JOINT DOCTRINE PUBLICATION 4-03
(2nd Edition)

MEDICAL SUPPORT TO JOINT OPERATIONS

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Director General Development, Concepts and Doctrine

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JOINT DOCTRINE PUBLICATIONS

The successful conduct of military operations requires an intellectually rigorous, clearly articulated and empirically-based common framework of understanding that gives advantage to a country’s Armed Forces and its likely partners in situations involving containment, confrontation, crisis and conflict. This common basis of understanding is provided by doctrine. UK policy states that national doctrine should, as far as is practicable and sensible, be consistent with NATO doctrine, terminology and procedures (except when the UK has elected not to ratify NATO doctrine). However, national doctrine needs to cover those areas not adequately covered by NATO doctrine and, by continuously and rigorously reviewing existing doctrine and operational practice, influence the development of Allied doctrine. This requirement is addressed in Joint Doctrine Publications (JDP).¹

Interim Joint Doctrine Publications (IJDP) are published to meet pressing needs for doctrinal guidance in a timescale that precludes full staffing or endorsement; they are duly caveated to reflect evolving or planned changes in policy, imminent legislation or in anticipation of future lessons. Short-term, urgent requirements for doctrine are published in Joint Doctrine Notes (JDNs). JDNs do not represent an agreed or fully staffed position, but are raised in short order by the Development, Concepts and Doctrine Centre (DCDC) to establish and disseminate current best practice. They also establish the basis for further development and experimentation, and inform operations and exercises.

Details of the Joint Doctrine development process and the associated hierarchy of JDPs are to be found in Defence Instructions and Notices (DINs) and in the Joint Doctrine Development Handbook (JDDH).

¹ Formerly named Joint Warfare Publications (JWPs).
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PREFACE

Purpose

1. JDP 4-03 (2nd Edition) ‘Medical Support to Joint Operations’ describes how medical, dental and veterinary support is prepared, planned and delivered during Joint operations. It is primarily aimed at the operational level, but includes strategic and tactical doctrine (where relevant). Whilst concentrating on operations, it also introduces the notion of health as a military, national and global security issue, thereby placing the actions of the Defence Medical Services (DMS) within the wider strategic context.

2. The delivery of health care to UK Armed Forces personnel before, during and after operations is a statutory obligation, fundamental to operational effectiveness. Fit and healthy people underpin the moral and physical components of fighting power, in particular Force Generation and Force Protection (FP). Defence medicine is subject to both internal and external influences, with medical personnel having to act within military and professional constraints, against a backdrop of increasing public, Ministerial and international expectation. On operations, a sequence of clinical personnel may attend to a patient at different points in the treatment chain, so a shared understanding and overarching doctrine are needed.

Scope

3. JDP 4-03 retains a high level focus, describing why a Joint medical framework is needed and how it can most effectively be employed on deployed operations. The publication identifies how medical functions interact and contribute to operational success, and it is aimed primarily at: Joint operational planning staffs, particularly medical; Joint Force Logistic Command (JFLogC) staff; Component medical staff; medical staff in the Front Line Commands (FLC) and Defence Equipment & Support (DE & S); and infrastructure and personnel support staff. JDP 4-03 will assist health personnel, many of whom reside in the Reserve services and/or in Other Government Departments (OGD), as well as members of Non-governmental Organisations (NGO) with whom the DMS frequently interact. Finally, JDP 4-03 should support equipment capability managers in the development and procurement of medical capabilities, as well as enabling the development of tactical doctrine and training requirements for DMS personnel.

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2 The term ‘medical support’ covers all medical, dental and veterinary services provided, directly or indirectly, to contribute to the health and well-being of patients or a population.

3 Force Generation is the process of providing suitably trained and equipped forces, and their means of deployment, recovery and sustainment to meet all current and potential future tasks, within required readiness and preparation times. (JDP 0-01.1)

4 FP is the means by which operational effectiveness is maintained through countering the effects from adversary, natural and human hazards, including fratricide, in order to ensure security and freedom of action. (JDP 0-01.1)
4. JDP 4-03 ‘Medical Support to (as opposed to on) Joint Operations’ recognises that medical preparedness commences before deployment and includes preventive and risk-reduction practices, as well as reparative treatments and evacuation chains. JDP 4-03 starts with the premise that individuals are ‘fit for task’, and concentrates on immediate preparation for operations; other aspects of preparation are set out in the Defence Health Programme (DHP). The scope of this publication is summarised by Figure 1 which, in addition, illustrates that the DMS functions within a broader military, civilian and strategic context.

5. JDP 4-03 applies to all types and scales of operations and exercises, in order to strengthen functional linkages between medical/non-medical enablers, military/non-military actors, and national/international alliances. It is applicable to all professional

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5 The extant Joint High Level Operational Concept (JHLOC) (promulgated in April 2004) states that immediate preparation will fine-tune the force for specific operations (currently being revised to mean the ‘mission-focused workup of the force’).

6 Extant JHLOC states that deep preparation will develop robust and flexible individuals, imbued with fighting spirit, to form the bedrock of operational agility (currently being revised to individual preparation, taken to mean the same). Functional preparation will develop core competencies, unit cohesion and the ability to transcend traditional boundaries in order to achieve an agile, task-orientated Joint force (currently being revised to collective preparation, taken to mean the provision of fighting power in appropriate configurations. Collective preparation recognises the current value of formed units and therefore training will focus on better levels of Joint interoperability, particularly at the tactical level where more powerful and flexible combinations of combat power might be achieved).
groups and healthcare providers within the DMS, including the Royal Fleet Auxiliary (RFA).

**Structure**

6. The structure of this publication is:

   a. **Chapter 1.** Chapter 1 describes Healthcare and its delivery by the DMS, together with enabling and constraining factors.

   b. **Chapter 2.** Chapter 2 describes the organisations and resources available to deliver healthcare on operations, from point of wounding or occurrence of illness, to definitive care (which may be within UK). This chapter describes the contributions and interactions of the Components and other organisations ahead of, and during, operations.

   c. **Chapter 3.** Chapter 3 describes planning and mounting the medical contribution to Joint operations, including the contribution of Medical Intelligence (MEDINT).

   d. **Chapter 4.** Chapter 4 describes the Command, Control, Communication and Information infrastructure that enables the delivery of medical support to Joint and multinational operations, including direction on Clinical Governance which is both a medical and command responsibility.

   e. **Chapter 5.** Chapter 5 describes those aspects of FP which are pertinent to Health, including the assessment of Risk.

   f. **Chapter 6.** Chapter 6 describes medical drawdown and recovery, including actions to be undertaken, on behalf of military personnel, upon their return from deployment.

   g. **Chapter 7.** Chapter 7 describes how the DMS should approach the treatment of civilian patients whilst on deployed operations.

**International Linkages and the Need for National Doctrine**

7. Doctrine encapsulates existing best practice and provides principles which guide planning. It is authoritative but requires judgement in its application. UK medical doctrine has both influenced, and been influenced by, NATO policy\(^7\) and doctrine\(^8\), with which it is largely compatible. However, there are differences between UK and

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\(^7\) MC 326/2 NATO ‘Principles and Policies of Operational Medical Support’ dated 7 April 2004.

NATO medical doctrine, owing, in part, to the way in which different nations’ Armed Forces deploy. For example, whilst NATO adopts a surgical focus for its doctrine, the UK acknowledges the importance of other capabilities. Significantly, the UK (in common with some, but not all, NATO nations) takes a less prescriptive view of the capability provided at each ‘Role’\(^9\) preferring, instead, to tailor its medical support to specific operations. Furthermore, NATO doctrine may not be entirely appropriate when coalition operations are undertaken with non-NATO partners.

**National Linkages**

8. JDP 4-03 receives policy direction from the Surgeon General’s Policy and Standards Document,\(^10\) Defence White Papers and Defence Strategic Guidance. It is to be read in conjunction with:

- The UK Joint High Level Operational Concept (JHLOC).
- IJDP 02 *Operations in the UK: The Defence Contribution to Resilience*.
- JDP 1-10 (2nd Edition) ‘Prisoners of War, Internees and Detainees’.
- JWP 3-00 ‘Joint Operations Execution’.
- JWP 3-52 ‘Humanitarian/Disaster Relief Operations’.
- JDP 3-61.1.1 ‘Joint Manual of NBC Defence’.
- JDP 3-90 ‘Civil-Military Co-operation (CIMIC)’.
- JWP 4-00 ‘Logistics for Joint Operations’.
- JWP 5-00 ‘Joint Operations Planning’.
- JDN 1/05 ‘The UK Military Effects-Based Approach’.
- JDN 4/05 ‘The Comprehensive Approach’.
- JDN 4/06 ‘Information Management’.
- JDN 7/06 ‘Incorporating and Extending the UK Military Effects-Based Approach’.

9. JDP 4-03 will lead to the development of subordinate Joint Tactics, Techniques and Procedures (JTTPs).\(^11\)

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\(^9\) Roles are defined in Chapter 2, together with comparisons between UK capabilities and NATO doctrine.
\(^11\) JDP 4-03.1 ‘Clinical Guidelines for Operations’ is programmed for promulgation in 2007.
# MEDICAL SUPPORT TO JOINT OPERATIONS

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Lexicon of Abbreviations
CHAPTER 1 – DEFINITIONS, CONTEXT AND ENABLING/CONSTRAINING FACTORS

Chapter 1 describes Healthcare and its delivery by the Defence Medical Services, together with enabling and constraining factors.

SECTION I – INTRODUCTION

The Joint and Multinational Perspective

101. Transformation of the world security environment has led to changes in the way in which the UK and its allies respond to crises. Flexible responses envisage the projection of task-orientated, agile, capable, network-enabled forces abroad rapidly, with freedom of action to synchronise effects throughout the (non-linear) battlespace and with maximum potential to exploit fleeting opportunities. These types of operations all require medical support.

102. The need to maintain morale in UK forces and sustain public support for expeditionary operations has resulted in greater emphasis being placed on the recovery of injured personnel and on the rapid evacuation of casualties from the point of wounding, through theatre treatment centres, to the Home Base. Medical support to operations is a national responsibility, although it is not uncommon for the Defence Medical Services (DMS) to operate within a multinational framework. Medical support should be mission-tailored, dynamic and responsive to changing situations. The risk of accidents and the possibility that any operation may degenerate into conflict, with military personnel being subject to violence and injury, demands that medical support will be required at all times. Large movements of displaced persons, within, into and out of a Joint Operations Area (JOA) may affect military operations, while the breakdown of civil order usually encourages the spread of disease. This, and the possibility of climatic extremes, could greatly increase the health risk to military forces. Furthermore, the availability and appropriateness of Host-nation Support (HNS) should not be assumed.

103. Aspects to be considered are:

   a. Operations will almost certainly be Joint in nature (Chapter 2).

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1 The extant ‘Joint High Level Operational Concept’ (JHLOC), promulgated April 2004, states that the core attributes of agility are responsiveness, robustness, flexibility and adaptability. In the current revision to JHLOC, robustness is replaced with resilience. Implications of agility for the medical function are discussed at Paragraph 121.
2 The DMS is described in Chapter 2.
3 ‘An adjective used to describe activities, operations and organisations in which elements of at least 2 services participate (Also called ‘multiservice’). (AAP-6)
b. Operations are likely to be multinational,\textsuperscript{4} either from the outset or after transition to enduring operations. Multinational medical cooperation is covered in detail in AJP-4.10(A) ‘Allied Joint Medical Support Doctrine’. Different nations possess staffs and force structures of varying strengths and capabilities which, together with different standards, languages and cultures, may represent obstacles to interoperability.

c. As far as practicable, medical forces should be as agile, mobile and as well protected as the forces they support. This aspect involves medical personnel acquiring and maintaining appropriate military skills (as well as clinical skills) through training and practice. In particular, medical assets will require protection from irregular threats.

d. Medical support should be agile and tailored to the requirements of a specific operation. This poses challenges, with respect to commonality for UK medical support working within a multinational environment, since some coalition partners adopt a more prescriptive approach based upon NATO definitions and terminology (Preface and Chapter 2).

e. Continually evolving threats (for example, novel weapons systems and non-lethal weapons) may result in changing patterns of wounding that challenge the accuracy and validity of previous casualty planning assumptions. Refinements in personal protection may also affect the nature of injuries.

f. Chemical, Biological, Radiation and Nuclear (CBRN) should be considered where there is evidence of a threat. CBRN applications, ranging from weapon-related CBRN threats to natural and man-made hazards, will pose a distinct challenge to operational medical support (Chapter 5).

g. Battle Casualty (BC) rates will vary and generally be lower than those generated during traditional, linear, warfighting scenarios; however, expectations of survival and recovery will be correspondingly higher. Levels of Disease and Non-Battle Injury (DNBI) will be a relatively steady source of force depletion, requiring continuous, possibly fluctuating, medical support throughout every phase of the operation (Chapter 3).

h. Medical support will seek to achieve outcomes of treatment equating to best medical practice. Accountability by individuals and organisations for their actions will be delivered through Clinical Governance (CG) and corporate responsibility (Chapter 4).

\textsuperscript{4} An adjective used to describe activities, operations and organisations, etc in which forces or agencies of more than one nation participate. (AAP-6).
Operational planning will encompass Medical Force Protection (MFP), and Environmental and Industrial Health (EIH), as well as preventive medicine, all informed by accurate health information and by Medical Intelligence (MEDINT) (Chapters 3 and 5).

Medical support may be subject to rigorous media scrutiny, public attention and political scrutiny.

Medical support must take account of both the scale and intensity of likely operations, noting that the latter may change rapidly and that activities of different intensity may occur concurrently across the JOA. In these Cross-Spectrum Operations, combat operations, reconstruction and humanitarian work may all be conducted at the same time and in close proximity.

An Effects-Based Approach (EBA) will seek to better understand the causes of complex situations and crises and use military means, in coordination with other agencies through a Comprehensive Approach (CA), to address them directly. From a medical perspective, a CA will require engagement with Other Government Departments (OGDs), International Organisations (IOs), and Non-governmental Organisations (NGOs) (Chapters 2 and 7).

Effective Information Management (IM) will be essential in enabling optimal care and tracking of patients throughout the medical system (Chapter 4).

Healthcare

According to the World Health Organisation (WHO), ‘health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’. In the military context, this well-being enables Service personnel to function unimpeded by physical, social or psychological problems. Health promotion, disease prevention, and treatment of the sick and injured are core functions of the DMS, but responsibility for health is also a command function and an individual responsibility. The contribution that health makes to fighting power is discussed within the 4 Cornerstones of the Defence Health Programme (DHP), but it is implicit...
that every possible effort should be made by commanders and medical staff to promote and sustain the highest state of health.

**Fighting Power**\(^10\)

105. Participating in military activities is hazardous but, where possible, risks should be minimised. Fighting power defines the Armed Forces’ ability to fight and achieve success, primarily on operations. It has 3 components, Conceptual, Moral and Physical, which are not independent but overlap. Fighting power is ultimately delivered by humans, with medical support contributing to each of its components:

a. **The Conceptual Component.** The Conceptual component shapes the ability to fight. It combines lessons from the past, thinking about how the Armed Forces can best operate today and in the future, and techniques for understanding the prevailing situation. The medical contribution to conceptual development is described in Section III.

b. **The Moral Component.** Troops require motivation, leadership, management and morale in order to be effective. Morale cannot be achieved and maintained without the expectation of high standards of medical care and casualty treatment.

c. **The Physical Component.** The Physical component of fighting power is the means to fight. It has 5 elements, manpower, equipment, collective performance and sustainability, that in turn generate readiness. Medical support maintains troop strength, maintains human performance and provides timely clearance of the battlespace; all these aspects promote troop combat effectiveness, as force enablers.

**Medical Contribution to Joint Operations**

106. Medical support should be delivered by an agile, task-orientated Joint medical capability geared towards generating and protecting the total deployed force. Historically, more forces have been degraded by DNBI than by combat means, and UK has shifted towards the management and prevention of DNBI. Numerically, DNBI might represent the greatest challenge, but delivering surgical capability is complex; as resources are finite, a balance is required between the surgical and non-surgical elements.

\(^{10}\) JDP 0-01 ‘British Defence Doctrine’ (BDD). The precise terminology used to describe the components of Fighting Power differs slightly between UK national and NATO allied joint doctrine, however the substance is the same.
The Role of the Defence Medical Services within UK, International and Civilian Society – A Comprehensive Approach

107. Health contributes to all 7 dimensions of the strategic environment and should be considered as part of any CA to a crisis. The role of the DMS is to support deployed operations, starting in the UK and extending beyond an operation’s conclusion. Deployed medical capability depends upon seamless links with the National Health Service (NHS) which undertakes the majority of care of personnel evacuated from operational theatres. Through partnership, the DMS and the Department of Health (DH) pursue common interests, goals and objectives.

108. Beyond Government, the DMS also interacts with IOs and NGOs. In engaging with these agencies in theatre, DMS personnel should be aware of the impact that their actions may have on both local healthcare workers and on the general population.

109. Health is a global security challenge; a major health crisis, such as the outbreak of an infectious disease or an epidemic, threatens any nation’s security and stability in the short-term. Longer-term health issues may also cause, or exacerbate, insecurity in failing and impoverished nations. Health is consequently a vital consideration at all levels of contingency planning, military and civilian.

SECTION II – ENABLING AND CONSTRAINING FACTORS

110. Legal Compliance. UK Armed Forces must comply with UK and International Law during the planning and conduct of all operations, as well as with the law of the territory in which operations are taking place. Whatever law applies, all captured, sick, injured, shipwrecked and wounded persons are entitled to basic, minimum, humanitarian standards of treatment at all times. Although the operational commander has authority to limit the availability of military medical support to third parties, acute emergency treatment of life-threatening illness should not normally be denied. The same principle applies to captured or detained persons who may, in addition, be entitled to varying degrees of enhanced rights depending on their status or categorisation, and on the nature of the operation.

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12 Or other healthcare providers.
13 A joint Concordat exists between MOD and DH which is signed by ministers and administered through a Partnership Board, reflecting the cooperation and working together of the 2 Departments of State in order to enhance the delivery of healthcare to Service personnel.
14 See JWP 3-46 ‘Legal Support to Joint Operations’.
15 Specific safeguards for wounded and sick detainees are contained in JDP 1-10 ‘Prisoners of War, Internees and Detainees’, Annex 5D, and in SGPL 01/05 Medical Support to Persons Detained by UK Forces whilst on Operations, dated 6 January 2005.
111. **International Humanitarian Law.** International Humanitarian Law (IHL) (sometimes referred to as the Law of Armed Conflict (LOAC)),\(^\text{16}\) has implications for medical support to operations. Annex 1A outlines these IHL considerations, drawing attention to the breadth of issues affecting the medical function in particular, and identifying areas where further thinking and procedures are required.

112. **Medical Ethics.** Whilst all military personnel are bound by military laws, regulations and ethics, health professionals are subject to additional codes of conduct. An action might be legal, but unprofessional, exposing a health professional to action by his/her Statutory Regulatory Body. Organisations such as United Nations (UN) and the General Medical Council (GMC)\(^\text{17}\) support and reinforce the strong stance taken by the military on topics such as torture and confidentiality. A medical organisation must maintain these values if it is, and its individual members are, to retain both their licence to practice and credibility within their profession and with society in general.

113. **Eligibility.** Members of all 3 Services are entitled to medical support, as are members of their respective Reserve forces while deployed on operations (and for some time afterwards), the Royal Fleet Auxiliary (RFA), deployed civil servants, Prisoners of War (PW) and other detainees.\(^\text{18}\) MOD Contractors deployed on operations (CONDO) are also eligible for medical support. In addition, Medical support may be provided to other nationals from NATO, the European Union (EU) or other troop-contributing nations (TCNs), depending upon standing or dormant agreements made either during the planning phase or as the operation proceeds.

114. There are additional groups who may be, or perceive themselves to be, eligible for limited medical support in theatre. These include refugees, NGOs, non-MOD contractors/subcontractors, Locally Employed Civilians (LECs), media personnel and members of the local population. Their entitlement, if any, and the limits to that entitlement, will be clarified by the operation-specific eligibility matrix compiled during the planning process by the Permanent Joint Headquarters (PJHQ). Any medical support to be offered to indigenous forces, working alongside or being trained/developed by UK forces, needs similar clarification.

115. **Standard of Medical Care.** Military medicine is highly specialised owing to the environment and conditions in which it is practiced. The standard of care available may have a permanent effect upon clinical outcome, and the effects of poor care can rarely be reversed. Patients should receive the highest appropriate\(^\text{19}\) level of medical care in suitable clinical environments. The DMS aims to *achieve outcomes of treatment which equate to best medical practice as identified in Surgeon General’s (SG) Policy and Standards for Operations, reflecting CG and Evidence Based*

\(^{17}\) GMC’s Good Medical Practice.
\(^{18}\) The estimation of captured or detained persons is a J3 function, assisted by J2/J5.
\(^{19}\) See discussion in paragraph 203.
Medicine. A well-founded risk register will identify where standards might necessarily have to fall below these norms, and also articulate procedures to manage this risk.\(^{20}\)

116. **Time-Related Constraints of Medical Care.** Time is a fundamental factor in patient survival and recovery, and the siting of medical facilities based on the 1-2-4-Hour principle is a clinically critical factor.\(^{21}\) Ideally, a medical treatment facility (MTF) offering Primary Surgery (PS)\(^ {22}\) will be located within one hour of own troops; where this is not achievable, the 1-2-4-Hour principle offers a number of alternatives involving multiple treatment nodes\(^ {23}\) providing Damage Control Surgery (DCS),\(^ {24}\) linked by evacuation capabilities. Critically injured patients who cannot receive PS within one hour should undergo DCS within 2 hours and PS within 4 hours.

117. While the 1-2-4-Hour principle relates primarily to trauma, the principle holds good for medical emergencies; Battlefield Advanced Trauma Life Support (BATLS) resuscitation should be available as swiftly as possible and certainly within the first hour. Access to Roles 2 E or 3\(^ {25}\) should also be available within 4 hours.

118. The 1-2-4-Hour principle is a pragmatic planning tool that determines the laydown of medical capability in theatre, based on risk management. It is not prescriptive, as it neither distinguishes between patients that really need surgery within 4 hours and those for whom it may be delayed safely, nor does it account for life-threatening conditions for which the provision of resuscitation within one hour will be too late.\(^ {26}\) However, the principle identifies currently accepted, good practice, combined with what is feasible, and ensures that specific time-sensitive interventions are delivered to specific sub-groups of casualties in order to minimize death or disability. The 1-2-4 Hour principle is not a justification for delaying evacuation, and it is most useful in planning operations at the Large-Scale Deliberate Intervention (LSDI) end of the operational spectrum.

119. Specific plans should be in place when operational circumstances and tempo mean that these guidelines cannot reasonably be achieved (for example, Special Forces, Submarine and Amphibious operations, Airborne and Air Assault operations and medical support to reconnaissance parties). Some basic facilities may have to be moved forward.

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\(^{20}\) SG’s standards of treatment on operations – working definition.

\(^{21}\) AJP-4.10(A) ‘Allied Joint Medical Support Doctrine’ dated 3 March 2006.

\(^{22}\) Primary Surgery (PS) describes the first surgery to repair local damage caused by wounding, rather than merely correcting the systemic effects (which itself, is Damage Control Surgery (DCS)).

\(^{23}\) Achieved by the provision of reserve treatment nodes and/or the closure and redeployment of existing treatment nodes.

\(^{24}\) Following initial resuscitation, some serious casualties will deteriorate because some life threatening problems are only partially controlled by Battlefield Advanced Trauma Life Support (BATLS). These casualties require DCS which deals with the systemic problems caused by wounding and buys time. Almost all will require PS afterwards.

\(^{25}\) ‘Roles’ are defined in Chapter 2.

\(^{26}\) The UK’s Operational Surgical Services Review (Final Report dated December 2004).
120. **Balancing Capabilities - the Interdependence of Evacuation and Treatment in Theatre.** Technology has led to significant advances both in medical intervention in theatre and in medical evacuation (MEDEVAC) to the Home Base. Operational considerations determine the balance between the two. The reliability of the evacuation chain and patients’ access to appropriate clinical treatments within accepted timescales are governed by:

- a. The scale of the operation, including the length and the robustness of lines of communication (LOCs) and dispersal of forces.
- b. Casualty estimation.
- c. Topography and terrain.
- d. Operational tempo/intensity.
- e. The availability of evacuation assets.
- f. Climatic conditions.
- g. Force Protection (FP) requirements, including in relation to a CBRN threat.

121. Light, mobile forces require agile,\(^{27}\) precise, in-theatre medical assets with a fast and robust evacuation capability and a small logistic footprint. Enhancements in capabilities enabling early evacuation of less stable patients to UK may result in a reduction in the number of beds required in theatre. This is consistent with recent UK and US experience,\(^{28}\) with UK government policy\(^{29}\) and with UK conceptual thinking.\(^{30}\)

122. Large numbers and/or anticipated surges of casualties generally require a more sophisticated ground-based or sea-based medical presence in theatre, as the reliability of an evacuation chain can never be absolutely guaranteed. Moving casualties is a skilled task which, ideally, requires patients to have been stabilised in theatre in the first place; and ‘sooner’ is not necessarily ‘better’ when transferring patients, who should be moved in optimal clinical condition. Thus, planning should reflect, and react to, the operational tempo.

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\(^{27}\) See paragraph 101.

\(^{28}\) On OP GRANBY, the utilisation of Support Helicopters (Sea King and Puma) enabled fewer UK hospital redeployments compared with the US, which used short-range Huey helicopters for medical evacuation. In addition, earlier evacuation of seriously injured casualties among UK and western nations reduced the number of hospital beds required in theatre.

\(^{29}\) UK Government policy is contained in 'Reception Arrangements for Military Patients' (RAMP) which is discussed in paragraph 220.

\(^{30}\) JHLOC.
123. **Theatre Holding Policy.** The Theatre Holding Policy (THP) is a command responsibility based on medical advice. It indicates the maximum length of time (days) that a patient will be retained in theatre for treatment, recovery and return to duty. PJHQ J4 Med will advise the Chief of Joint Operations (CJO) on the THP which will be a factor in defining the capacity of medical support to an operation. It is, by necessity, a guideline and the availability of specific clinical capabilities, Air Transport (AT) or specialist MEDEVAC assets, and morale will all have a significant impact on whether patients are evacuated from Theatre. If the prognosis is that recovery will take longer than permitted by the THP, the patient should be assigned a priority and evacuated when clinically, and pragmatically, appropriate.\(^{31}\)

124. In order to provide patients with the best possible medical care and commanders with a fit and healthy force, the THP enables medical planners to match the provision of resources with the anticipated medical requirement. THPs should be flexible and dynamic in order to reflect changing tactical situations, including fluctuating medical capacity and anticipated surge conditions.

125. The tactical situation may permit a pragmatic approach to THPs, allowing patients to be investigated and treated in theatre, where there is a concentration of military medical assets, for longer. An extended THP may serve to return patients (for whom there is no guarantee of replacement) to duty at a later stage, or at least enable diagnosis before evacuation. However, there are disadvantages of retaining unfit personnel in theatre and commanders must approve any decision to alter the THP.

126. **Patient Management.** Patient management describes the passage of a patient through progressive medical interventions in different MTFs (which may belong to different Services or nations). Progressive medical support allows forward medical capabilities to be mobile, and for more resource-intensive MTFs to be concentrated in secure areas where medical capability is not required to move with the changing operational or tactical situation. Patient management exposes patients to a sequence of clinical settings, requiring, for safety and effectiveness, interoperability of medical personnel and equipment (delivered through collective training and practice together with common policies and doctrine). Standardised casualty treatment regimes should extend throughout the continuum of care including the evacuation system\(^{32}\) with a common Communications and Information System (CIS) to enable tracking, patient regulation, and medical documentation within and between MTFs.

127. **Medical Capabilities.** As medical capabilities increase, they do so at the price of increased lift and other support, limiting their mobility and increasing the medical and logistic footprint within the JOA. Highly sophisticated MTFs in the combat zone

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\(^{31}\) Aeromedical evacuation (AE) priorities are described in AJP-4.10.2 (Ratification Draft 12 October 2006), STANAG 3204 ‘Aeromedical Evacuation’, and RAF AP 3394.

\(^{32}\) JDP 4-03.1 ‘Clinical Guidelines for Operations’ to be promulgated in 2006.
could encumber the commander and restrict his freedom of movement, although benign operations may allow sophisticated MTFs to be placed further forward.

128. **Medical Support to Exercises.** Medical support to exercises, if real-time, should be resourced as an extension of the operational role so that medical capability is not limited by exercise artificialities.
ANNEX 1A – INTERNATIONAL HUMANITARIAN LAW – CONSIDERATIONS FOR OPERATIONAL PLANNERS

Introduction

1A1. This Annex introduces some of the International Humanitarian Law (IHL) considerations that can affect the planning of medical support to Joint Operations. It is not intended to be all encompassing or to replace the advice from MOD Legal staffs, which should always be sought on individual issues. Instead, it lays down some enduring principles covering IHL on operations, draws attention to the breadth of legal issues affecting the medical function and identifies areas where further development is required.

1A2. IHL exists to minimise the effects of conflict on those not directly involved in the conduct of hostilities. IHL places obligations on the UK to take account of the protection guaranteed to such individuals in the planning and conduct of operations during international armed conflict. Although not legally obliged to apply IHL in full to operations that do not amount to international armed conflict (for example, Peace Support Operations (PSO)), it is MOD policy that the same obligations and protections should be applied to the planning and conduct of all operations where hostilities are envisaged. While a detailed discussion of these issues is beyond the scope of this publication, medical specialists engaged in operational planning should recognise that the Geneva Conventions (GC) and their Additional Protocols (AP) influence the planning and conduct of all operations. In particular, there is guidance in JSP 383 ‘Manual of the Law of Armed Conflict’, Chapter 7 on: the legal definitions of Medical units, personnel and transport; the protection afforded by the law to those entities; the general protection afforded to the conduct of medical duties; permitted functions of medical units (including bearing arms); the duties of occupying powers to meet the medical needs of the civilian population; rules for the protection of medical transport; and identification of medical units, personnel and transport. Those responsible for the planning, conduct and command of medical functions and any related activities in joint operations should be familiar with that guidance. Legal advice should invariably be sought to resolve cases of doubt.

1A3. The challenge for planning staffs is to reconcile the requirement to abide by IHL with the additional resources needed to achieve this compliance with the law. There will be occasions where IHL can assist in balancing resources. As a tactical example, since uniformed medical staff may be armed for the purposes of self defence and the protection of those under their care, force protection can, to some extent, be

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1 See JWP 5-00 ‘Joint Operations Planning’, Chapter 3.
3 For example, medical personnel, Prisoners of War (PW), the wounded and the civilian population.
addressed within medical resources. However, this also brings with it an obligation to equip and train medical staff in weapon handling. It should be noted that early consultation with J1/J9 planning staffs and legal advisers can assist in identifying how and where IHL is likely to impact, and how to address those issues most effectively.

The General Obligation to Treat Others

1A4. UK Armed Forces are under a continuing obligation to treat wounded or sick persons, whether military or civilian, who are in need of medical assistance and who refrain from hostilities, to the extent that it is practicable to do so. This may of course include not only adversaries but the civilian population, and careful consideration should be given to calculating the likely numbers of casualties in any operation. Liaison with J2/J3 and Operational Analysts, while of assistance, cannot be definitive, and planners should recognise that the demands on medical staff may vary considerably depending on the phase and success of the operation. The ability to surge, re-role and recover medical support will be key, and the resources to support this range of activity must be identified and assigned at an early stage.

The Specific Obligation to Treat Prisoners of War, Internees and Detainees

1A5. Captured or detained persons are entitled to certain basic standards of humanitarian treatment. Once in the hands of UK Armed Forces, they are to be treated strictly according to medical need. This protection extends to all those who are interned or detained pursuant to the conflict and calls for planning and resources to be committed to their initial care. Complications arise when it is proposed, for reasons of imperative medical care, to transfer captured patients to a country outside the territory where they were captured. As a rule, while PWs may be transferred extra-territorially (subject to legal and policy advice in each case), internees and detainees may not. In all cases, J9 legal advice should be sought before any transfer takes place.

The Nature of Treatment

1A6. The nature and extent of the medical treatment administered to individuals will be governed primarily by medical judgement and ethics, within the constraints of Armed Forces’ medical policy. In addition, IHL places certain obligations on UK medical staff. Medical procedures, which are not indicated by the patient’s state of health and which are not consistent with generally accepted medical standards, are prohibited. Experiments or unjustified medical interference on patients who are in no position to give free and genuine consent, are prohibited. A patient may refuse surgical treatment, but emergency surgery to save a life does not require the patient’s consent.

4 See JDP 1-10 ‘Prisoners of War, Internees and Detainees’, and SGPL 01/05 Medical Support to Persons Detained by UK Forces whilst on Operations, dated 6 January 2005.
Status of Medical Units

1A7. The GC defines medical units as establishments and other units, whether military or civilian, organised for medical purposes, namely the search for, collection, transportation, diagnosis or treatment (including first-aid treatment) of the wounded, sick or shipwrecked or for the prevention of disease (AP I (Article 8e)). They include hospitals, blood transfusion centres, preventive medicine centres, medical depots and stores. Medical units are to be respected and protected at all times and are not to be made the object of attack (AP I (Article 12)). They may be fixed or mobile, permanent or temporary, and on land, sea or in the air. Medical units, personnel and transport must not be used for non-medical purposes otherwise their protection will lapse. Medical units must not be used to shield military objectives from attack and where possible should be so situated that attacks upon military objectives do not imperil their safety (AP I (Article 12.4)). Improper use of medical units to kill, injure or capture the enemy is a war crime (perfidy).

Status of Medical Personnel

1A8. The term ‘medical personnel’ means those persons assigned exclusively to the medical purposes enumerated above, and/or to the administration of medical units, or the operation of medical transport. Such assignments may be permanent or temporary but must be exclusive for their duration. The GC definition of medical personnel includes doctors, dentists and nurses, and a range of specialists, technicians, maintenance staff, drivers, cooks and administrators attached to medical units or medical transport units (AP I (Article 8c and 9.2)).

1A9. Medical personnel should be respected and protected in all circumstances and, if captured, they should be retained only to the extent necessary to tend to the health of PWs (GC I (Article 28)). On capture, they are not categorised as PW but they do have the same rights. When no longer required to be retained, they should be returned to their own side. While captured, they continue to carry out, within their professional ethics, their medical duties on PW.

The Arming of Medical Personnel

1A10. Medical personnel may be armed with ‘light individual weapons for their own defence or the protection of those in their charge’ without losing their protected status. They may use arms in their own defence, or in the defence of the wounded and sick in their charge (GC I (Article 22)). The arming of medical transports, ambulances and so on for strictly defensive purposes is also permitted. It should be stressed that the provision and use of such arms must be for defensive purposes, and the Rules of Engagement issued to armed medical personnel must reflect these limited purposes, as should their training. Medical units may be protected by armed guards or pickets but,
again, those guards may only act in a purely defensive manner and may not oppose the occupation or control of the unit by the enemy.

**Medical Vessels and Vehicles**

1A11. The general rule is that medical vessels, craft and vehicles should be protected at all times. International law recognises that such protection is only effective if the medical transport can be recognised as such. Thus in the case of hospital ships (vessels built, converted or equipped specially and solely with a view to assisting either military and/or civilian wounded, sick and shipwrecked and to treating them and transporting them) or craft, they should be white and marked with the distinctive emblem. Emblems should be as large as possible and be so placed as to maximise visibility.

1A12. Information about a hospital ship may (and in normal circumstances, should) be declared, including its name, description, time of sailing, course, estimated speed etc. Negotiations between belligerents may settle a protected zone for use by hospital ships where no military operations will take place. The protecting powers may assist in the negotiation of such an agreement. Information to ease identification of medical ships may also be transferred between belligerents.

**Medical Aircraft**

1A13. Medical aircraft shall also be respected and protected. If such aircraft are being operated in areas not controlled by the enemy, respect and protection do not depend on specific agreements, but notification to the other side of flight arrangements may make the flights safer (AP I (Article 25)).

1A14. Prior agreement of the enemy becomes essential in the combat zone, particularly those areas where control is not established. Without that agreement, medical aircraft operate at their own risk. If recognised as such, they should be respected (AP I (Article 26)). Protection of such aircraft continues when over-flying enemy-controlled territory provided prior agreement has been obtained. If no agreement is obtained or it is deviated from, the transport should identify itself and explain. When recognised, the adverse party shall give orders to protect its own interests and give time for compliance before resorting to an attack on the aircraft (AP I (Article 27)).

1A15. Medical aircraft flying over areas controlled by the enemy can be ordered to land for inspection. If its medical status and bona fides are supported by the inspection, it shall be permitted to resume its journey. If the inspection reveals that it

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6 The Primary Casualty Receiving Facility, RFA ARGUS is not declared under the Geneva Convention – see Chapter 2.
is not a medical aircraft, has flown without or in breach of an agreement or has broken the rules, it may be seized.

1A16. Medical aircraft may not be used to acquire a military advantage, nor to collect or transmit intelligence data and cannot carry associated equipment. Communications, navigation and identification equipment is permitted. They must be unarmed (save for small arms taken from the wounded and side arms to defend the personnel on board).

**Recognised Emblems**

1A17. Great care must be taken to ensure that no improper use is made of the Red Cross, the Red Crescent, the Red Crystal or the Red Diamond. The Red Cross flag must not be used to cover vehicles used for the transport of munitions or other non-medical stores. A hospital train must not be used to facilitate the escape of combatants. Using a building protected by the Red Cross as a firing position is prohibited, except perhaps in self-defence. Vehicles supplying forward positions with food, ammunition etc should not display the emblem. They may display it on the return journey if they are exclusively used for carrying the wounded and sick (AP I (Article 8k)).
(INTENTIONALLY BLANK)
CHAPTER 2 – THE DELIVERY OF MEDICAL CAPABILITY ON OPERATIONS

Chapter 2 describes the organisations and resources available to deliver healthcare on operations, from point of wounding or occurrence of illness, to definitive care (which may be within UK). This chapter describes the contributions and interactions of the Components and other organisations, ahead of and during operations.

SECTION I - INTRODUCTION

201. An outline schematic of Joint medical support to operations is at Figure 2.1. The principle elements are explained in the remainder of this chapter, highlighting where UK medical doctrine differs from NATO doctrine.

202. Medical support to operations may be thought of as a ‘system’ comprising:

   a. Medical Treatment Facilities (MTFs), designated by ‘Role’ (defined below).

   b. Medical Evacuation (MEDEVAC).

   c. A range of specialist medical capabilities and enablers, including Medical Force Protection (Med FP). Some of these enablers are achieved through ‘reachout’.¹

   d. Supporting organisations – medical and non-medical.

203. Patients passing through the medical system should receive care that is effective, relevant and continuous, from point of injury or sickness to definitive care. Medical and surgical treatments should be undertaken in the most appropriate clinical facility, recognising that exposing patients to either excessive or inadequate levels of treatment and evacuation will deplete force numbers. Clinical accountability applies across all aspects of the medical system, and is delivered through Clinical Governance (CG) arrangements (described in Chapter 4). Within operational constraints, clinical considerations should always govern the timing, means and destination of a patient’s evacuation.

¹ Reachout is defined as ‘the ability to access, through the Network Enabled Capability (NEC), expertise, information and functions in distributed locations and from wider organisations’ (whilst the concept of reachback has been discussed and used for many years, it is becoming increasingly evident that required information or support may be at home, within the Joint Operations Area (JOA), or even in an adjacent JOA. Therefore, the term ‘reachback’ has been replaced by ‘reachout’) – Development, Concepts and Doctrine Centre (DCDC) working definition.
SECTION II – MEDICAL TREATMENT FACILITIES AND ROLES

Overview

204. The term ‘Role’ refers to a level of medical care, from Role 1 (Primary Health Care (PHC), specialised first aid, triage, resuscitation and stabilisation) through to Role 4 (definitive treatment and rehabilitation). It is also used to define a MTF according to its clinical capability. Patients may follow a progressive route from point of injury or sickness to specialised care at Role 3 and eventually, to Role 4. However, this guidance may need judgement and adaptation in reality. One or more Roles may be bypassed on grounds of efficiency and patients’ needs, such that patients may return to duty without passing through the entire medical chain. This is particularly true for Disease and Non-Battle Injury (DNBI) where effective treatment often results in rapid return to duty.

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2 Dental care should be an integral part of all MTFs, with sufficient flexibility to provide different levels of care independently of specific Roles for situations where dental problems are expected to be particularly high.
205. Roles are assigned according to the minimum clinical capability available within an MTF, rather than its capacity or manoeuvrability. Additional, mission-specific capabilities may augment a MTF without necessarily altering its Role designation. NATO doctrine indicates that Roles should be intrinsic to higher Roles - for example, a Role 3 facility should incorporate Role 1 and 2 capabilities. As the UK does not apply this guidance in all cases, medical planners may need to co-locate or functionally integrate medical assets in theatre (for example, a Role 3 MTF should have access to a Role 1 capability if it does not possess one of its own).

206. Role terminology provides a common language that enables services and nations to work together, and for medical planners to determine their laydown in theatre. In practice, however, the boundaries between Roles can become blurred as MTFs develop bespoke or mission-specific capabilities.

207. Table 2.2 describes UK tri-Service medical capabilities across the Roles, and compares these capabilities with those described in NATO medical doctrine. In essence, Role 1 MTFs are the most likely point of entry to the medical chain for most patients. Together, Roles 2 and 3 form a continuous spectrum of Deployed Secondary Care (DSC) with Role 2 acting as a bridge, both functionally and geographically, between Roles 1 and 3. Role 4, technically a system rather than a discrete MTF, provides the full spectrum of definitive medical care that cannot be deployed to theatre or is too resource intensive to be conducted there.

**Role 1**

208. The provision of Role 1 medical care is a national responsibility. If a national contingent cannot provide Role 1 care, an increase in capability or medical support from elsewhere must be negotiated. UK Role 1 is provided by RN, Army and RAF Medical Services.

**Role 2**

209. There are 2 types of Role 2: Role 2 Light Manoeuvre (Role 2 LM); and Role 2 Enhanced (Role 2 E). Their characteristics are summarised in Table 2.2. Role 2 E will normally replace Role 2 LM and Role 3 units as an operation stabilises, and may require the provision of some life support normally ascribed to Role 3.

210. Role 2 offers a range of clinical capabilities, but needs flexible arrangements to deliver best effect. For most NATO nations, surgical capability is the defining feature at Role 2, whereas for the UK (and US), the defining feature is ‘consultant-led resuscitation’ - surgical and non-surgical.

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3 For example, Army field hospitals incorporate Role 1 for their own personnel only, not for the wider population.
4 For example, from a Coalition Partner or from the Host Nation, depending upon the circumstances.
211. If definitive hospital care is available in theatre within the 1-2-4-Hour principle timelines described in Chapter 1, superscript 5 Role 2 may not be deployed at all. Examples of scenarios requiring Role 2 are:

   a. Where the anticipated number of casualties is high.

   b. When geographic, topographic, climatic or operational factors preclude MEDEVAC to Role 3 within 1-2-4-Hour principle timelines.

   c. When lines of communication (LOCs) are extended or likely to become extended.

   d. When Role 3 cannot be deployed in a timely manner.

   e. When the size and/or distribution of the force do not warrant the deployment of a full Role 3 capability.

   f. When formations are new in theatre or manoeuvring, in which case medical support will consist of relatively light field hospitals deploying onto unprepared sites using field standard equipment.

212. UK Role 2 is provided by RN, Army and RAF Medical Services.

**Role 3 Medical Treatment Facility**

213. Role 3 medical support is deployed hospitalisation and associated support elements. Whilst both Role 2 E and Role 3 provide Deployed Hospital Care (DHC), it is the greater range of specialist capabilities, found at Role 3, which differentiates between them.

214. UK Role 3 may be provided by the Royal Navy’s (RN’s) Primary Casualty Receiving Facility (PCRF) or by Army field hospitals. On enduring Land Operations, the RN and Royal Air Force (RAF) will, in future, contribute to the delivery of Role 3 capability. Alternatively, it may be acquired through Allied or Host-nation Support (HNS). The UK view of Role 3 differs from that of some NATO nations by being less prescriptive in terms of clinical capability, and more tailored to the nature and stage of the operation.

215. The deployment of Role 3 is designed to achieve 3 objectives beyond the treatment of the sick and injured:

   a. To hold patients until their further evacuation.

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 superscript 5 For example, on operations at smaller scales of effort or for those operations unlikely to involve significant combat activity.
b. To offer the possibility, within the Theatre Holding Policy (THP),\(^6\) of returning personnel to duty.

c. To offer a range of clinical services not available elsewhere in the theatre of operations.

216. These objectives come at a price, and commanders must balance the capability offered by Role 3 MTFs and the logistic constraints imposed. Some need only be deployable in order to get into theatre, whilst others may need to be redeployable in order to support manoeuvring formations. Role 3 MTFs are complex and require a period of days/weeks to reconfigure and substantial logistic support to move them.

**The Relationship between Role 2 and Role 3**

217. Forward medical interventions generate particular problems\(^7\) and may carry significant clinical risk. Medical and surgical treatments conducted at Role 2 (particularly Role 2 LM) should be kept to a minimum in order to buy time and save lives. Clinicians should distinguish between patients who require medical intervention (including the scale of intervention) and patients for whom it might be delayed safely. Sound clinical judgement will be influenced by the robustness of in-theatre MEDEVAC to Role 3 MTFs, and requires situational awareness and an appreciation of the scope and limitations of specific treatments.

218. If Role 3 medical support is not available through PCRF or Allied support/HNS and/or by evacuation to the Home Base, then carefully planned and engineered Role 3 builds in Tier 1 or Tier 2 accommodation\(^8\) will need to be included in the theatre infrastructure plan from the outset. Illumination and temperatures must be maintained at levels that permit advanced interventions and promote healing, and the infrastructure should be designed to provide a clinical environment and levels of infection control not possible in a Role 2 structure. With this improved environment comes the option of incorporating highly technical and often fragile medical equipment (particularly in areas such as diagnostics, operating theatres and intensive care units (ICU)), enabling the development of an in-theatre referral centre for specialist cases such as neurosurgery or burns.

219. Role 3 should be deployed where it offers the greatest benefit to the deployed population; in most theatres it is likely, for logistic and force protection (FP) reasons, to be deployed in the rear of an Area of Responsibility (AOR). In such circumstances, clinical timelines and surgical load may demand the deployment of one or more Role 2 MTFs closer to combat activities.

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\(^6\) THP is discussed at paragraphs 123-125.

\(^7\) For example, refrigeration and/or special handling of medical equipment further forward.

\(^8\) JDP 4-00 ‘Logistics for Joint Operations’.
Role 4

220. The National Health Service (NHS) in the UK provides UK Role 4 medical care for all British casualties who require, specialist or prolonged (beyond THP) in-patient care, definitive treatment and rehabilitation. The seamless reception, triage, tracking and secondary care of military patients requires close cooperation between MOD and the Department of Heath (DH). The current agreement is known as the Reception Arrangements for Military Patients (RAMP), and includes provision for infectious and CBRN casualties. The RAMP plan is modular in concept and based on 4 Levels, Level-1 being day-to-day Aeromedical Evacuation (AE) to the Royal Centre for Defence Medicine (RCDM) for admission to NHS care at the University Hospital Birmingham Foundation Trust (UHBFT). The plan can be escalated through all levels or activated initially at any level, but a planned major military campaign is likely to require a full Level-4 response with national DH coordination from the outset (DMSD Reception Arrangements for Military Personnel – Concept of Operations, Version 3).
### NATO Descriptor based upon AJP-4.10 (A)

<table>
<thead>
<tr>
<th>Role 1</th>
<th>‘Provides primary health care (PHC), specialised first aid, triage, resuscitation and stabilisation’.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specified/Implied Tasks (UK)</td>
<td>Clinical Capability based upon AJP-4.10 (A)</td>
</tr>
<tr>
<td>• Medical support to a man manoeuvring/static organisation. Includes packaging for evacuation. BATLS/BARTS resuscitation. Not necessarily Medical Officer (MO)-led. Collective Protection (COLPRO) unlikely.</td>
<td>• Basic occupational and preventative medical advice to the Chain of Command. Routine ‘sick call’ and the management of minor sick and injured personnel for immediate return to duty. Casualty collection from the point of wounding and preparation of casualties to the next MTF. Primary dental care. Additional capability may include: Minimal patient holding capability. Basic laboratory testing. Initial stress management.</td>
</tr>
<tr>
<td>Contemporary Examples (UK)</td>
<td></td>
</tr>
<tr>
<td>• Sick bay afloat (RN, RFA).</td>
<td></td>
</tr>
<tr>
<td>• Unit Aid Post (Army).</td>
<td></td>
</tr>
<tr>
<td>• Med Sections (Army).</td>
<td></td>
</tr>
<tr>
<td>• Role 1 MTF (RAF).</td>
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</tr>
</tbody>
</table>

### Role 2 Light Manoeuvre. ‘Conducts triage and advanced resuscitation procedures up to damage control surgery (DCS). It will usually evacuate its post surgical cases to Role 3 (or Role 2 E) for stabilisation and possible primary surgery (PS) prior to evacuation to Role 4.’

<table>
<thead>
<tr>
<th>Role 2</th>
<th>‘Conducts triage and advanced resuscitation procedures up to damage control surgery (DCS). It will usually evacuate its post surgical cases to Role 3 (or Role 2 E) for stabilisation and possible primary surgery (PS) prior to evacuation to Role 4.’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specified/Implied Tasks (UK)</td>
<td>Clinical Capability based upon AJP-4.10 (A)</td>
</tr>
<tr>
<td>• Utilised during high intensity combat, supporting manoeuvre (land or amphibious operations). Located forward in Brigade area of operations to deal with anticipated surge of casualties. Light &amp; highly mobile. An intermediate treatment node in complex terrain. COLPRO depending upon operational risk assessment.</td>
<td>• All Role 1 capabilities (UK). Consultant-led resuscitation with the elements required to support it (UK). Routinely DCS with post-operative care. Field laboratory. Basic imaging (UK). Reception, regulation and evacuation of patients. Limited holding capacity.</td>
</tr>
<tr>
<td>Contemporary Examples (UK)</td>
<td></td>
</tr>
<tr>
<td>• Sick bay + Aircraft Carrier (CVS)/Landing Platform Helicopter (LPH)/Landing Platform Dock (LPD).</td>
<td></td>
</tr>
<tr>
<td>• Cdo Forward Surgical Group (RN).</td>
<td></td>
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<tr>
<td>• Air Assault Surgical Group (Army).</td>
<td></td>
</tr>
<tr>
<td>• Role 2 (10) MTF (RAF).</td>
<td></td>
</tr>
</tbody>
</table>

### Role 2 Enhanced MTF. ‘Basic secondary care facility built around PS, ICU, and beds with nursing support. A Role 2 E facility is able to stabilise post-surgical cases for evacuation to Role 4 without the need to put them through Role 3 MTF first.’

<table>
<thead>
<tr>
<th>Role 2</th>
<th>‘Basic secondary care facility built around PS, ICU, and beds with nursing support. A Role 2 E facility is able to stabilise post-surgical cases for evacuation to Role 4 without the need to put them through Role 3 MTF first.’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specified/Implied Tasks (UK)</td>
<td>Clinical Capability based upon AJP-4.10 (A)</td>
</tr>
<tr>
<td>• Theatre entry. A theatre or regional secondary health care hub mainly on stable operations where a full Role 3 is not justified. A Role 2 E will normally replace both Role 2 LM and full Role 3 units as an operation stabilises. A light manoeuvre hospital in advance.</td>
<td>• All Role 2 LM capabilities. PS. Surgical and medical ITU capability. Beds with nursing support. Enhanced field laboratory including blood provision. Casualty decontamination facilities (dependent on operational risk assessment).</td>
</tr>
<tr>
<td>Contemporary Examples (UK)</td>
<td></td>
</tr>
<tr>
<td>• PCRF (RN) with Surgical Support Teams (SST).</td>
<td></td>
</tr>
<tr>
<td>• Field Hosp (Army).</td>
<td></td>
</tr>
<tr>
<td>• Role 2 (25) MTF (RAF).</td>
<td></td>
</tr>
</tbody>
</table>

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10 Any clinical capability missing from the stated requirement will reduce the Role designation of a MTF.

11 Capabilities marked ‘UK’ highlight areas the UK has either shaped NATO doctrine in order to reflect its own emphasis, or deviates from NATO doctrine.

12 Including the initial diagnosis and treatment of oro-facial maxillary surgery (OFMS) injuries in accordance with NATO STANAGs 2453 and 2465.

13 The RFA provides Role 1 under the auspices of the RN. RFA Roles 2-3 medical component is provided directly by DMS personnel.

14 For NATO, read Specialist MO – not all NATO nations recognise the term ‘consultant’.
<table>
<thead>
<tr>
<th>NATO Descriptor based upon AJP-4.10 (A)\textsuperscript{10}</th>
<th>Specified/Implied Tasks (UK)</th>
<th>Clinical Capability based upon AJP-4.10 (A)\textsuperscript{11}</th>
<th>Contemporary Examples (UK)</th>
</tr>
</thead>
</table>
| Role 3 MTF. ‘Provision of theatre secondary health care within the restrictions of the Theatre Holding Policy (THP)’ | • Force hospital.  
• COLPRO capability present. | • Capability may include:  
• Preventive medicine and environmental health capability.  
• Psychiatry.  
• Tele-medicine.  
• Evacuation coordination. | • PCRF (RN) with Surgical Support Teams (SST).  
• Field Hospital (Army) with SSTs. |
| of Role 3 MTF.  
• COLPRO depending upon operational risk assessment | | | |

Table 2.2 – Summary of UK Capabilities across Roles 1-3
SECTION III – MEDICAL EVACUATION\textsuperscript{15}

Introduction

221. MEDEVAC is the process of moving any person who is sick or injured to and/or between MTFs. Thus, MEDEVAC falls into 2 categories. The first is responsive in nature, when assets are called to an incident; the second is planned, when casualties are moved between MTFs. MEDEVAC requires specific medical personnel and assets appropriate to the particular operational environment. MEDEVAC forms part of the continuum of a patient’s treatment and care, and is a medical function.\textsuperscript{16}

222. Each Component contributes to MEDEVAC and should be able to adapt to changing (including deteriorating) operational scenarios. The need to evacuate patients, medical attendants and platforms from unstable and/or non-permissive environments may require a different clinical philosophy, and approach to risk, compared to more stable and benign environments. Similarly, the approach to the treatment of manageable numbers of casualties differs to mass casualty (MASCAL) situations in which the medical response is overwhelmed.

Characteristics of a Medical Evacuation System

223. Characteristics of an effective MEDEVAC system include:

a. 24-hour all-weather capability, over all terrain and in any operational environment. Clinical care should be provided throughout the journey, to an agreed standard and in accordance with CG principles. Alternative platforms or staging facilities should be available to ensure patients’ safety and welfare when evacuation is jeopardised for operational or technical reasons.

b. Appropriately trained clinical staff applying best practice tempered by operational constraints and realistic expectations, whose training should include military skills appropriate to the operating environment.

c. Interoperable equipment and training of in-transit medical personnel to enable rapid and safe transfer between airframes, ambulances and MTFs.

d. A system of patient regulation so that the flow and types of patients can be controlled, with accurate tracking of patients throughout the evacuation process.

\textsuperscript{15} AJP-4.10.2 ‘Allied Joint Doctrine for Medical Evacuation’ – (Ratification Draft 1, 12 October 2006).

\textsuperscript{16} As opposed to ‘Opportune Lift’ and ‘CASEVAC’. These are terms used by some NATO nations to describe evacuation of ill or injured persons without in-transit medical care. Whilst this might be deemed to be better than nothing, CASEVAC is not a medical function.
e. Appropriately dispersed assets, throughout (and beyond) the Joint Operations Area (JOA).

f. Platforms tailored to the environment, together with their necessary protection (especially for Forward MEDEVAC), including air support and armoured ambulances. Geneva Convention principles restrict the use of recognised emblems on armoured platforms (Annex 1A).

g. Effective Command and Control (C2) to enable a coordinated, timely MEDEVAC response, supported by resilient communications across the MEDEVAC organisation.

Forward Medical Evacuation

224. Forward MEDEVAC transfers patients from point of wounding to the initial MTF. It is usual to ensure a baseline ground (ambulance) MEDEVAC capability, augmented by Rotary Wing (RW) assets, when possible and appropriate. The receiving MTF should be the most appropriate level of care as opposed to the closest, and Forward MEDEVAC teams should be equipped and trained to carry out appropriate pre-hospital care, including resuscitation. Forward MEDEVAC is controlled by operations staffs, with medical advice from the HQ providing the transport assets. The most appropriate platform (ground or air) should be despatched along with appropriate FP. Forward MEDEVAC encompasses a range of capabilities, including:

a. **Incident Response Teams.** An Incident Response Team (IRT) will be held at high readiness in order to respond as required. The response may not be purely medical, but it is medical timelines which will influence the location of assets and the readiness of the teams. The medical component of an IRT should be trained and equipped to deal with the consequences of trauma or life-threatening illness (although skill levels may vary according to the nature of the operation), and in military skills relevant to the mission. IRTs might be conveyed by ground or air.

b. **Forward Aeromedical Evacuation.** NATO defines Forward Aeromedical Evacuation (AE) as ‘that phase of evacuation that provides airlift for patients to the initial medical treatment facility in theatre. This is usually conducted by rotary assets in forward areas’.\(^1\)  This is normally undertaken by RW. The UK has refined its Forward AE capability in order to reflect the hazards of operating in the forward area, placing greater emphasis on the balance of risk. Thus, UK Forward AE capability extends from ‘as far forward as the tactical situation permits (which might be from point of

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\(^1\) AAP-6 *NATO Glossary of Terms and Definitions*. 
wounding, from Role 1 or from a point rearward of Role 1, to higher levels of care).”

c. **Joint Personnel Recovery.** Joint Personnel Recovery (JPR) is the aggregation of civil, military and political efforts to obtain the release or recovery of personnel from uncertain areas or hostile and denied areas whether they are captured, missing or isolated. The medical element of JPR is one aspect of a highly specialised team. Extraction of injured personnel in non-secure areas (formerly known as Combat Search and Rescue) requires medical staff to have a high degree of military and pre-hospital immediate care skills.

**Tactical Medical Evacuation**

225. Tactical MEDEVAC transfers patients within the JOA along LOCs, typically to Role 3 (or Role 2 E) MTFs, with patients stabilised before evacuation. Tactical MEDEVAC may be undertaken by ground or air (Fixed Wing (FW) or RW assets), although MEDEVAC by air will invariably be quicker and more secure.

226. Depending on the size and configuration of the operation, Tactical AE is controlled by an Aeromedical Evacuation Coordinating Officer (AECO) based at the Air Port of Debarkation (APOD) or Aeromedical Staging Unit (ASU), or by an Aeromedical Evacuation Liaison Officer (AELO), based in a Role 3 (or Role 2 E) MTF. An AECO will normally control all elements of Tactical MEDEVAC from several MTFs, including the theatre-end of Strategic AE and occasionally Forward AE if collocated with RW assets. An AELO is normally only responsible for Tactical AE involving the MTF within which he is based and the theatre-end of Strategic AE on smaller operations. However, depending on the size and configuration of the operation, Tactical and Strategic AE may also be coordinated by an AE Operations Officer (AEOO) based within the National Support Element (NSE) or the Joint Force Logistic Component Headquarters (JFLogC HQ).

**Strategic Medical Evacuation**

227. Strategic MEDEVAC transfers patients from the JOA to the home nation, or to another NATO country or temporary out-of-theatre safe area. It is a national responsibility (although nations may share resources) and uses military or civilian aircraft (although repatriation by PCRF might be considered a form of strategic MEDEVAC). In UK, the NHS is responsible for the reception, triage and acute secondary care of military patients evacuated from overseas, in accordance with the

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19 JWP 3-66 ‘Joint Personnel Recovery’.
principles contained in RAMP,\(^\text{20}\) although the destination of patients (where numbers allow) may be customised to their individual requirements.

228. Strategic AE is controlled by the Air Evacuation Control Centre (AECC) from the nation providing the aircraft and AE teams; close liaison with the AECO/AELO ensures that the correct personnel and equipment are matched to patient load. The roles of the Medical Coordination Cell (MEDCC) and the Patient Evacuation Coordination Cell (PECC) in multinational operations are described in Chapter 4.

**Triage Priorities**

229. Triage\(^\text{21}\) is a dynamic process that prioritises patients for treatment and evacuation. The following definitions apply:\(^\text{22,23}\)

- **Immediate Treatment (Group T1).** T1s require emergency care and life-saving interventions. Procedures should not be time-consuming and should apply only to patients with high chance of survival. Examples include respiratory obstruction, accessible haemorrhage and emergency amputation.

- **Delayed Treatment (Group T2).** T2s need surgery, but their general condition permits delay in treatment without undue danger to life. They may require sustaining treatment (such as intra-venous fluids, splinting, administration of antibiotics, catheterisation, gastric decompression and pain relief). Examples include large muscle wounds, fractures of major bones, intra-abdominal and/or thoracic, head or spinal injuries and uncomplicated major burns.

- **Minimal Treatment (Group T3).** T3s have minor injuries and can care for themselves or may be helped by untrained personnel. Examples include minor lacerations, abrasions, fractures of small bones and minor burns.

**Mass Casualty and Incident Response Planning**

230. A MASCAL situation is one in which an excessive disparity exists between the casualty load and the medical capacities available locally for its management. The situation may be complicated by Chemical, Biological, Radiological and Nuclear (CBRN) factors. MASCAL situations require the focus of the medical response to change from individual to collective needs, allowing resources to be concentrated on

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\(^\text{20}\) RAMP was discussed in paragraph 220 (footnote 9).

\(^\text{21}\) Triage describes the assessment of wounds and illnesses to decide the order of treatment of patients or casualties (Concise Oxford English Dictionary). The means by which this is achieved is described in JDP 4-03.1 ‘Clinical Guidelines for Operations’ due for publication in 2007.

\(^\text{22}\) Previously a system of P1, P2 and P3 was in place the term has now been replaced with the T system.

\(^\text{23}\) KIA should not be included in the Triage system and T0 should not be used.
achieving the most good for the greatest number of casualties. In the case of a declared MASCAL situation, a fourth triage category is used.

a. **Expectant Treatment (Group T4).** The T4 term is unique to MASCAL, and includes patients who have received serious and often multiple injuries, and whose treatment would be time-consuming and complicated with a low chance of survival. If fully treated, they make heavy demands on medical manpower and supplies. Until the MASCAL situation is under control, they should receive appropriate supportive treatment, the extent of which will depend on available resources and may involve large doses of drugs. Every effort should be devoted to their comfort, bearing in mind their potential survival should extra medical resources become available. Examples include severe head or spinal injuries, high doses of radiation and widespread severe burns.

231. Plans should be developed for different scenarios at the tactical level and integrated into a theatre-wide Major Incident Plan. The rapid and efficient response to a major incident is largely a FP (J3) issue, requiring best utilisation of resources, effective communications and removal of obstacles to interoperability. Major Incident Plans should be developed, tested and rehearsed at both theatre and local levels.

**SECTION IV – COMPONENT MEDICAL SUPPORT – CONTRIBUTION AND INTERACTIONS**

232. Single-Service medical organisations and facilities, optimised for their respective operating environments, provide a range of common core functions and some specialist functions. Notwithstanding any Service differences, the integration of medical support within theatre is essential to achieve efficiency and economies of scale. Joint theatre medical support should draw upon the medical facilities of all the Components engaged in the JOA. This Joint approach necessitates tri-Service interoperability in terms of medical policy, practices, training and doctrine. Characteristics of the Component medical services are outlined below.

**Support to the Maritime Environment.**

233. The RN Medical Services (RNMS) are responsible for all aspects of medical support afloat and for amphibious operations. Support to a deployed Maritime force may be afloat or ashore, with support afloat being the responsibility of the Maritime Component Commander. The concentration of manpower within the relatively small
volume of a ship’s hull means that casualties are likely to occur in groups. Maritime evacuation depends predominately upon Support Helicopters (SH) to ferry patients from land to maritime facilities, or for the evacuation of maritime casualties to more advanced shore facilities or evacuation points. Small boats and landing craft may also be used.

234. Afloat Role 3 medical support to Maritime, Littoral and Joint operations is delivered via the PCRF, a largely dormant facility permanently built into the hull of RFA ARGUS. The PCRF does not have its own dedicated helicopters but may embark SH during an operation. The PCRF is not declared as a hospital ship under the Geneva Conventions (GCs) but operates within an area of operations, exploiting secure communications and FP from other assets.

Support to the Land Environment

235. Land operations include amphibious, airmobile, airborne and follow-on force deployments, and may cover extended distances/LOCs. The AOR may be large enough to have 2 distinct support areas: the Rear Support Area (RSA), where most operational level support functions are performed; and the Forward Support Area (FSA), where tactical support functions take place.

236. Medical support to Land Operations is primarily provided by both the RN and the Army. The independent and complex nature of Land medical units requires commanders and soldiers to possess command, field, movement control, administrative, personnel and logistics expertise.

237. The Army Medical Services (AMS) can provide medical support to any part of a deployed force and specialises in the provision of Deployed Secondary Care (DSC) through its field hospitals.

Support to the Air Environment

238. Deployment Operating Base (DOB) medical support offers emergency cover for 24-hour, all weather flying operations, with aviation medicine advice available from specialists. AE, which extends beyond the JOA, is one of the main interfaces with other components.

239. Since AE may need to be conducted in more than one stage, ASUs may be required. An ASU located on, or in the vicinity of, an APOD or staging airfield, provides reception, triage, administration, ground transportation and medical, surgical and nursing support for patients entering, or en route to, the AE chain. An ASU close to a Role 3 (or Role 2 E) MTF at an APOD is principally a holding facility to enable controlled loading of an aeromedical aircraft.
240. The RAF Medical Services’ (RAFMS) deployable medical capability is delivered by the Tactical Medical Wing (TMW). Other than a small permanent cadre of headquarters staff, TMW is a shadow-manned organisation consisting of personnel who are routinely employed on other duties when not deployed.

241. AE links the theatre medical chain and enables evacuation to Role 4. UK policy is for all AE to be undertaken by allocated (as opposed to dedicated) airframes. The use of allocated airframes requires a responsive medical C2 structure and direct access to the air tasking authorities so that airframes may be appropriately configured and prepared for any AE role.

SECTION V – SPECIALIST CAPABILITIES AND REACHOUT

242. **Medical Support to a Brigade.** Close Support Medical Regiments (CS Med Regts) deliver (or augment) Role 1 and Role 2 LM medical support to supported manoeuvre Battlegroups and some Combat Support formations/regiments.

243. **General Medical Support.** General Medical Support Regiments (GS Med Regts) provide PHC, casualty transfer to Role 2 and 3 MTFs and emergency ambulance cover to major route networks.

244. **Specialist Support Organisations (Land).** Specialist Support Organisations (SSOs) deliver specialist in-transit care personnel and equipment to (principally) GS Med Regts to ensure the continuum of care during ground-based transfer for high and medium dependency patients.

245. **Medical Supply Squadrons.** Medical Supply Squadrons are Royal Logistic Corps (RLC) sub-units that deliver medical supply for all units (including maritime and air units) on operations.\(^{27}\) They will be under the Operational Command (OPCOM) of the Joint Force Logistic Component Commander (JFLogCC) when supporting Role 2E and 3 MTFs, and may be placed under OPCOM of either the JFLogCC or a Component Commander when supporting Role 2 MTFs (depending on the operational situation).

246. **Critical Care Air Support Teams.** Critical Care Air Support Teams (CCASTs) are specialist teams with ICU expertise for moving critically ill patients by air: comprising anaesthetists, ICU nurses, other medical support personnel and sometimes medical engineering support. CCASTs can usually transport 2 ventilated patients per anaesthetist, and require additional space on aircraft for equipment and patient access. CCASTs operate throughout the evacuation chain, including in support of Special Forces (SF).

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\(^{27}\) One Regular (84 MSS RLC) and one TA Sqn (381 MSS RLC) are established under Future Army Structures (FAS). 381MSS is earmarked to provide a Contingent Component in support of 84 MSS at Large Scale Deliberate Intervention (LSDI).
247. **Support to Special Forces.** SF are held at very high readiness and require robust preventive FP measures. SF operations are a challenge for medical support owing to: high prioritisation of SF assets; heightened or increased security needs; high mobility with limited logistic footprint; operational tempo; limited redundancy and equipment support; long and often insecure LOCs; and reluctance to compromise a mission for medical reasons alone. Consequently, SF equipment should be man-portable and multipurpose, and operators should be trained for multiple roles. Medical support consists of Role 1 (Land) with MEDEVAC routes (which may include RAF CCAST) that are well-defined, aided by rehearsed surgical capability, either within RW or FW SF airframes or as part of JPR.

248. **Deployable Aeromedical Response Teams.** RAF Deployable Aeromedical Response Teams (DARTs) provide an initial medical footprint (in terms of PHC and pre-hospital emergency care) in response to a crisis. They are held at very high readiness, operate in austere or unsupported environments, and will support any Service or UK interests, including providing support to Non-combatant Evacuation Operations (NEO) and to Non-governmental Organisations (NGOs).

249. **Mental Health Support.** Whilst mental health support\(^{28}\) is integral to all Roles and MEDEVAC, augmentation by additional Psychiatric Support Teams (PSTs) can be provided by reachout when the incidence of psychiatric cases is known, or anticipated, to be high.

250. **Medical Force Protection.** Med FP is the subject of Chapter 5. Although integral to all operational activities, much specialist Med FP is supported by reachout, including:

   a. **Air Transportable Isolators.** Air Transportable Isolators (ATI) provide a (Biological) containment facility which enables safe movement of highly infectious patients without endangering the medical team or the aircraft crew. ATIs are national assets, owned by DH and operated by MOD.

   b. **Technical Advisory Group.** The Technical Advisory Group (TAG) is a group of experts in the Home Base providing advice on CBRN. In order to be effective, the TAG requires information provided by the Joint Force Headquarters through the PJHQ, as well as data fusion provided, ideally, through integrated medical information systems.

251. **Specialist Occupational Training and Advice.** Specialist Occupational Medicine (OM) training and support to operations is provided by organisations such as the Institute of Naval Medicine (INM) and the RAF Centre of Aviation Medicine

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\(^{28}\) See Chapter 5.
(RAF CAM). Each single-Service also retains its own OM branch to provide operational training and advice.

252. **Dental Support to Operations.** The Defence Dental Services (DDS) provide professionally trained personnel for operational deployment through the DMSD Operations and Exercise Manpower Planning Committee (OEMPC). At home, the DDS ensures dental fitness for operations (see Chapter 5).

253. **Specialist Advisors.** Defence Consultant Advisers (DCAs) are military consultants who are heads of their speciality and appointed by SG in order to advise the DMS on standards, training and CG. In specialities without serving representation, SG appoints Honorary Civilian Consultants.

254. **Veterinary Support.** The Royal Army Veterinary Corps (RAVC) comes under the auspices of Director General Army Medical Services (DGAMS), although veterinary medicine falls outside the remit of GCs. It can be tasked:

   a. To ensure the safety of locally procured foods of animal origin (in association with the Defence Catering Group and Environmental Health (EH) staff.

   b. To provide veterinary public health advice and surveillance as MEDINT in support of Intelligence Preparation of the Battlespace (IPB) and to advise on diseases that may be transmitted from animals to humans, both treatment and prevention. This will include advice on the control and, if necessary, the disposal of feral animals

   c. To support Military Working Animals (MWAs), including their procurement, training, care and disposal as well to advise commandeers on their use for FP.

   d. To advise on the effects on animals and personnel of CBRN attack, and to undertake animal surveillance as an indicator of potential biological agent use.

   e. To advise commanders on the potential impact of conflict on a rural community, and on the planning and management of post-conflict/disaster reconstruction and contribute to Civil-Military Co-operation (CIMIC), particularly in agrarian economies where heavy reliance is placed on the use of animals for food and as a means of transport. This may assist a return to self-sufficiency as part of a force’s exit strategy.
255. **Forensics in Theatre.** Forensic support is required on operations to ensure that deceased personnel are managed consistently and appropriately.\(^{29,30}\) Forensic pathology may assist in Military Police (MP) investigations. Role 3 MTFs must be able to accommodate and support military and civilian forensic pathology teams. Forensic advice should be made available to detention facilities should the need arise.

256. Investigations involving aircraft accidents and incidents may be assisted through reachout by aviation medicine specialists provided by the RAF’s Forensic Aviation Pathology Response Teams (FAPRTs) and the RAF Centre of Aviation Medicine (CAM) Accident and Investigation Team (which have primacy over other investigation teams). Identification of aircrew and passengers may be facilitated by pre-morbid blood sampling for DNA testing or by dental records.

**SECTION VI – ORGANISATIONAL SUPPORT**

257. The DMS consists of a number of Service organisations, specialist organisations and agencies that provide medical capability for operations. Sound Command, Control, Communication and Information (C3I) processes are vital to achieving coordinated, balanced, operational medical support. C3I is further discussed in Chapter 4.

**The Defence Medical Services Department**

258. The Defence Medical Services Department (DMSD) provides strategic direction and management of the DMS and ensures that DMS outputs are consistent with Defence Planning Assumptions (DPAs).

a. The Deputy Chief of Defence Staff (Health) (DCDS (H)) reports to the Vice Chief of Defence Staff (VCDS) (and to 2\(^{nd}\) Permanent Under Secretary (PUS) for budgetary matters) and is the non-professional head of branch (or Senior Responsible Officer (SRO)).

b. The Surgeon General (SG), as the professional head of branch, is accountable to Ministers and to the Chief of Defence Staff (CDS) for the provision of medical advice across the military (including CG\(^{31}\)), and is responsible to DCDS (H) for all other matters.

259. DMSD sets policy and standards for the DMS and is responsible for establishing and maintaining professional links with various medical Colleges and

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\(^{30}\) The consistent management of deceased for coroner purposes is discussed in JDP 4-03.1. Administration of the deceased is a J1 responsibility.

\(^{31}\) However, as discussed at paragraph 421, for personnel deployed on operations SG will have dual responsibility for CG with the Joint Commander.
with the DH.\textsuperscript{32} DCDS(H) and SG have a coordinating function over the single-Service Medical Directors General (MDGs) whose own C2 arrangements are described in paragraphs 260 and 261.

**Front Line Commands - Single-Service Medical Organisations**

260. The role of the Front Line Commands (FLCs) is to ensure the provision of appropriate military capability in the right place, at the right time, in the most cost-effective manner in support of the UK’s Defence Strategy. FLCs are responsible for ensuring that single-Service/environmental contributions to the force are properly trained, manned and equipped to provide the required capability and effect.

261. RN, Army and RAF medical organisations comprise MDGs, their staffs and all military and civilian, Regular and Reserve employees, providing PHC and specialist occupational training to their own population,\textsuperscript{33} as well as MED FP. Each Service contributes to DSC and to MEDEVAC (this Chapter, Sections I and II).

262. MDGs set policy and standards for their respective organisations and provide Assurance.\textsuperscript{34} They are commanded by their own Commanders-in-Chief (CinCs) who, in turn, answer to the single-Service Chiefs of Staff (COS) and then to CDS. The single-Services retain full command of their medical personnel at all times,\textsuperscript{35} passing OPCOM to the Joint Commander when they deploy.

**The Defence Medical Education and Training Agency**

263. The Defence Medical Education and Training Agency (DMETA) is an executive agency of the MOD and is an integral part of the DMS under the strategic direction of DCDS (H). DMETA provides specialist education and training to DMS personnel, and is responsible for MOD Hospitals Units (MDHUs), the Defence Medical Services Training Centre (DMSTC), the Royal Centre for Defence Medicine (RCDM), the Defence Postgraduate Medical Deanery (DPMD) and the Defence Medical Rehabilitation Centre (DMRC), Headley Court. The Agency has a remit to provide those secondary care personnel, who work within DMETA establishments, to meet the CinCs’ requirements for operational support. The Agency works closely with DCAs and other heads of Career Employment Groups in relation to the training and employment of medical and allied health professionals. In addition, it trains and advises non-DMS personnel in First Aid and Casualty Drills.

**Relationships with other MOD Organisations**

264. The DMS maintains important links with:

\textsuperscript{32} See paragraph 108.
\textsuperscript{33} The delivery of PHC may be through provider organisations.
\textsuperscript{34} Certainty of action.
\textsuperscript{35} Exercised through DMETA in the case of secondary care personnel – paragraph 267.
a. **Permanent Joint Headquarters.** The PJHQ undertakes the highest level of operational planning for Joint operations. PJHQ is responsible for directing the mounting process and coordinating deployments. Although the medical function is embedded in J4, it permeates every staff and command function (see Annex 4A). The role of PJHQ as it relates to the medical function, is discussed in Chapter 3.

b. **Joint Force Logistic Component Headquarters.** A permanent standing UK JFLogC HQ has been established. Chapter 4 discusses the C2 implications of the deployed HQ.

c. **Defence Equipment & Support.** Although the DMS will require relationships with a number of the Integrated Project Teams (IPTs) within Defence Equipment & Support (DE & S), the primary link is with the Medical Supply IPT for the acquisition and through-life management of medical equipment.

d. **Service Personnel Organisations.** Special relationships between the DMS and single Service personnel organisations address personnel Health and welfare issues.

e. **Defence Scientific and Technology Laboratory.** The Defence Scientific and Technology Laboratory (Dstl) is an agency of the MOD providing scientific and technological advice in sensitive areas such as tri-Service medical research, human factors, and chemical and biological defence.

f. **Defence Chemical, Biological, Radiological and Nuclear Centre, Winterbourne Gunner.** The Defence Chemical, Biological, Radiological and Nuclear Centre (DCBRNC), undertakes training of military personnel in defensive CBRN warfare, including the training of Role 1, 2 and 3 medical, nursing and dental officers in primary resuscitation and management of CBRN casualties in a CBRN environment.

g. **Joint Helicopter Command.** The Joint Helicopter Command (JHC) focuses on the employment of battlefield helicopters, drawing upon personnel and equipment from each of the 3 services to provide tailored packages to meet operational demands. Strong links between the DMS and JHC ensure effective MEDEVAC by RW.

h. **Defence Transport and Movements Agency.** The Defence Transport and Movements Agency (DTMA) enables Strategic AE by assigning military and civilian lift, when instructed to do so by the aeromedical tasking authorities.
i. **Development, Concepts and Doctrine Centre.** The Development, Concepts and Doctrine Centre (DCDC) is responsible for operational medical doctrine, Joint tactical doctrine and for overall coherence of single-Service doctrine.

j. **Defence Analytical Services Agency.** The Defence Analytical Services Agency (DASA) assists decision making within MOD by providing economic, statistical and management information, advice and research. In medical terms, it provides epidemiological information on which the medical function (in the home base and on deployment) is both based and evaluated.

### Relationships with non-MOD Organisations

265. The DMS maintains important links with:

a. **Other Government Departments.** The NHS provides a UK-based clinical environment for DMS secondary care personnel when not deployed, as well as treating casualties upon their repatriation to the UK (see RAMP, discussed at Paragraph 220). Links with Other Government Departments (OGDs) (such as the Department for International Development (DFID), Foreign and Commonwealth Office (FCO) and the Post-Conflict Reconstruction Unit (PCRU)) contribute to a coordinated cross-Government response to a crisis.

b. **International Organisations and Non-Governmental Organisations.** International Organisations (IOs), for example the International Committee of the Red Cross (ICRC), play a pivotal role in treating captured or detained persons and refugees. IOs and NGOs have the lead on civilian assistance, although their Code of Conduct, developed by ICRC, Red Crescent Movement and other NGOs (with broad acceptance in the NGO community), recognises the value of a military contribution in exceptional circumstances. From an NGO perspective, any relationship between the military and civilian aid workers may be perceived to threaten the impartiality on which NGOs rely. This is covered in detail in JWP 3-50 (2nd Edition) ‘The Military Contribution to Peace Support Operations’.

c. **The NATO Response Force.** NATO’s expeditionary capability will be delivered by the high readiness NATO Response Force (NRF). The NRF’s high readiness, wide spectrum of missions and the uncertainty of Host Nation

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37 The NRF must be available for deployment within 5 days and self-sustaining for at least 30 days.
(HN) medical support will necessitate effective, self-sustaining medical support and evacuation planning. This is expanded upon in MC 0551, ‘Medical Support Concept for NRF Operations’, dated 30 June 2006.

d. **European Union, United Nations and United States.** Outside NATO, the UK may participate in operations led by the European Union (EU), United Nations (UN) and/or United States (US).

(1) **European Union.** EU planning assumptions involve deploying a ‘high-readiness’ force of 60,000 in 60 days sustained for at least one year, and the UK is involved in the European Union Battlegroup (EUBG) concept. Medical support to EUBG is ‘dual-hatted’ and similar to the NRF, but since the EU level of ambition is smaller and more inclined towards Crisis Response Operations (CRO), the level and configuration of the medical support will vary. UK provision for the EUBG is based on medical elements of the Joint Rapid Reaction Force (JRRF).

(2) **United Nations.** When military forces are part of a UN mission, medical units are usually organic to national contributing forces. UK military medical personnel deployed on CROs or Peace Support Operations (PSOs) are likely to find UN units working in their vicinity, particularly if humanitarian elements are involved.  

(3) **United States.** Whilst the US is a signatory to NATO medical doctrine, it also produces its own with which the UK will wish to remain broadly aligned.

**SECTION VII – MANPOWER ISSUES**

266. The pool of deployable medical manpower falls into 3 groups: Regulars, Reserves and civilians, all of whom (ideally) need both military and clinical skills.

a. **Regular Personnel.** Regular personnel provide the majority of the manpower for Role 1-3 MTFs, MEDEVAC and reachout functions. Regular personnel reside in the single-Services, although may be employed elsewhere when not deployed.  

b. **Reserves.** Reserves form a vital pool of manpower for, generally, DHC and Strategic AE. Owing to their numbers and/or specialisation, their

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38 Details of UN procedures and protocols can be found on the UN website and its associated links.
39 Uniformed clinicians require a patient population when not deployed so that they can maintain their clinical expertise and currency, and many hospital specialists and non-specialists are employed within MDHUs and in the wider NHS under the auspices of DMETA. Their readiness and deployability are determined by their respective branches and reflected in contracts with the civilian health services.
participation is necessary for most large operations. Reserves may volunteer for any operation, but their compulsory call up requires an Order in Council issued under the Reserve Forces Act 1996 (RFA 96). Ex-DMS personnel are retained on the active list for a variable period of time depending upon their specialisation and experience; their conditions of mobilisation are contained within RFA 96, but they are much less likely to be mobilised than Reserve forces. Once deployed, the MOD is responsible for the indemnity of medical Reserves’ professional activities. All Reserves (medical and non-medical) should receive the full range of FP measures, and any potential exposure to hazards which may have long-term consequences should be identified and recorded. The MOD provides medical support to all Reserves during, and for a period of time after, deployment.

c. **Civilians.** Increasingly, civilian medical contractors with little or no military experience are being employed in specialist functions on operations. Their lack of military training will limit their utility when deploying to potentially non-benign or hostile environments.

**Formed and Non-Formed Units**

267. Medical personnel may deploy in formed units, which train and operate together, or as individuals and/or non-formed units (NFUs). NFUs come together as teams for a specific deployment only, and they have limited opportunities for training before-hand. NFUs are not self-sufficient and require considerable support from others (especially logistic, movements, infrastructure, administrative, security and communications support). Formed units are typically found in the Army; NFUs are more typically found in the RN and RAF, although these distinctions are not absolute and will vary according to the mission.

**SECTION VIII – EQUIPMENT AND SUSTAINABILITY ISSUES**

268. Medical logistics includes the acquisition and supply of capital and consumable items. Sustainability is defined as ‘the ability of a force to maintain the necessary level of capability for the duration required to achieve its objectives’. Medical sustainability requires predictions of manpower and supply requirements, both at the outset of, and during, an operation.

269. Medical supply is an integral part of the Joint Supply Chain and all medical materiel is managed in accordance with the common operating procedures described in JWP 4-00 ‘Logistics for Joint Operations’. Medical materiel is classified as a specific class of supply and is subject to particular planning constraints.

40 This includes staff within Defence Equipment & Support (DE&S), Contractors on Deployed Operations (CONDO), and Integrated Medical Teams (IMT) consisting of a mixture of military and civilian personnel providing DSC.

41 JDP 0-01.1 ‘UK Glossary of Joint and Multinational Terms and Definitions’.
a. **Medical Logistic Footprint.** The Logistic Estimate must take full account of medical supply capability requirements in order to provide the necessary level of medical support throughout the battlespace, to the Coupling Bridge\(^{42}\) and to Forward Mounting Bases which might be outside the JOA.

b. **Medical Infrastructure.** Effective and robust medical capability relies upon non-medical support such as transport, water, and power (this is especially the case for NFUs). Larger medical facilities require significant Force engineer and logistic support for their construction, protection, maintenance and supply.

c. **Acquisition of Medical Materiel.** Quality medical support requires trained medical personnel to be provided with appropriate equipment and consumables. In order to keep pace with changes in the NHS, the Defence medical inventory adopts an evolutionary acquisition life-cycle, delivering capability in increments and acknowledging opportunities for future improvements. The effectiveness of this incremental process depends on consistent and continuous definition of the requirement by DCAs and on active user-feedback.

d. **Modularisation.** The deployed medical inventory is initially stocked on a modular basis, consisting of default lists of medical materiel. Modules are to be designed and the content reviewed regularly by DCAs in order that they meet the requirement of the medical support provided at each Role. Resupply modules, consisting of consumables required to re-stock initial modules, may be held within a theatre of operations, although resupply modules are bulky and wastage is common. Their use should be restricted to peak periods of demand, with single line-item demanding the preferred norm.

e. **Priority of Distribution and Time.** Much of the medical inventory has a finite shelf life and may be sensitive to extremes of temperature, requiring strict stocktaking regimes to ensure that effective treatment is maintained. Requests for medical items are prioritised in line with patient requirements and flown into operational Theatres using the Joint Supply Chain. In Theatre, specialist distribution arrangements can be made to ensure that critical supplies, such as blood, are delivered to the point of consumption.

f. **Specialist Storage and Distribution Media.** Some consumables require specialist storage, distribution and handling. Logistic planners may be required to allocate specialist distribution assets and control measures for items such as blood, blood products and a range of pharmaceuticals. The storage,
distribution and handling of medical products are subject to national regulatory measures.

g. **Clinical Waste Products.** Disposal of medical and pharmaceutical waste, a logistic support responsibility with EH advice, may have a significant impact upon the deployed Joint Supply Chain and requires close control by the chain of command. The disposal of medical waste needs to conform to national legislation. Ideally, medical waste should be incinerated at a deployed UK medical facility or passed to a partner nation, HN facility or suitable contractor at the earliest opportunity. Under the Wholesale Dealers Licence, no pharmaceuticals can be returned via the reverse Defence Supply Chain. If no longer required, they are to be disposed of as pharmaceutical waste.  

**Responsibilities**

270. Medical provisioning and storage are integral parts of the Defence Supply Chain, which facilitates intelligent procurement and maximises the interoperability of medical assets on operations. The medical supply function is incorporated within DE&S. DE&S includes DMS personnel within its command structure, who remain responsible functionally to DMS and retain their protected status on deployment.

271. The Medical Supplies Integrated Project Team (Med S IPT) is responsible for acquisition and through-life management of all new medical equipment and consumables, although they may not be solely responsible for non-medical items of equipment which are required to meet a medical capability.

272. Close liaison is necessary between the Med S IPT and other IPTs or organisations supporting the medical function. The Medical Logistics Centre (MedLoC), within the Defence Storage and Distribution Agency (DSDA), stores and distributes medical equipment and consumables to operational units, while DSDA itself undertakes this role for essential non-medical equipment.

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43 Exemptions currently apply to the return of morphine autojets and combopens.
44 For example, they carry protected medical status cards (F Ident 107s) on deployment.
45 The Med S IPT will merge with the GS IPT in 2007 to form the Med & GS IPT.
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CHAPTER 3 – PLANNING AND MOUNTING THE OPERATION

Chapter 3 covers planning and mounting the medical contribution to Joint operations, including the contribution of Medical Intelligence (MEDINT).

301. The planning, mounting and conduct of an operation is an iterative process, undertaken by the Permanent Joint Headquarters (PJHQ). The Front Line Commands (FLCs) act as force contributors, with the Defence Medical Services Department (DMSD) providing central policy and advice. Whilst the tools and templates described below provide a basis for planning, the reality is a dynamic process, dictated by the requirements of the specific operation. This chapter is, therefore, a statement of broad principles upon which Joint tactics, techniques and procedures (JTTPs) should be developed.

302. Medical planning must be versatile, and fully integrated within all phases of the planning process described in JWP 5-00 ‘Joint Operations Planning’, and in Joint Doctrine Note (JDN) 7/06 ‘Incorporating and Extending The UK Military Effects-Based Approach’ (which codifies emerging best practice and provides guidance on the incorporation of effects-based thinking into planning).

SECTION I – OPERATIONAL PLANNING

Strategic-Operational Interface - Current Commitments Team/Contingency Planning Team/Operations Team

303. The planning process starts with warnings from the Defence Intelligence Staff (DIS) and from J2 in PJHQ. As the crisis develops, the MOD forms a Current Commitments Team (CCT) and Chief of the Defence Staff (CDS) issues a planning directive to PJHQ and the FLCs. On the strength of this directive, the PJHQ forms a J5-led Contingency Planning Team (CPT). This will include J4 Medical representation from the outset ensuring that PJHQ medical planners are fully abreast of developments. When political authorisation is received, and an operation is activated, the CPT becomes a J3- led Operations Team (OT). Normally, specialist advisers (such as medical) will transfer from the CPT to the OT. The MOD may also be expected to adopt a supporting role in a cross-Government plan for a specific crisis. Early engagement with DMSD will provide strategic guidance on the level of Capacity Building support that the deployed medical services could be expected to provide.

1 JDN 4/05 ‘The Comprehensive Approach’ details the MOD view of the Comprehensive Approach.
The Planning Process

304. CDS directs the Joint Commander, normally at PJHQ, and relevant single-Service Commanders to plan operations in accordance with specified assumptions, objectives and constraints. PJHQ develops plans (including a medical plan) in conjunction with the Commands who will identify the capabilities required to achieve the mission. ACOS J1/J4’s Medical Estimate, which is undertaken to inform the Joint Commander’s Mission Directive to the Joint Task Force Commander (JTFC) will have early influence from DMSD, Defence Consultant Advisers and FLCs. This early engagement with DMSD allows the opportunity to pool scarce medical resources with other Troop Contributing Nations (TCNs), as far as possible, without compromising nationally accepted standards. The Joint Commander’s Directive will detail the mission, scale of forces, type of operation and command arrangements. The JTFC issues his own directive (the JTFC’s Directive) to component commanders outlining the Campaign Plan. Each level of directive contains a medical component which becomes progressively more detailed as information and the level of command permits/requires. The medical planning process is thus a product of:

a. Medical Intelligence Assessments (MIA).

b. Reconnaissance.

c. The Medical Estimate.3

d. Medical Warning Notice (although not strictly part of the planning process, the medical warning notice enables subordinate formations and units to engage in concurrent mission preparation activity).

e. Medical Directive (issued as an annex to the Joint Commander’s Directive).

Medical Intelligence Assessments

305. Medical Intelligence (MEDINT) is defined as ‘Intelligence derived from medical, bio-scientific, epidemiological, environmental and other information related to human or animal health. Note: this intelligence, being of a specific technical nature, requires medical expertise throughout its direction and processing within the intelligence cycle.’4

306. MEDINT provides the basis on which the risks to health of an operation may be assessed and directs the development of Medical Force Protection (MFP). Advice on

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2 The Joint Commander is usually, but not invariably, Chief of Joint Operations (CJO). For the purpose of this document, the term Joint Commander will be used unless the text specifically refers to the appointment of CJO.

3 Although part of the overall Medical Estimate process, factors pertinent to Dental Estimates are contained at Annex 5A.

4 AJP-4.10.3. ‘Allied Joint Doctrine for Medical Intelligence (MEDINT)” Ratification Draft.
policy and specific countermeasures should be sought through the medical chain of command. MEDINT also provides information on an adversary’s medical facilities, which should not then be targeted. UK MEDINT outputs are based on all-source reporting and analysis conducted by trained personnel. MEDINT has wide utility in assisting with general Intelligence Preparation of the Battlespace (IPB) and with other Intelligence products. Medical information (which may contribute to MEDINT) is collected at the tactical level and passed through the medical chain as appropriate.

307. If information is insufficient, medical planning staff should forward Requests for Information (RFI) to the supporting Intelligence staff. RFIs should be tightly defined, narrow in scope, and specific to a mission or objective.

Reconnaissance

308. Reconnaissance is an important part of the early planning process and a suitably qualified medical Staff officer should accompany any reconnaissance parties. The primary aim is to update the medical information picture, confirm the availability and suitability of health resources in the Joint Operations Area (JOA), identify potential health hazards and, where appropriate, assess local health needs.

The Medical Estimate

309. Medical planning utilises standard staff methods to ensure coherence between operational, logistic and medical functions. Whilst there are a number of means in existence, the basic tool is the Estimate. The nature and complexity of the operational plan will dictate whether medical staff simply contribute to the Command Estimate and Joint Logistic Estimate, or devise a separate Medical Estimate and plan.

310. The purpose of the Medical Estimate is to gauge the effect of enemy and natural forces upon the force strength and to identify appropriate preventive measures and medical force treatment capabilities required for the mission. The Medical Estimate will calculate Populations at Risk (PAR) (see paragraph 311a), and consider key factors such as mission, geography, population distribution, potential for mass casualties (MASCAL), combat risks and disease. These will be considered alongside available evacuation capacity and medical facilities (own, allied and Host-nation Support) to inform the emerging medical plan. Essentially, it is an estimate of the total liability and risk in order to inform the total medical capability requirement, and of the Command, Control, Communications and Information (C3I) required to underpin the effective utilisation of scarce medical assets.

311. Two key considerations are:

a. Population at Risk. Calculation of the necessary medical capability requires accurate assessment of the PAR, which includes entitled personnel within the JOA and the Coupling Bridge (CB). The PAR assessment will be
refined as the operational plan matures; this may result in the addition of groups and individuals with different healthcare needs, requiring changes in the provision of medical support in theatre.

b. **Casualty Estimate.** Different types of military operations produce different casualty profiles. The trench warfare of WWI produced a high proportion of head injuries whilst armoured warfare tends to produce higher proportions of burns. The Casualty Estimate is a numerical calculation of the expected rate, flow and profile of battle casualties (BC) and Disease and Non-Battle Injury (DNBI) cases, against which the type and extent of medical support is assessed. BC estimates are produced or endorsed by J5 staffs, with the profile and mix of casualties based on medical judgement. DNBI estimates are set by medical staffs, based upon the level and nature of activity, acclimatisation, training and living conditions of the deployed personnel. Specific casualty calculations will be required for medical resource areas such as dental and surgery or specific threats such as Chemical, Biological, Radiological and Nuclear (CBRN) or a known endemic disease. Further guidance on casualty estimation is in AJP-4.10.1 *Allied Joint Doctrine for Medical Planning* with specific detail on CBRN casualty estimation available in AMed P-8. Figure 3.1 is an illustrative diagram, showing the rate and flow of casualties throughout a generic operation.

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5 AJP-4.10.1 Study Draft 2 dated 30 November 2006.
6 AMed P-8 is a series of STANAGS (2475, 2476 and 2477) pertaining to nuclear, biological and chemical casualties (respectively).
Medical Warning Notice

312. A Medical Warning Notice contains information such as the required medical standard of troops, details of immunisation policy, malaria chemo-prophylaxis and other measures, and is issued to units, by PJHQ, as early as possible to aid force preparation. It is based on assessed threat (from the Estimate), extant policy and specialist medical advice (especially from subject matter experts in Public Health and Communicable Disease Control).

Medical Directive

313. As planning matures, a Medical Directive is issued as a Medical Annex to the Joint Commander’s Directive (also known as the Theatre Reference Document).

Lessons

314. The lessons process should begin as soon as the operation is ordered by means of a record of lessons that are identified as the campaign or operation progresses. It will culminate in the medical commander providing a post-operational report (POR), highlighting relevant lessons and suggesting ways in which the lessons might be assimilated and learned. The POR should be staffed through the chain of command to either the single Service HQs or PJHQ. Lessons will also be scrutinised and assessed

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7 Carford Bargraph, developed from AMS Core Doctrine Volume 1.
8 Note that the operation may not be linear – paragraph 103 explains.
by the single Services or PJHQ, with strategic lessons being passed to the Director of Operational Capability (DOC) and to DMSD for further analysis and action.

315. Clinical lessons, which may themselves have operational implications, should also be developed. Any lessons whose speedy application can improve the conduct of an operation or lead to the better realisation of appropriate effects should be implemented as soon as sensibly and practically possible.

**SECTION II – MOUNTING AND DEPLOYMENT**

316. The Joint Mounting Order, issued by PJHQ’s Joint Mounting Cell, directs FLCs on the mounting and deployment of forces. There are essentially 2 medical aspects to mounting an operation:

   a. Medical preparation of the total force.

   b. Mounting and deploying the medical capability.

**Medical Preparations of the Total Force**

318. **Selection of Personnel.** Medical standards for the selection of deployable personnel should be agreed and promulgated as soon as possible, using the Medical Warning Notice. To avoid an additional burden on the Defence Supply Chain, personnel who require medication should deploy with sufficient supplies for the duration of the deployment, where practicable.

319. **Preventive Measures.** Any immunisation and pre-medication programme to protect against prevalent disease or CBRN hazards takes time, both to implement and to become effective. Such a programme should be agreed upon and directed as early as possible.

320. **Medical Records.** Wherever possible, normal peacetime medical and dental records will be maintained on deployed operations. The decision to deploy medical records must be communicated to medical units in time for them to make appropriate preparations.

321. **Medical Training Requirements.** Medical pre-deployment training of the total force should include health education, field skills, first aid training and the psychological preparation of troops (the latter focusing on the normality of psychological reactions before, during and after deployment on operations and stressors likely to be encountered in the JOA).9

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9 SGPL 03/06.
Mounting and Deploying Medical Capability

322. **Training of Medical Personnel.** In addition to the above training requirements, medical personnel (Regular and Reserve) should undertake pre-deployment collective training with the units they will support, together with assessment and validation of medical Force Elements (FE) and medical systems. Comprehensive pre-deployment training develops the necessary medical capability up to and including thorough mission rehearsal, and mitigates the challenge of delivering medical capability by disparate groups. Where full training is not possible, any consequent risk should be quantified and communicated to PJHQ.\(^\text{10}\)

323. **Population of the Operational Establishment Table.** The Operational Establishment Table (OET), a J3 lead with medical advice, provides a statement of the required Line Serial Numbers (LSN) (posts) to be filled, which is then passed to J4 medical staffs for onward transmission to DMSD, the Defence Medical Education and Training Agency (DMETA), the Defence Augmentation Committee (DAC) and the FLCs. They, in turn, populate the OET with the names of individuals, resulting in the Force Establishment Table (FET).

324. **The Desired Order of Arrival Staff Table.** The Desired Order of Arrival Staff Table (DOAST) is constructed by the Joint Mounting Cell in accordance with the operational commander’s priorities. The out load of medical capability into the JOA must be an integral part of the DOAST and tailored to the build-up of FEs and the threat to those forces.

The Coupling Bridge

325. The CB is made up of strategic assets, infrastructure, routes and facilities used to move personnel, equipment and materiel between the Port of Embarkation in the home base and the Ports of Disembarkation/Debarkation in the JOA. The CB concept incorporates all the activities that are necessary to deliver FE and materiel into and out of the JOA, in accordance with the operational commander’s priorities. Medical support to operations will include support to, and use of, the CB.

326. Medical assets will deploy using the CB, and medical support will be required for those personnel operating the CB. The CB provides the link between in-theatre medical assets and the full range of definitive care available within UK Role 4 provided (largely) by the National Health Service. All entitled casualties who require specialist (beyond Theatre Holding Policy) in-patient care, for definitive treatment and rehabilitation, will be evacuated via the CB. This could include evacuation by sea or air using the appropriate Sea Port of Disembarkation (SPOD) or Air Port of Debarkation (APOD). This will be supported by the deployment of RAF Aeromedical

\(^{10}\) Possible mitigation may include: delaying deployment to allow further pre-deployment training; additional in-theatre training; and/or limitations placed upon the deployment and employment of under-trained individuals or groups.
Evacuation (AE) and Critical Care Air Support Teams (CCAST), as well as Aeromedical Staging Units (ASU) at all nodes where there is a potential need to hold and/or transfer casualties between aircraft.11

327. The CB concept ensures that medical support to an operation is comprehensive (across and beyond the JOA) and continuous from point of wounding to definitive care. A significant proportion of medical support to an operation, including AE, CCAST, ASUs and RAF Role 1, will operate inside the CB but outside the JOA, and remain under the C2 of the Joint Commander. It should be noted, furthermore, that whilst the CB is intended to be comprehensive, some APODs or SPODs for casualties being transferred to a hospital (including the hospital itself, from which patients are discharged) may fall outside the CB and the Joint Commander’s influence.

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11 These nodes could be outside the span of the CB.
CHAPTER 4 – COMMAND, CONTROL, COMMUNICATIONS AND INFORMATION

Chapter 4 describes the Command, Control, Communications and Information infrastructure that enables the delivery of medical support to Joint and multinational operations, including direction on Clinical Governance which is both a medical and command responsibility.

SECTION I – COMMAND AND CONTROL

401. Complex, progressive medical support in theatre, provided by a number of services and organisations, requires fast and efficient communication of relevant information, delivered through effective Command and Control (C2). These arrangements must extend beyond the Joint Operations Area (JOA) to the home base, so that patients are properly managed, resources properly utilised, and medical commanders receive appropriate information on which to base their decisions.

402. Whilst medical planning is undertaken under the auspices of J4, the medical function will have an input to all Joint staffing areas (J1-J9). The interfaces and interaction between medical and non-medical staff functions are detailed at Annex 4A. Medical C2 (especially in theatre) will usually be embedded within other command nodes, including the principal deployed headquarters (HQ) (see Command in Theatre, paragraphs 404-410). Medical planners should issue unequivocal guidance on C2 matters as they relate to specific Joint or multinational operations.

403. **UK Command Structures**

   a. **Strategic.** Strategic (and operational) command structures are described in JDP 01 ‘Joint Operations’.

   b. **Strategic/Operational interface.** The Permanent Joint Headquarters (PJHQ) incorporates the Joint Force Headquarters (JFHQ) staff, who form the basis of a deployed JTFHQ (Joint Task Force Headquarters). PJHQ, Deputy Assistant Chief of Staff Medical (DACOS Med) deals with medical aspects of the planning and conduct of UK’s Joint operations (in conjunction with the Defence Medical Services Department (DMSD) and the Components) and is the Joint Commander’s principal adviser for operational Clinical Governance (CG). PJHQ issues medical direction formally, as an element of the Joint Commander’s theatre directives, and through normal staffing procedures. Use of the Strategic Line of

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1 Joint planners should be aware of organisational differences between the Components, as each Service embeds the medical function within different staff and command areas.
Communication (pertinent to aeromedical evacuation (AE)) is accessed via PJHQ (who are responsible for allocating priorities) and operated through the Defence Transport and Movements Agency (DTMA) (who assign military and civilian lift).

c. **Operational - Joint Task Force Headquarters.** The UK recognises 2 broad types of HQ: a generic UK-led multinational or national Joint Task Force HQ (JTFHQ) and a National Contingent HQ (NCHQ) where the UK is a participating nation. There is no fixed template for either HQ – their structure is mission dependent and allows for concurrency of operations. See Command in Theatre, paragraphs 404 - 410.

d. **Tactical – Component Headquarters.** Detailed execution at the tactical level lies with the Components. The role of the Joint Force Logistics Command Headquarters (JFLogC HQ), as it relates to the medical function, is discussed at paragraph 408.

**Command in Theatre**

404. **Medical Advisers.** At each level of command there should be a Medical Adviser (MEDAD) (sometimes called Chief Medical (Chief Med) in NATO) who can advise the operational commander on medical matters. On small-scale operations, this may be a unit medical officer (UMO) whilst, on larger operations, senior medical staff officers and even medical commanders may be specifically appointed.

405. The Medical Adviser should be part of the operational command group and maintain a detailed understanding of both current and future plans. He will ideally be collocated with the commander, be present at planning meetings and operational briefings, and establish direct interactions with other principal commanders’ staffs and advisers. Medical staff at HQ level embedded in other ‘J’ staff and command cells should follow technical directions given by Medical Adviser. The relationship between Medical Adviser and those in subordinate formations is one of functional direction and coordination; executive authority remains with the operational commander’s J3 command chain. The exception to this is when the Medical Adviser is appointed as Commander Medical (Comd Med).

406. **Commander Medical.** Comd Med is the functional head of the medical services in a formation or theatre of operations. His job is to provide policy direction and coordinate activity of all UK Medical Force Elements (FEs), including responsibility for the medical laydown, casualty regulation, medical information capture and CG within the JOA. Command status can be assigned by the Joint Task Force Commander (JTFC), National Contingent Commander (NCC) (or PJHQ if neither is deployed). A Comd Med may also act as Medical Adviser to a senior commander.
407. **Location.** The location of principal UK Medical staffs cannot be overly prescriptive. Ideally, medical staff should be embedded within all operational HQs, with overarching C2 being executed in the principal deployed HQ (which is likely to be the JTFHQ or the NCHQ).

408. For larger operations, at Medium Scale and above, the standing JFLogC HQ will be deployed ‘to deliver coherent, coordinated logistic support, within the JOA or at theatre level, to the Joint force in accordance with the JTFC’s priorities’. Generally, there will be a Comd Med within the JFLogC HQ who will assume responsibility for deployed Role 3 (including the Primary Casualty Receiving Facility (PCRF), if deployed), and Strategic AE.

409. Alternatively, on operations without a JTFHQ, a lead component HQ could support the nominated Commander British Forces (COMBRITFOR), or the Components could answer independently to PJHQ. In the latter case, a MEDAD in each of the Components should be identified to communicate with PJHQ, DACOS Med.

410. **Function.** Medical C2 functions include:

   a. Directing Medical Force Protection (MFP), through preventive medicine, medical information, Medical Intelligence (MEDINT), epidemiological and environmental survey, hygiene and sanitation and veterinary services, including medical Chemical, Biological, Radiological and Nuclear (CBRN). (see Chapter 5).

   b. Ensuring that medical support meets the operational requirement, through monitoring and assessing the medical status of deployed personnel, the collation of medical reports from subordinate organisations, and by the setting and dissemination of medical policies, plans and directives.

   c. Contributing to the provision of acute care services, through battlespace awareness and casualty estimation.

   d. Medical regulation and tracking of patients and medical assets, including AE (aspects of MEDEVAC C2 are described in Chapter 2).

   e. Establishing an overall Mass Casualty (MASCAL) plan, in coordination with other HQ staffs (MASCAL is described in Chapter 2).

   f. Contributing to the development of the operational plan.

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2 JWP 4-00 ‘Logistics for Joint Operations’.
g. Coordinating with Civil-Military Co-operation (CIMIC) staffs in the areas of public health and humanitarian assistance throughout the UK’s Area of Responsibility (AOR).

h. Liaising with Medical Directors (Med Dirs) of other nations in order to coordinate and deconflict multinational medical support to forces in theatre.

i. Ensuring that an appropriate person is nominated to act as Caldicott Guardian3 of deployed medical records.

j. Commanding the Medical Group/Medical sub-units.

Coalition Operations

411. Coalition medical C2 arrangements will be superimposed on UK’s national C2 structure. On coalition operations, the JFLogC may also form the UK National Support Element (NSE). On smaller operations not justifying a JFLogC there may still be the requirement for a Joint logistic element that is also the UK NSE. For the smallest deployments, the logistic support may be integrated within other Components.

412. On most operations, nations retain command of their medical assets and the coalition role is one of coordination of medical support in order to provide efficient cover across the Force. NATO guidance is contained in AJP-4.10(A) ‘Allied Joint Medical Support Doctrine’.

413. NATO medical doctrine introduces 2 organisations:

a. Medical Coordination Cell. The Medical Coordination Cell (MEDCC) is the central medical body for all Combined Joint Task Force (CJTF) operations and coordinates multinational, Joint and multifunctional medical issues, including MEDEVAC. The MEDCC will normally be assigned to the Multinational Joint Logistic Centre (MJLC), when formed, but will receive technical and functional guidance from the Force MEDAD and send MEDASSESSREPs through medical channels. When a MJLC is not formed, the MEDCC will normally be collocated with the Command J4 staff or as a separate Combined Joint Medical (CJMEd) Staff Branch at the CJTF HQ. The MEDCC consists of 2 cells - Medical Ops/Plans Cell and the Patient Evacuation Coordination Cell (PECC).

b. Patient Evacuation Coordination Cell. The PECC provides a theatre-level patient regulation function which works in conjunction with force components and theatre logistic and movement control agencies. It is responsible for patient

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3 The Caldicott Report, published December 1997, recommended the establishment of a network of ‘Guardians’ for patient information throughout the NHS. ‘Caldicott Guardians’ ensure that guidance and statutory legislation regarding access to patient identifiable information is upheld and implemented in everyday practice.
tracking and for the maintenance of the MTF capability database. The PECC should have its own dedicated communication links to the key nodes of the evacuation system. Should a MASCAL situation arise, the PECC will implement the Med Dir’s decisions and act as the interface between the Med Dir and the units involved in the MASCAL.

Medical Regulation

414. Medical regulation is the dynamic process of directing and coordinating the transfer of patients within and beyond the JOA, from point of wounding or onset of disease through successive MTFs, to recovery and/or definitive care. This requires dedicated staff with appropriate Communications and Information Systems (CIS) providing visibility of the status of MTFs, evacuation assets and casualty flow. It is particularly important when there are multiple Role 3 MTFs (field hospitals, PCRF, allied/Host-nation Support (HNS)), in order for patients to be directed to the most appropriate facility and for each MTF to be utilised effectively.

Patient Tracking

415. A J1 function, patient tracking is the precise, continuous monitoring of the condition, location and intended destination of each patient in the medical treatment and evacuation chain (national and multinational). Keeping track of personnel is important for patients’ own medical wellbeing, for their families and the perceptions of the media. A patient tracking system should be near real-time, accurate and dynamic, using standardised procedures. Tracking is a challenging task, especially if different languages, cultures and communication systems are involved and may require, in order to be effective, the provision of trained and experienced Liaison Officers (LOs), as well as interoperability in process and training.

SECTION II – INFORMATION MANAGEMENT

416. Information Management (IM)\(^4\) is a set of integrated management processes and services that provide exploitable information on time, in the right place and format, to maximise freedom of action. Accordingly, IM manages people and their methods of working, as well as information flow and technology.

417. Medical IM is enabled by the CIS community, although medical staff should consider their own IM requirements with regard to what, by whom, when and where information is required. Challenges to medical IM include the large number of health care providers delivering medical support to operations, together with the diverse population of

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\(^4\) JDN 4/06 "Information Management".
military and non-military patients. This requires seamless and confidential transfer of sensitive information.

418. Medical IM requires efficient information systems that are coherent across primary, secondary and dental healthcare boundaries, both military and civilian, and applicable to peacetime and operations. Medical IM extends beyond confidential patient health records to include rescue, evacuation, patient regulation and tracking, data collection, dispensing details and supply tracking, real-time tele-medicine, in-transit patient monitoring, MEDINT, MFP and situational awareness so that clinical decisions may be made in the light of changing operational and tactical situations. Access to online information resources and DMETA specialist library resources will also be required.

419. Medical IM should be considered with headquarters IM staff as part of the Estimate process. Future medical information requirements will be delivered, in part, through the Defence Medical Information Capability Programme (DMICP).5

SECTION III – CLINICAL GOVERNANCE

420. CG is ‘a system through which medical organisations are accountable for continuously improving the quality of their services and safely guarding high standards of care, by creating an environment in which clinical excellence will flourish. Basic components are a coherent approach to improving clinical effectiveness, continuing utilisation of audit, ongoing professional development and establishing effective processes for identifying and managing risk and addressing poor performance’6.

421. CG is fundamental to understanding medical support to operations, since it governs how and to what extent, medical capability is delivered. Previously, Force Generation and the distribution of resources were described in quantitative terms such as capacity, Force Establishment Tables (FETs), numbers of beds, timelines and lay-down. Whilst these terms remain relevant, CG demands a qualitative approach, based upon best practice and delivered through organisations, training, clinical environment and equipment. Although developed in the peacetime environment, CG is equally applicable on deployed operations. CG applies to every activity at all levels and at all times, including capabilities outside Role 1-4, such as MEDEVAC and other specialist medical functions.

422. Responsibility for CG rests with line management and is laid down in extant medical policy.7 The Surgeon General (SG) assumes overall responsibility for CG

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5 DMICP will provide Defence with a modern and efficient clinical information service that is coherent across primary, secondary and dental healthcare, in both peacetime and on operations, in order to enable the DHP and its associated Defence Health Change Programme (DHCP), to deliver their strategic intent. The Defence requirement is to provide a business process and supporting information infrastructure that will allow the Defence Medical Services (DMS) to gather, store, retrieve and analyse medical information in a timely way, and then share it with other MOD stakeholders and with the NHS.


7 SGPL 01/03 dated 7 January 2003 and SGPL 18/04 dated 20 December 2004.
(effected through policy, direction and assurance)⁸ but shares responsibility with the Joint Commander for those deployed on operations, re-assuming overall accountability when patients leave the operational theatre. This includes the period of patient transfer from the DMS to the NHS (and for monitoring the outcome of those treated by the NHS). All elements of the DMS play a part in CG by ensuring that practices and procedures are in place, including audit and remedial actions.

423. Deployed Medical Commanders (or Unit Medical Officers) for smaller deployments) effectively assume the Joint Commander’s responsibility for CG within their AOR, and they should be resourced accordingly. They perform risk assessments regarding local operational healthcare provision, identify capability gaps to superior medical commanders and take such steps as they can to generate local solutions to reduce the risk where possible.

⁸ Certainty of action.
ANNEX 4A – INTERFACE BETWEEN MEDICAL AND OTHER STAFF FUNCTIONS

J1 – Personnel and Administration

4A1. The interface between medical and personnel support emerges during the initial planning stages and continues long after an operation has finished:

a. HQ medical staff manning and qualifications.
b. Manpower fitness and health standards.
c. Operational manning and establishments.
d. Patient tracking.
e. Casualty reporting.
f. Consideration of patients returning to the Joint Operations Area (JOA) (with J3).
g. Medical involvement in detention facilities.
h. Handling of deceased.
i. Patient and personnel welfare.
j. Medical requirements for civilian contractors prior to deployment.

J2 – Intelligence

4A2. ‘Medical’ is a ‘customer’ of Medical Intelligence (MEDINT) and also contributes to the Intelligence cycle.

J3 – Operations

4A3. The Joint Operations Centre (JOC) is the operational hub for the whole operation, including Force Protection (FP) and issues surrounding patients’ return to the JOA in the event of their recovery and return to duty (with J1). It is imperative that medical staffs are included in the J3 decision-making cycle.

4A4. Mass Casualty (MASCAL) planning, including Immediate Response Teams (IRTs), involves a significant number of agencies, including medical, and is therefore a command-led activity.
J4 – Logistics

4A5. J4 staffs coordinate the overall logistic effort in theatre. ‘Medical’ is grouped within the functional area of logistics. Close interactions are required for:

a. Planning and mounting the operation.

b. The creation of statements of requirement (SOR) and sustainability statements.

c. The conduct of reconnaissance and other enabling operations (in conjunction with J3 and J5).

d. The resourcing process.

e. The definition of logistics and medical Command and Control (C2) architecture.

f. The deployment and redeployment of medical units.

g. The logistic aspects of Aeromedical Evacuation (AE), with planning and execution being coordinated through J3 Air.

h. Medical supply, which is a J4 lead with medical advice.

i. Management of bio-security hazards, including medical waste.

j. Ensuring that Medical Treatment Facilities (MTFs) are located and marked in accordance with the principles of International Humanitarian Law.

J5 – Plans and Policy

4A6. J5 staffs coordinate and consolidate planning input from key staff elements, including medical. They promulgate the commander’s decisions on the Courses of Action (CoAs) for the campaign through planning directives, operation plans and contingency plans. Medical staff should provide input to the commander’s operational plan (OPLAN) via J5 staff. A key function of J5 and the medical staffs is Casualty Estimation.

J6 – Communications

4A7. J6 communications staff provide reliable and secure Communications and Information Systems (CIS) - early operational planning should include the requirement for medical CIS.
J7 – Exercise Planning and Training

4A8. J7 is responsible for exercise planning and training. Medical should, where possible, participate in exercises as well as providing real-time non-exercise cover – the latter requires the allocation of appropriate resources, including access to AE. J7 records lessons and proposes amendments to doctrine.

J8 – Resources and Finance

4A9. J8 linkages to medical support relate to planning and budgeting, including: Memoranda of Understanding (MOUs); contractor support; renting accommodation for medical facilities; work services; hospital rebuilds; medical bills to other nations and contractors; and Local Purchase Orders.

J9 – Civil-Military Co-operation

4A10. J9 staff interface between Allied forces and civilian authorities and organisations, in order to establish and maintain good civil-military (CIMIC) relations and gain the greatest advantage for the commander. J9 staff may request medical staff to provide non-emergency medical assistance to the local population and should provide political/military advice for interacting with Non-governmental Organisations (NGOs) and other health agencies.

J9 Legal

4A11. Examples of medical and legal inter-relationships include:

   a. Status of Forces Agreements (SOFAs) and Host-nation Support (HNS) arrangements.

   b. Issues and actions pertaining to NATO support to International Organisations (IOs), NGOs or the local population.

   c. MOUs with non-NATO nations with regard to the arrangements governing shared or devolved delivery of health care, and MOUs with NATO nations when operating on non-NATO territory.

   d. Claims activity within the JOA related to incidents involving damage to property, or injury or loss of life.

   e. NATO liability regarding individual or public health, such as related to environmental contamination.

   f. International Committee of Red Cross (ICRC) inspections.

   g. Compliance with Humanitarian Conventions.
h. Treatment of Prisoners of War (PW) and other protected persons.

J9 - Public Information Operations

4A12. Information on real or perceived risks affecting the health of military personnel or others can be stressful for troops and their families. Accurate reporting and sensitive dealings with the media and informal information outlets are essential in order to maintain focus and morale on operations, to reassure families and the home population, and to avoid disadvantageous speculation in theatre or among the indigenous population.
CHAPTER 5 – MEDICAL FORCE PROTECTION

Chapter 5 describes those aspects of Force Protection which are pertinent to Health, including the assessment of Risk.

SECTION I – FORCE PROTECTION

501. Force Protection (FP) is the ‘means by which operational effectiveness is maintained through countering the threats from adversary, natural and human hazards, including fratricide, in order to ensure security and freedom of action’. Aspects of FP are covered in linked documents, but this chapter focuses on the medical contribution to FP.

Medical Force Protection

502. NATO defines Medical Force Protection (Med FP) as ‘the conservation of the fighting potential of a force so that it is healthy, fully combat capable, and can be applied at the decisive time and place. It consists of actions taken to counter the debilitating effects of environment, disease, and selected special weapon systems through preventive measures for personnel, systems, and operational formations’.

503. Whilst all aspects of medical support to operations might be considered to be a form of Med FP, this chapter concentrates on other medical (mainly preventive) contributions to Med FP:

a. The maintenance of a fit and healthy force by promoting behaviour that encourages health and minimises risk. This is largely a command issue, as the conduct and discipline of a deployed force significantly impacts upon the numbers of avoidable accidents. Commanders will wish to gather advice from relevant subject matter experts such as environmental health, driver safety etc.

b. Measures taken to counter the debilitating effects of: infection, adverse environmental conditions including climatic extremes, Environmental Industrial Hazards (EIH) and Chemical, Biological, Radiological and Nuclear (CBRN) hazards. These measures require Medical Intelligence (MEDINT) and may require medical countermeasures (Med CM). Although this area falls under Preventive Medicine, the provision of equipment such as air conditioning is a non-medical function with consequences for health.

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1 JDP 0-01.1 ‘UK Glossary of Joint and Multinational Terms and Definitions’.
c. Performance-enhancing measures, both physical and psychological (such as G-protection and fatigue management), which are delivered by Defence Medical Services (DMS) specialists at the Institute of Naval Medicine (INM) and the RAF Centre of Aviation Medicine (CAM), supported by the Defence Scientific and Technology Laboratory (Dstl) and the wider research community.

504. Med FP is one of the main areas of interaction between medical and non-medical functions, requiring an executive lead with medical advice. It is owned by the chain of command J3 which should coordinate with J2, J4 medical and the wider FP community to ensure balance of investment and best practice on operations. Med FP permeates all levels of preparation within the DMS, extending throughout the operation and into the post-deployment period. Med FP principles should apply beyond the force to the Population at Risk (PAR); both physical and psychological protection should be in place from the outset of an operation, and extend from theatre HQ down to units and below.

Medical Force Protection Principles

505. The 4 principles of Med FP are:

a. **Measured Assessment of the Threat.** A threat assessment based on accurate and timely all-source intelligence forms the basis of Med FP. NATO doctrine states that a Med FP Cell should be located within the Medical Director’s (Med Dir) staffs; UK uses a MEDINT point of contact with links to (and preferably embedded within) J2, who is responsible for advising medical staffs in J4.

b. **Risk Assessment.** Med FP is based on risk management, not risk elimination. Casualties, deliberate or accidental, are a reality of military operations, and the ambition to avoid them totally is likely to impact adversely on the task. On operations, the Joint Commander owns the risk, with Defence Medical Services Department (DMSD) providing policy guidance on health measures and Clinical Governance (CG).

c. **Health Risk Management.** Health risk management provides military commanders with freedom of action to execute a mission through an informed assessment of any health risk, including CBRN. Health risk management is achieved through control measures, treatment resources, monitoring, Med CM and education.

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4 Preparation is discussed in the Preface.
d. **Audit and Surveillance.** The effectiveness of Med FP is measured by audit (which assesses compliance against directives) and surveillance (which assesses the success of Med FP by examining health outcomes).

506. These 4 principles should be embraced by commanders throughout the Joint Operations Area (JOA) and should address all aspects of the threat. It is unlikely that one Med FP measure will support all force elements (FE) to the same degree and priorities may have to be set. Med FP should be flexible, informed and capable of responding to changing threats and circumstances. A monitoring system should be established when residual risks cannot be avoided or controlled, together with a mechanism for health surveillance of deployed forces. Records are to be maintained for individuals who have, or may have, been exposed to health risks with this surveillance extending into the post-deployment period (Chapter 6).

507. Figure 5.1 illustrates a model for Med FP planning, placing audit and surveillance at the centre of the process.

![Figure 5.1 - Model for Med FP Planning](image)

**Implementation - Pre-Deployment**

508. **Baseline Medical Fitness Assessment.** Selection and training of personnel contributes to Med FP. The baseline assessment of medical fitness is delivered through the PULHHEEMS system which, together with dental standards, should be confirmed before arrival in a JOA. Preparations also include routine immunisation as well as Med CM against specific diseases and/or biological threats. Briefings on health threats (infectious diseases, including sexual health and HIV/AIDS, personal

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5 Baseline medical surveillance (physiological and psychological) is important for managing liability issues concerning illnesses, conditions and disability for troops returning from deployments.
and communal hygiene, acclimatisation and prevention and management of heat and cold-induced illnesses) should be delivered to all deploying personnel, in accordance with the Medical Directive.

**Implementation - Deployment Phase**

509. **Medical Force Protection Support.** Med FP plans should include effective preventive measures against the ever-present risk of Disease and Non-battle Injury (DNBI). Med FP will be delivered through the Role structures described in Chapter 2, especially at Role 1, and by specialists in Public Health (PH), Occupational Medicine (OM), Primary Dental Care, Environmental Health (EH) and Veterinary Medicine. Preventive measures are further discussed in Section II, whilst monitoring and surveillance functions include:

   a. Assessing the overall health of troops through MEDASSESSREPs.
   
b. Establishing an epidemiological surveillance data collection and reporting system, to include veterinary surveillance.
   
c. Verifying a system for operational stress management, including prevention of psychological reactions to traumatic events.
   
d. Assessing Med FP in order to:
      
      (1) Provide commanders with an assessment of medical support readiness and capability.
      
      (2) Collect lessons.
      
      (3) Advise commanders on medical support issues requiring national or collective action.
   
e. Provision of Med FP initial and reinforcement training.
   
f. Provision for monitoring, inspection, assessment and advice regarding occupational and EH risks.

510. **The Outbreak of Disease.** The outbreak of disease may have significant FP implications, since clinical findings by medical personnel may be a crucial factor in determining the presence of Biological Warfare (BW) which would otherwise be difficult to detect.\(^6\) The Joint CBRN Regiment is responsible for the detection of BW agents using specialist surveillance systems, but coverage across the JOA cannot be guaranteed. Clinicians should be highly vigilant in their management of patients, reporting any suspicions of BW, or even Chemical Warfare (CW), as quickly as

\(^6\) JWP 3-00.
possible though their chain of command. Overall responsibility for the subsequent management of a BW or CW incident will involve FP personnel and other commanders, although medical staff should remain engaged in the planning of subsequent FP measures.

511. **Acclimatisation.** The need to acclimatise applies to hot, cold and high-altitude environments, and applies to all personnel irrespective of their individual characteristics. Heat stress, which can be fatal, is a recognised complication of military operations, depleting force numbers and utilising medical resources. Commanders, with medical advice and taking into account the range of prevailing working environments, should be aware of the impact of heat and hydration-related policies on operational effectiveness and training. Individuals returning to theatre (for example, following Rest and Recuperation (R&R)) are likely to have lost some, if not all, of their acclimatisation protection.

**Implementation - Post Deployment Phase**

512. **Follow-up.** Troops (including Reserves) returning from operations may require ongoing medical support, including mental health and operational stress management (further detailed in Annex 5B). Chapter 6 describes medical aspects of recovery, recuperation and rehabilitation.

**SECTION II – PREVENTIVE MEDICINE**

**General Considerations**

513. Preventive Medicine is concerned with identifying, preventing and controlling acute and chronic communicable and non-communicable diseases and illnesses. Preventive medicine will enable medical staff to:

a. Promote health and prevent disease in a specific JOA, through the identification of risks from terrain, climate, endemic disease, Environmental and Industrial Hazards (EIH) and occupational hazards (including field hygiene and sanitation).

b. Identify and supervise preventive and controlling measures, and advise commanders on their implementation (for example, pest and vector control).

c. Advise on, and audit, the quality of air, soil, water and food.

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7 The Air Transportable Isolator (ATI) described in Chapter 2 may be used to transfer index cases to UK for assessment where this cannot be achieved in theatre.

8 JSP 539 ‘Climatic Injuries in the Armed Forces: Prevention and Treatment’. 
d. Advice on noise and other industrial hazard protection programmes (in conjunction with OM specialists).

e. Veterinary advice on potential zoonotic diseases within the JOA.

f. Gather and audit epidemiological and other technical statistics and information.

g. Advise commanders on overall health risks and any limitations they may place on the campaign.

514. Preventive Medicine enablers include:

   a. **Medical Intelligence and Medical Information.** An essential requirement of preventive medicine is a source of timely, usable MEDINT available at the planning stage of an operation. See Chapter 3.

   b. **Public Health Advice.** PH is concerned with the health of populations and groups, addressing health issues at the strategic and operational levels of command.

   c. **Occupational Medicine Advice.** OM deals with the effect of work on health and vice versa, and is essential in determining fitness for task. The level of OM involvement will depend on the nature and degree of the hazard encountered and on general health and safety policy. OM is delivered by the Front Line Commands.

   d. **Environmental Health Advice.** While EH is brigaded with Medical in peacetime, on operations it is a distinct and key element of FP, and helps to minimise force attrition through DNBI. EH relies upon health risk management to minimise preventable casualties and to ensure that, when they do occur, the appropriate resources are available to treat them.

   e. **Sexual Health Advice.** Sexual health medicine should be properly resourced, including access to appropriate diagnostic and treatment facilities.

   f. **Laboratory Capabilities.** Preventive medicine requires laboratory back-up. Field laboratory capabilities support immediate sampling and initial screening of hazards. More sophisticated laboratory capabilities enable more extensive investigations and confirm results from the field. Access to reference laboratories, capable of dealing with advanced requests and medico-legal analysis, is also required.

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9 Information is unprocessed data of every description which may be used in the production of Intelligence. (AAP-6)

10 JWP 3-00.
Oral Health Support

515. Oral health support plays a significant role in Med FP, and dental care is an integral component of operational medical capability and military medical fitness. Dental support should be flexible and configured to the type, nature and scale of operation, taking account of the expected prevalence of dental disease in the PAR. Standards of dental care on operations should conform to the Surgeon General’s (SG) overall medical standard described in paragraph 115.

516. Most dental emergencies can be resolved in forward locations and will result in rapid return of personnel to duty, with more complex cases being treated or evacuated through the Role system. Entitlement to dental care on operations should be included in the eligibility matrix issued by PJHQ. Operational dental doctrine is at Annex 5A.

Mental Health Support

517. Specific guidance for commanders, regarding operational stress management, is included at Annex 5B.

SECTION III – CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR HAZARDS

The Chemical, Biological, Radiological and Nuclear Threat

518. Responsibility for CBRN defence is a command responsibility, addressed through CBRN Policy to which SG contributes through Med FP. Coordination of CBRN matters, across the J2, J3 and J4 functions, is undertaken by the J3 Operational Support Force Protection Cell, which resides within PJHQ and may deploy with the Joint Task Force Headquarters (JTFHQ).11

519. Particular medical considerations, to achieve an effective CBRN FP plan, include:

a. **Source of threat.** The potential CBRN threat and resultant hazards, should be viewed as a spectrum (Figure 5.2). However the medical response to any given CBRN hazard will be independent of its source (man-made or endemic disease, EIH or BW/CW).

b. **Risk.** The presence of a hazard *per se* does not necessarily imply or quantify risk. Hazards may be detected by agent detection systems, but a risk

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11 Cooperation between FP, CBRN and medical communities is key to effective overall FP, and to achieve harmonisation of doctrine in the following areas: AJP-3.8 (JWP 3-61) ‘Allied Joint Doctrine for NBC’; JWP 3-61.1 ‘Joint NBC Defence’; JWP 3-61.1.1 ‘Joint Manual of CBRN Defence’; AJP-3.14 (JDP 3-64) ‘Allied Joint Doctrine for Force Protection’; JDP 4-03 (this publication); and tactical doctrine to be developed in the Medical CBRN area.
**Figure 5.2 - The CBRN Threat Spectrum**

520. EIH hazards may have immediate or long-term health effects on personnel, as well as impacting on a commander’s operational capability. Toxic materials may be released from industrial plants, storage depots or transport facilities through battle damage, terrorism, deliberate desperation measures, accidents or as a result of a natural catastrophe.

521. Threat agents across the CBRN spectrum may pose challenges for medical operational support which differ from those produced by conventional weapons:

   a. Casualty rates may be higher when personnel are unprotected or where personal drills are not performed effectively.

   b. Injury patterns may be different:

      (1) Chemical weapons or EIH release may produce signs and symptoms not recorded previously.

      (2) The effects of radiological exposure in particular may be seen for the first time.

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12 The CBRN threat can be represented as a spectrum, ranging from natural or endemic sources to man-made sources (including EIH) and, at the extreme, agent weaponisation.
(3) BW agents and toxins may produce disease in patterns not encountered previously in military or civilian populations.

(4) Combined CBRN and conventional injuries will present complex handling, treatment and containment problems.

c. Indirect casualties may result from the use of CBRN agents, including:

(1) Side effects of Med CMs which may degrade performance in the short-term, through fatigue or minor symptoms. Their impact upon an individual’s effectiveness may be minimised by their early administration; this in itself will require support from non-medical commanders.

(2) Heat stress and dehydration due to Individual Protective Equipment (IPE).  

(3) Psychological casualties.

d. Protection of medical staff and patients may be hampered by:

(1) Limitations posed by IPE on patient examination and treatment.

(2) The requirement to decontaminate casualties. Collective Protection (COLPRO) should be appropriate to the medical intervention being undertaken, the operating environment and the logistic burden it imposes.

Medical Force Protection in a Chemical, Biological, Radiological and Nuclear Environment

522. The aim of CBRN FP is to maintain freedom of action despite the presence, threat, or use of CBRN weapons through Timely Warning, Survive and Sustain. Med FP contributes through:


b. Restriction of movement, including isolation of personnel and quarantine.

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13 The personal clothing and equipment required to protect an individual from biological and chemical hazards and some nuclear effects. (AAP-6). Contemporary usage of the term IPE, relevant to Med FP, might include reference to combat body armour, helmets, specific CBRN IPE and barrier creams, and other measures that protect skin, mucous membranes and routes of entry.

14 Protection provided to a group of individuals in a NBC environment, which permits the relaxation of individual NBC protection. (AAP-6)

15 NATO STANAG 2278 ‘Medical Advice to Commanders on Restriction of Movement’.
c.  Hazard control and management (including avoidance), communicable disease control, control of agent spread and decontamination.

d.  CBRN casualty management through all stages of medical support, including triage, treatment, hospitalisation and evacuation, with logistic support providing re-supply and medical waste management.

Medical Countermeasures and Support

523.  Med CMs fall into 4 categories:

a.  **Pre-exposure prophylaxis.** Pre-exposure prophylaxis describes the administration of Med CMs before exposure in order to prevent or ameliorate the effects of a CBRN agent. These may be given days, weeks or even months in advance. An example would be vaccines, which currently represent the safest and most effective means by which a force may be protected against serious infectious disease. Current UK policy is for voluntary vaccination, and emphasis should be placed on commanders’ encouraging good vaccination uptake before deployment.

b.  **Pre-treatment.** Pre-treatment describes those drugs which are administered, prior to exposure, that enhance the efficacy of subsequent post-exposure therapy. Examples include Nerve Agent Pre-treatment Sets or the use of antibiotics as a CBRN Med CM.

c.  **Post-exposure prophylaxis.** Post-exposure prophylaxis exploits advances in detection capabilities in order to take advantage of the window of opportunity between exposure to an agent and the development of any irreversible consequences (for example, commencing a course of antibiotics when it is believed personnel may have been exposed to certain BW agents).

d.  **Immediate Therapies.** Immediate therapies include self-administered medical products which are used when effects of CBRN agents are seen (for example, the L4A1 Nerve Agent Antidote, or ComboPen).
ANNEX 5A – DENTAL CARE ON OPERATIONS AND THE DENTAL ESTIMATE

5A1. Oral health\(^1\) contributes to troops’ ability to operate effectively in the military environment,\(^2\) and is an integral part of Medical Force Protection (MFP). Whilst dental care is subject to most of the principles described in this publication, this Annex describes differences in dental doctrine that may be relevant to medical planners.

5A2. Historically, dental morbidity accounts for a significant element of Disease and Non-Battle Injuries (DNBI) casualty rates. Data collected internationally since the end of the Vietnam War consistently shows a dental morbidity rate of 150 - 200 per thousand per year for dentally well-prepared all-volunteer forces, a rate of 150 - 260 for Reserve forces and a rate of 750 for troops with low dental standards or ill-prepared forces.\(^3\) During recent operations, the level was higher during certain phases.\(^4\)

5A3. The profile of dental problems encountered at various stages of an operation differs from that of non-dental DNBI. Augmentation of units by Reserves (with a variable and un-quantified prevalence of dental pathology) should be evaluated as a risk factor. However, dental morbidity can present unexpectedly at any time and, whilst many medical conditions are screened out at initial examination, oral diseases are not.

5A4. Oral health is dynamic and responds rapidly to changes in environment, particularly levels of oral hygiene, specific dietary changes, levels of hydration and stress-related immunosuppression. In order to maintain levels of oral health, continuity of care throughout an individual’s service is required, including during deployments. Within this continuum, there will be variations in the levels of care available, but the overriding principle should be to provide a fully comprehensive service at the earliest opportunity in all locations, subject only to the mission and local tactical situation.

5A5. While medical DNBI reduces during the acute phase of an operation, dental morbidity increases, requiring additional capability. Thereafter, routine dental treatment forms a major component of mature operations, providing ongoing force sustainment away from the home base.\(^5\) These different characteristics of dental morbidity are outlined in Figure 5A.1, which shows that despite a fairly constant level

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\(^1\) Oral health is defined as a standard of the oral and related tissues which enables an individual to eat, speak and socialize without active disease, discomfort and embarrassment and which contributes to general well being.


\(^4\) Morbidity figures during Op TELIC I were 148 per 1000 personnel per year for the RN and 160 for the Army. These figures increased subsequently, peaking in January/February 2004 at 310 for the Army.

of oral health problems throughout an operation, the nature of oral care required will fluctuate between emergency and routine treatments.

![Continuity Profile of Dental Morbidity on Operations](image)

Figure 5A.1 – Continuity Profile of Dental Morbidity on Operations

5A6. **Relationship with the Permanent Joint Headquarters – the Dental Estimate.** Dental considerations should form part of the Medical Estimate and contribute to the overall planning process. The Permanent Joint Headquarters (PJHQ) devolves responsibility for the Dental Estimate to HQ Defence Dental Services (DDS) Operations and Exercise Manpower Planning Committee (OEMPC). HQ DDS informs PJHQ of the dental requirement to support a planned operation. PJHQ tasks the Front Line Commands (FLCs) to provide dental teams as required as part of Component Primary Health Care (PHC) support. This should be an iterative process as the character and tempo of the operation change.

**Dental Planning Considerations**

5A7. Dental support forms part of the PHC matrix, although assets should be deployed according to the operational scenario and need not be constrained by the Medical Treatment Facility (MTF) footprint.

5A8. **Dental Risk of Deployed Forces.** The overall dental standard of the deployed Population at Risk (PAR) will determine the number of dental teams required to support an operation. There may be differences between discrete elements of the deployed force. HQ DDS bases its judgement on dental risk data (an indicator of likely dental morbidity on operations) for all personnel, rather than on the PAR alone.

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6 Note that the operation may not be linear – paragraph 104 explains.
5A9. **Dental Capability.** Dental support in any location and/or stage of an operation will vary from emergency dental treatment to full dental capability, based upon the Dental Morbidity profile at Figure 5A.1, and on the eligibility matrix developed by PJHQ. Timely dental support should be available to the PAR in accordance with CG principles.

5A10. **Prisoners of War.** Prisoners of War (PW) should be factored into the Dental Estimate because of the high numbers of PWs presenting with dental morbidity.7

5A11. **Forensic Odontology.** Dental officers provide Forensic Identification on operations8 and this discipline should form part of the Estimate.9

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8 Chapter 2 and NATO STANAG 2464 ‘Military Field Identification’ dated 2 October 2002.
9 The DDS has provided forensic dental teams to OP TELIC and to the Oxford Coroner.
ANNEX 5B – MENTAL HEALTH AND OPERATIONAL STRESS

5B1. The effective management of psychological illness is a force multiplier, and specialist psychiatric capability should be included in operational medical support. While the medical management of specific disorders is not covered by this publication, the principles of prevention, management and treatment of operational stress differ significantly from other medical and surgical interventions and warrant inclusion.\(^1\) Differences are:

a. The emphasis is on not evacuating patients along the medical chain.

b. Non-medical staff may be used to care for psychological casualties.

c. Responsibility for operational stress management is a chain of command (Executive) responsibility, resting largely outside the medical area.\(^2\)

Psychological Injury

5B2. The operational environment may present individuals with abnormal or unfamiliar experiences and may result in a range of psychological responses. A proportion of individuals will require the intervention of mental health staff and, in most cases, prompt and appropriate care will result in an early return to duty without long-term morbidity.

5B3. Service personnel exposed to potentially traumatic events during the course of their deployment may develop various forms of psychological injury, especially following mass casualty (MASCAL) situations. Whilst the best known of these injuries is Post-Traumatic Stress Disorder (PTSD), virtually any psychiatric condition can arise, including acute stress reaction (or combat stress reaction), depressive disorders and anxiety states, any of which may lead to extremes such as substance misuse or suicide.

5B4. In the absence of discernible symptoms, medical science cannot accurately screen for psychological disorders before or after deployment, although attempts should be made to identify high-risk cases. It is good practice to offer Service personnel (Regular and Reserve) pre-deployment and post-deployment briefings on stress in order to reduce the risk of psychological injury following exposure to potentially traumatic or unfamiliar events. Such briefings may also assist individuals,

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\(^1\) Policy guidance may be found in SGPL 3/06 – ‘The Prevention and Management of Traumatic Stress Related Disorders in Armed Forces Personnel Deployed on Operations’ (dated 20 January 2006).

\(^2\) The Service Personnel Executive Group (SPEG) Overarching Review of Operational Stress Management Executive Summary recommends that MOD guidance should state clearly that implementation and delivery of policy for operational stress management is a single-Service management responsibility, not a medical responsibility.
commanders, colleagues and families to detect signs of psychological ill health in those returning from deployment.

**Acute Stress Reaction**

5B5. An acute stress reaction\(^3\) is defined as ‘a transient disorder that develops in an individual without any other apparent mental disorder in response to exceptional physical and mental stress and which usually subsides within hours or days’. Individual vulnerability and coping capacity determine the occurrence and severity of acute stress reactions. When such a presentation is seen within the context of combat then the term ‘combat stress reaction’ is applied; its incidence is related to the intensity and duration of combat, particularly if combat losses are high.

5B6. Combat stress may trigger underlying psychiatric illness, especially if poorly managed. Pre-deployment preparation, good leadership, sound administration, battle hardening, physical fitness and provision of adequate rest will reduce the incidence of combat stress reactions. The principles of treatment are proximity, immediacy, expectancy, and simplicity (PIES):

a. **Proximity** – manage as close as possible to the cause of the problem, ideally within the individual’s unit.

b. **Immediacy** – manage promptly. Delays in diagnosis and treatment may result in rapid deterioration and a disproportionately prolonged recovery.

c. **Expectancy** – expect individuals to recover and manage them as normal military personnel rather than casualties, including segregation from other medical systems. Failure to do this can lead to reinforcement and fixation of psychological problems, as well as putting unnecessary strain on the medical chain.

d. **Simplicity** – simple management delivered by friends and comrades is most effective including the facilitation of rest, the opportunity to discuss experiences and reassurance of recovery.

\(^3\) International Classification of Disease (ICD) F43.0.
CHAPTER 6 – CONCLUDING THE CAMPAIGN

Chapter 6 describes medical drawdown and recovery, including actions to be undertaken, on behalf of military personnel, upon their return from deployment.

General Principles

601. In concluding the campaign, medical activity will centre on:

a. Post Conflict Activities\(^1\) including operations to meet the Exit Strategy.

b. Medical drawdown.

c. Redeployment, Recuperation and Rehabilitation\(^2\).

d. Actions to be taken, on behalf of military personnel, upon their return from deployment.

e. Medical lessons.

Post Conflict Activities

602. Post-conflict activities tend to be focused on normalisation, the civil population and on repairing damage to the Joint Operations Area (JOA) infrastructure. Remaining forces (and contractors) will require continued medical support. Medical personnel may be required to plan and provide emergency support for the civilian population, refugees or Prisoners of War (PW), and may need to be prepared to work alongside (and, when appropriate, hand over responsibilities to) UN agencies and Non-governmental Organisations (NGOs) (see Chapters 2 and 7). The medical response should be geared to the new environment and Population at Risk (PAR), which may be very different compared to previous phases of the operation.

Medical Drawdown

603. As far as possible, the termination or steady-state of a campaign should be anticipated. The requirement for medical support continues beyond the main

\(^1\) JWP 3-50 ‘The Military Contribution to Peace Support Operations’.

\(^2\) Redeployment, Recuperation and Rehabilitation will be re-defined in the 3\(^{rd}\) Edition of JDP 4-00 ‘Logistic Support to Joint Operations’ (currently under development). Recuperation is the generic term used to describe the move of forces to a strategic base or to a new operation. Recuperation is the action undertaken to bring redeployed troops to a given readiness. Rehabilitation (which may include medical rehabilitation) describes individual activities within the JOA that have to be undertaken against Force Elements (FE) - personnel, equipment and materiel - in order to achieve Recuperation (working definitions).
operational phase, since Disease and Non-Battle Injury (DNBI) is a constant problem. Medical provision should be scaled proportionately to the force size, but the process should be rapidly reversible should the situation again deteriorate. Medical drawdown should only reduce to the ‘irreducible minimum’ of support as defined by the Permanent Joint Headquarters (PJHQ). In addition, a withdrawing force needs medical support while concentrating and moving to departure ports or airheads. This process may be extended, during which expectations of the same high standards of medical care will remain unchanged.

604. Non-formed Units (NFUs) require security and logistic support until closure of their facility. The deployed hospital care (DHC) requirement might be assumed by the Host Nation (HN), possibly augmented with UK military clinical specialists. Similarly, Status of Forces Agreements (SOFAs) and Memoranda of Understanding (MOU) should be drawn up to allow UK-HN or other allied medical partnerships to evolve at this stage.

Medical Redeployment, Recuperation and Rehabilitation

605. Restoring and/or replacing scarce resources in preparation for future operations is in itself an exacting task, especially as the medical function is invariably early to deploy, late to redeploy and time for recuperation between operations may be minimal. Considerations will include:

a. Manpower Limitations. The most difficult resource to replace is that of trained manpower, especially personnel with specialist skills; only those at an advanced stage of professional training can be relied upon to provide a replenishment pool.

b. Equipment and Materiel Limitations. Lost and damaged equipment and materiel should be replaced like any other Force Elements (FE). The pipeline time for the replacement of specialist medical equipment may be a factor in re-establishing medical capability.

606. The recovery of forces when Chemical, Biological, Radiological and Nuclear (CBRN) threats have been encountered may pose bio-security challenges. This is a logistic function, with medical and veterinary advice. Personnel and equipment (medical or otherwise) that are possibly contaminated may have to satisfy national and international criteria for decontamination and quarantine.

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3 Led by PJHQ, following a detailed medical assessment of HN facilities to form, in effect, a MOD Hospital Unit (MDHU).
Actions to be Taken, on Behalf of Military Personnel, upon their Return from Deployment

607. Coordinated, post-deployment medical support should apply across the Regular and Reserve (medical and non-medical) elements, including:

   a. Assessment of the effectiveness of medical support provided through Lessons (Chapter 3).

   b. Assessment of the suitability of medical and non-medical equipment (including communications support).

   c. Continued treatment and follow up of casualties, addressing medico-legal and pensions requirements.

   d. The assessment and management of psychological injury (see Annex 5B).

   e. Post-recovery disease surveillance and follow-up.

   f. Medical research using data obtained from the operation.

   g. Collation and archiving of medical records.

   h. Identifying cohorts of personnel for long-term epidemiological study.

608. Patients returning from the JOA may require continuing treatment and medical rehabilitation from the Defence Medical Services (DMS) and/or the National Health Service (NHS). Experience from recent operations indicates that a reasonable balance needs to be struck between the availability of medical treatment and the patients’ need for emotional and practical support from their units and families.
CHAPTER 7 – TREATING CIVILIAN PATIENTS

Chapter 7 describes how the Defence Medical Services should approach the treatment of civilian patients whilst on deployed operations.

701. There are essentially 3 groups of civilians who may be encountered on operations:

a. Civilians who contribute to the total force and are entitled to some, if not all, aspects of medical care from the military (such as contractors, civil servants, workers from Other Government Departments (OGDs)/Non-governmental Organisations (NGOs), local civil labour). Their entitlement to medical support, and the scale of that entitlement, is contained in the Permanent Joint Headquarters’ (PJHQ’s) eligibility matrix.

b. Prisoners of War (PW) and detainees, for whom very specific policy and doctrine applies (see Annex 1A).

c. Civilians who are injured and/or displaced, either as a direct or indirect result of military intervention, or due to the events leading up to the intervention. Some of these individuals will enter the military medical chain.

702. Any of these groups potentially pose challenges for the Defence Medical Services (DMS), which are only configured to provide treatment to their own deployed forces. Concerns include the volume and types of illness that may be encountered, for which DMS personnel may not be equipped and prepared, and around the requirement for an entirely different type and structure of medical response. In addition, civilian populations may harbour disease,¹ and civilian/local compounds may pose health risks if they are not subject to the same preventive measures as military compounds.

703. Host Nations (HN) should be responsible for the health of civil labour and their compounds. Troop Contributing Nations (TCNs) employing civil labour should ensure the health of their own troops and civilians where the HN’s medical arrangements are inadequate, including, as a minimum, arrangements for preventing, detecting and/or eradicating infectious diseases and a basic first aid service.

704. Planning considerations, and the Joint Commander’s directive, should set Humanitarian Assistance (HA) policy and parameters. Alternative medical support to

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¹ Infection of own troops from food handlers, contaminated water sources and from sexually transmitted diseases is historically associated with civil labour.
civilians is usually organised through early engagement with HN, International Organisations (IOs) and NGOs.


a. **Humanitarian Assistance.** The UK defines HA\(^2\) as ‘support provided to humanitarian and development agencies, in an insecure environment, by a deployed force whose primary mission is not necessarily the provision of humanitarian aid. Should the deployed force undertake such humanitarian tasks, responsibility should be handed over/returned to the appropriate civilian agency at the earliest opportunity’.

b. **Humanitarian/Disaster Relief Operations.** Comprehensive doctrine and policy guidance, both national\(^3\) and allied,\(^4\) exists in relation to HDROs. A HDRO may be conducted independently or within the framework of an ongoing operation (which may be self-sustaining), requiring (all or any of) medical support to the Force, the augmentation of existing local medical assets and the regeneration or development of medical capabilities through IOs and NGOs.

**Humanitarian Issues**

706. Military medical HA will only be provided when the HN, IOs or NGOs are unable to meet the requirement. NGOs should be encouraged (and supported, where appropriate) to provide health care to a civilian population following a disaster. However, during and immediately upon cessation of combat operations, military medical support may be the only support available for HA. As soon as NGOs arrive in theatre, this responsibility should be handed over as swiftly and efficiently as possible. The military should remain aware of NGO activity (through liaison officers if appropriate) and, if necessary, maintain a coordinating focus – not least to define areas of responsibility in order to avoid competition, duplication of effort, or shortfalls.

707. The affected population should be encouraged and assisted to help themselves. A return to the pre-crisis status quo, in terms of self-help, should be as rapid as possible.

\(^2\) JDP 0-01.1 ‘United Kingdom Glossary of Joint and Multinational Terms and Definitions’.

\(^3\) JWP 3-52 ‘Humanitarian/Disaster Relief Operations’.

\(^4\) MC 327 provides NATO policy on the planning and conduct of non-Article 5 Crisis Response Operations (NASCRO). MC 343 outlines the principles of military assistance in humanitarian emergencies not connected to any NATO military operation. MC 411 addresses civil-military interfaces, including military support for humanitarian emergencies within the context of other operations when NATO forces are already deployed or to be deployed. Chapter 5 of MC 326/2 provides detailed guidance on Military Medical Support in Humanitarian Operations and Disaster Relief.
possible to avoid long-term dependence. Disengagement and transfer to permanent or semi-permanent organisations should be ensured before engagement and withdrawal.

708. Medical support should at least meet standards acceptable to participating nations, given the prevailing circumstances, and to the receiving country. The aim is to provide treatment outcomes comparable to the normal peacetime standards of the receiving country, although this should be tempered with realism if effective medical support is to be delivered within available means. A balance between providing care that is technically possible and that which is appropriate should take into account the availability of follow-up capabilities, own means, and the requirement to preserve sufficient capabilities for supporting own troops. Expectations should be managed appropriately, and deference given to local culture, customs and rules (unless these conflict with responding effectively to clinical need).

709. Comprehensive, flexible medical plans are essential for an accurate and early response to a situation or disaster. Medical support should deploy with agreed quantities of medical supplies as directed by PJHQ. All medical materiel, drugs and other medical products used for disaster relief and HA operations should be equivalent to those used to support the force. Clear guidance on legal issues, such as indemnity of medical personnel, should be established before deployment. Systematic Public Health assessment will help to mitigate the effects of the disaster and the associated dislocation of infrastructure in the affected area. Poor living conditions and the absence of basic utilities will inevitably contribute towards the breakdown of health in the population, particularly with respect to epidemics.

710. Overall responsibility for producing an effective civilian medical evacuation (MEDEVAC) system nominally lies with the affected country’s medical authority. Patients should not normally be removed from the country without appropriate national authority and advice from legal staffs.

711. Patient confidentiality should be observed in all situations, and protocols on sharing medical information should be developed with local medical authorities wherever possible.
LEXICON OF TERMS AND DEFINITIONS

This Lexicon is provided to aid comprehension of this Joint Doctrine Publication (JDP). However, it is not the full and definitive reference of UK and NATO medical terminology for which the reader is referred to JDP 0-01.1 ‘UK Glossary of Joint and Multinational Terms and Definitions’ and AMedP-13 ‘NATO Glossary of Medical Terms and Definitions’.

Aeromedical Evacuation
The movement of patients under medical supervision to and between medical treatment facilities by air transportation. (AAP-6)

Aeromedical Evacuation Control Centre
The control facility established by the commander of an air transport division, air force, or air command. It operates in conjunction with the Command Movement Control Centre and co-ordinates overall medical requirements with airlift capability. It also assigns medical missions to the appropriate AE elements in the system and monitors patient movement activities. (AAP-6)

Aeromedical Evacuation, Forward
That phase of evacuation that provides airlift for patients to the initial medical treatment facility in theatre. This is usually conducted by rotary assets in forward areas. (AJP-4.10(A))

Aeromedical Evacuation, Strategic
That phase of evacuation that provides out-of-theatre airlift for patients from overseas areas or from theatre of active operations, to the home nation, to other NATO countries or to a temporary out of theatre safe area. Strategic AE is ultimately a national responsibility, nevertheless bilateral or multilateral agreements between nations are an efficient way to share scarce resources of MEDEVAC aircraft, equipments and AE teams. (AJP-4.10(A))

Aeromedical Evacuation, Tactical
That phase of evacuation that provides intra-theatre airlift for patients between MTFs, typically transferring patients between Role 3 MTFs or Role 2 (LM or E) to Role 3. This is conducted by rotary assets or Tactical Air Transport along LOC in the JOA. (AJP-4.10(A))
Aeromedical Staging Unit
A medical unit operating transient unit beds located on or in the vicinity of an emplaning or deplaning air base or air strip that provides reception, administration, processing, ground, transportation, feeding and limited medical care for patients entering, on route via, or leaving an AE system. (AMedP-13)

Blue-Light Ambulance Matrix
Area coverage by properly equipped and medical specialist or paramedic crewed ambulances or response vehicles (usually ground or rotary) tasked to respond to incidents along Lines of Communication or within the AOR in order to achieve the initial response timeline of 1 hour to advanced trauma life support for a casualty. An example is the placement of paired paramedic crewed ambulances, of an Area Medical Company, one hour’s drive time apart along a Main Supply Route. (AJP-4.10(A))

Capability Package
A combination of national and NATO funded infrastructure associated running costs that, together with the assigned military forces and other essential requirements, enable a NATO Commander to achieve a specific NATO Military Required Capability. (AJP-4.10(A))

Casualty
In relation to personnel, any person who is lost to his organisation by reason of having been declared dead, wounded, injured, diseased, detained, captured or missing. (AAP-6)

Casualty, Battle
Any 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. (AMedP-13)

Casualty, Disease and Non-battle Injury
A grouping of casualties which are due to disease or injury not acquired in combat or relating to combat. (AMedP-13)

Casualty Staging Unit
A medical unit caring for in-transit patients under medical personnel supervision. (AAP-6)

Clinical Governance
A system through which medical organisations are accountable for continuously improving the quality of their services and safe guarding high standards of care, by creating an environment in which clinical excellence will flourish. Basic components are a coherent approach to improving clinical effectiveness, continuing utilisation of audit, ongoing professional development and establishing effective processes for identifying and managing risk and addressing poor performance. (MC 326/2)
**Combined Joint Operation**
An operation carried out by forces of two or more nations, in which elements of at least two services participate. (AAP-6)

**Consequence Management**
The reactive measures used to mitigate the destructive effects of attacks, incidents, or natural disasters. (MC 326/2)

**Co-ordinating Authority**
The authority granted a commander or individual assigned responsibility for coordinating specific functions or activities involving forces of two or more countries, or two or more forces from the same Service. He has the authority to require consultation between the agencies involved or their representatives, but does not have the authority to compel agreement. In case of disagreement between the agencies involved, he should attempt to obtain essential agreement by discussion. In the event he is unable to obtain essential agreement, he shall refer the matter to the appointing authority. (AAP-6)

**Damage Control Surgery**
Emergency surgical procedures and treatment to stabilise casualties, in order to save life, limb or function, always conducted by surgical team. These procedures should be followed later by primary surgery. (AJP-4.10(A))

**Deployed Hospital Care**
Hospital Care that is deployed. It includes Role 2 E and 3. (JDP 4-03)

**Deployed Secondary Care**
Secondary Health Care that is deployed. It includes Roles 2 LM, 2 E and 3. (JDP 4-03)

**Doctrine**
Fundamental principles by which the military forces guide their actions in support of objectives. It is authoritative but requires judgement in application. (AAP-6)

**Environmental Health**
The control of all those factors in man’s physical environment that exercise, or may exercise, a deleterious effect on his physical development, health or survival. (AJP-4.10(A))
Evidence-Based Medicine
An approach to health care that promotes the collection, interpretation, and integration of valid, important and applicable patient-reported, clinical observed, and research-derived evidence. The best available evidence, moderated by patient circumstances and preferences, is applied to improve the quality of clinical judgements. (MC 326/2)

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 organisations which are located on, operating on/from, or in transit through the host nation’s territory. (AAP-6)

Humanitarian Operation
An operation specifically mounted to alleviate human suffering where responsible civil actors in an area are unable or unwilling to adequately support a population. It may precede, parallel, or complement the activity of specialised civil humanitarian organisations. (AAP-6)

Incident Response Team
Team held at high readiness in order to deploy in response to an incident. The medical component of an Incident Response Team should include trained, equipped and experienced specialist personnel to deal with the consequences of trauma or life-threatening illness. (AJP-4.10(A))

Information
Unprocessed data of every description which may be used in the production of intelligence. (AAP-6)

Intelligence
The product resulting from the processing of information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product, and to the organisations engaged in such activity. (AAP-6)

Intensive Care
That degree of care, which is extensive, highly technical and required because of the patient’s actual or threatened inability to maintain vital function. (AMedP-13)

International Organisation
An organisation established by intergovernmental agreement and operating at the international level. IOs include the various UN organisations and the Organisation for Security and Cooperation in Europe (OSCE). (JDP 3-90)
**Interoperability**
The ability to operate in synergy in the execution of assigned tasks. (AAP-6)

**Joint Force Commander**
A general term applied to a commander authorised to exercise command authority or operational control over a joint force. (JDP 0-01.1)

**Joint Task Force Commander**
The operational commander of a nominated Joint force. (JDP 0-01.1)

**Joint Operations Area**
An area of land, sea and airspace, in which a designated Joint Task Force Commander plans and conducts military operations to accomplish a specific mission. A Joint Operations Area including its defining parameters, such as time, scope and geographic area, is contingency/mission specific. (JDP 0-01.1)

**Mass Casualty Situation**
A Mass Casualty Situation is one in which an excessive disparity exists between the casualty load and the medical capabilities locally available for its management. (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication) Any number of casualties produced in a relatively short period of time which overwhelms the available medical and logistic support capabilities. (AAP-6)

**Medical Adviser**
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 issues connected to the operation. The Medical Adviser may also be the Force or Theatre Medical Director. (MC 326/2)

**Medical Director**
The functional head of the medical services in a formation or theatre of operations. The Medical Director may also have the additional responsibilities of being the Medical Adviser to a senior commander. (MC 326/2)

**Medical Coordination Cell**
The Medical Coordination Cell (MEDCC) is the executing body of the medical organisation for all CJTF operations. The MEDCC works under the direction of the Medical Director and coordinates multinational, joint and multifunctional medical issues, including AE. (AJP-4.10(A))

**Medical Evacuation**
The medically controlled process of moving any person who is wounded, injured or ill to and/or between medical treatment facilities. (AMedP-13)
**Medical Intelligence**
That category of Intelligence resulting from collection, evaluation, analysis, and interpretation of foreign medical, bio-scientific, and environmental information which is of interest to strategic planning and to military medical planning and operations for the conservation of the fighting strength of friendly forces and the formation of assessments of foreign medical capabilities in both military and civilian sectors. (JDP 4-03)

**Multinational**
Adjective used to describe activities, operations, organisations, etc in which forces or agencies of more than one nation participate. (AAP-6)

**National Support Element**
A national organisation with a HQ and units responsible for the provision of logistic support to its national forces. (JDP 0-01.1)

**NATO Standardisation Agreement (STANAG)**
A normative document recording an agreement among several or all NATO member nations, that has been ratified at the authorized national level, to implement a standard, in whole or in part, with or without reservation. (AAP-6)

**Non-Governmental Organisation**
A voluntary, non-profit making organisation that is generally independent of government, international organisations or commercial interests. The organisation will write its own charter and mission. (JDP 3-90)

**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 control, and/or tactical control, as the commander deems necessary. 
**Note:** it does not include responsibility for administration. (AAP-6)

**Operational Control**
The authority delegated to a commander to direct forces assigned so that the commander may accomplish specific missions or tasks which are usually limited by function, time or location; to deploy units concerned, and to retain or assign tactical control of those units. It does not include authority to assign separate employment of components of the units concerned. Neither does it, of itself, include administrative or logistic control. (AAP-6)
Patient Regulating
A process of control and coordination to ensure patients are evacuated to medical treatment facilities which are best capable of providing the required treatment, and having the required number and type of beds available. Also called Medical Regulating. (MC 326/2)

Patient Tracking
The precise and continuous monitoring of the location and the intended destination of the patient in the medical treatment and evacuation chain. (AJP-4.10(A))

Post Operative Care
Care occurring soon after a surgical operation. (AJP-4.10(A))

Preventive Medicine
The services that are concerned with identifying, preventing and controlling acute and chronic communicable and non-communicable diseases and illnesses with food and environmental hygiene, and vector control. (MC 326/2)

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. It includes health promotion, disease prevention, patient education and counselling, the diagnosis and treatment of acute and chronic illness, as well as dental and veterinary functions. (JDP 4-03 (2nd Edition))

Primary Surgery
Primary surgery describes the surgery directed at repair of the local damage caused by wounding, rather than correcting the generalised effects. It is performed normally at Role 3. Delays to primary surgery allow further generalised effects to develop that may lead to an increase in mortality, morbidity and residual disability. (MC 326/2)

PULHHEEMS
PULHHEEMS is a tool for recording medical fitness across all 3 Services (literally, Physical; Upper, Lower, Hearing, Hearing, Eyes, Eyes, Mental, Stability). The acronym is an oversimplification without interpretation – details may be found in BR 1750A (Handbook of Naval Medical Standards); AC 13371 (PULHHEEMS Administrative Handbook 2000); AP 1269A (Medical Administration).

Resuscitation
The restoration of tissue perfusion and oxygenation. (AJP-4.10(A))
Role Specialisation
One nation assumes the responsibility for procuring a particular class of supply for all or a part of the multinational force. Compensation and/or reimbursement will then be subject to agreements between the parties involved. (MC 319/2)

Secondary Health Care
The provision of hospitalisation and specialised clinical care, requiring training and equipment levels beyond that which could normally be provided at the level of primary care. Routine access to these services will normally be by referral from Primary Health Care. Urgent access will normally be via an Emergency Medicine department. (MC 326/2)

Stabilisation
The maintenance of tissue perfusion and oxygenation. (AJP-4.10(A))

Sustainability
The ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives. (AAP-6)

Tele-Consultation
The exchange of clinical information among medical and dental providers separated by distance, in order to improve patient care (access to specialists, prevention of unnecessary evacuation, or improvement in diagnosis or treatment). (AJP-4.10(A))

Tele-Medicine
The use of information and communications technologies to access healthcare regardless of time and distance. Depending on the clinical speciality involved, this may incorporate such terms as Teleradiology, Teledermatology, Telesurgery, Telepathology and Telepsychiatry. (AJP-4.10(A))

Theatre of Operations
A geographical area defined by the military-strategic authority which includes and surrounds the area delegated to the operational commander within which he will conduct operations - known as the joint operations area. (JDP 0-01.1)

Theatre Holding Policy
A command decision which sets the maximum period a hospitalised convalescing casualty will be kept in the theatre of operations awaiting recovery and return to duty. It is a control measure to ensure that sufficient hospital capacity is retained for anticipated surges in battle casualties or illnesses. (MC 326/2)
LEXICON OF ABBREVIATIONS

This Lexicon contains abbreviations and acronyms used in this document as well as others commonly used in joint and multinational operations.

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<td>Air Component Command</td>
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<td>AE</td>
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<td>Aeromedical Evacuation Control Cell</td>
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<td>AJF</td>
<td>Allied Joint Force</td>
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<td>Allied Joint Publication</td>
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<td>ALSS</td>
<td>Advanced Logistic Support Site</td>
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<td>AOO</td>
<td>Area of Operations</td>
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<td>Area of Responsibility</td>
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<td>APOD</td>
<td>Airport of Debarkation</td>
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<td>APOE</td>
<td>Airport of Embarkation</td>
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<td>Aeromedical Staging Unit</td>
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<td>BATLS</td>
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<td>CAM</td>
<td>(RAF) Centre of Air Medicine</td>
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<td>CB</td>
<td>Coupling Bridge</td>
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<td>Chemical, Biological, Radiological and Nuclear</td>
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<td>Component Command(er)</td>
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<td>CCAST</td>
<td>Critical Care Aeromedical Support Team</td>
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<td>CDS</td>
<td>Chief of the Defence Staff</td>
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<td>CG</td>
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<td>Civil-Military Co-operation</td>
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<td>CIS</td>
<td>Communications and Information System</td>
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<td>Combined Joint Task Force</td>
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<td>Abbreviation</td>
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<td>Comd Med</td>
<td>Commander Medical</td>
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<td>COMEDS</td>
<td>Committee of the Chiefs of Military Medical Services in NATO</td>
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<td>DCA</td>
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<td>Deputy Chief of the Defence Staff (Health)</td>
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<td>Department for International Development</td>
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<td>Department of Health</td>
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<td>Defence Medical Education and Training Agency</td>
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<tr>
<td>FLC</td>
<td>Front Line Command</td>
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<td>FLS</td>
<td>Forward Logistics Site</td>
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<tr>
<td>FOB</td>
<td>Forward Operating Base</td>
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<tr>
<td>FP</td>
<td>Force Protection</td>
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<td>Forward Support Area</td>
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<tr>
<td>FW</td>
<td>Fixed Wing</td>
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<tr>
<td>HA</td>
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<tr>
<td>HDRO</td>
<td>Humanitarian/Disaster Relief Operation</td>
</tr>
<tr>
<td>HDU</td>
<td>High Dependency Unit</td>
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<td>HN</td>
<td>Host Nation</td>
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<td>HNS</td>
<td>Host-Nation Support</td>
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<tr>
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<td>International Civil Aviation Organisation</td>
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<td>ICD</td>
<td>International Classification of Disease</td>
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<td>International Committee of the Red Cross</td>
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<td>International Disaster Relief Operation</td>
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<td>International Organisation</td>
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<td>Intelligence Preparation of the Battlespace</td>
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<td>Integrated Project Team</td>
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<td>In-theatre Replacement</td>
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<td>Joint Personnel Recovery</td>
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<tr>
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<td>KCMIA</td>
<td>Killed, Captured and Missing in Action</td>
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<td>LOC</td>
<td>Line of Communication</td>
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<td>Medical Director</td>
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<td>Medical Assessment Report</td>
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<td>Medical Information and Coordination System</td>
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<td>Memorandum of Understanding</td>
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<td>NATO Assessment of Medical Indicators</td>
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<td>Non-formed Unit</td>
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