

THE OPERATIONAL PATIENT CARE PATHWAY

Aim

1. The aim of this paper is to describe the Operational Patient Care Pathway and subordinate concepts in order to define the clinical requirements for the Defence Medical Operational Capability (DMOC).

Implementation

2. Unless cancelled or otherwise revised, this leaflet will be reviewed prior to publication of a hybrid NATO/UK Allied Joint Medical Support Doctrine (anticipated by end 2014).¹ HQ Surgeon General (HQ SG) will make policy leaflets publicly available in accordance with the Freedom of Information Act. This policy leaflet is releasable to the Internet. An Equality Analysis has been undertaken in the production of this policy and no impact is anticipated in terms of the Equality Act 2010.

Authorisation

3. This policy is released for publication by Head of Medical Strategy and Policy on behalf of the Surgeon General (SG).

Point Of Contact

4. Point of contact for this policy is SO1 Medical Doctrine DCDC, via email DCDC-DoctrineMedicalSO1@mod.uk Telephone 01793 314 250.

¹ AJP 4-10(B) 'Allied Joint Medical Support Doctrine' will be merged with JDP 4-03 'Joint Medical Doctrine'.

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THE OPERATIONAL PATIENT CARE PATHWAY (A paper by Med Op Cap – HQ SG)

INTRODUCTION

1. Clinical care for combat trauma patients has been transformed over the decade that has seen highly challenging operations in Iraq and Afghanistan. The UK Defence Medical Services (DMS) are now widely acknowledged to be international leaders in this field. Incremental improvements in the system of care have led to a significant number of unexpected survivors compared to the performance of civilian trauma systems.² The Operational Patient Care Pathway (OPCP) set out in this leaflet provides a series of unifying concepts that articulate the clinical requirements for the UK military **health services support (HSS)**³ system on operations, including the system of clinical care for the 'medical' or 'non-trauma patient' as well as trauma care, and in regard to the specific challenges faced by the Chemical Biological Radiological and Nuclear (CBRN) threat.
2. The Medical Operations and Capability (Med Op Cap) pillar in HQ SG defines the Joint Medical Operational Capability Requirement (JtMedOpCapR) using the Strategy to Capability Framework to articulate, interpret and prioritise medical operational demand. This paper describes the OPCP in order to set the clinical capability requirements against which the Service Commands (SCs) design Medical Force Elements (Med FEs). SCs advise on the medical force structures required to deliver HSS across the instruments of military medical care in order to meet current and contingent military operational tasks.^{4,5} Med Op Cap provides the joint capability coherence to collate this advice into the medical contribution to the Force Elements at Readiness (FE@R) table contained in the Defence Plan. The OPCP is designed to provide a single capability model for the clinical care of Defence patients on operations and is fully coherent with the DMS objectives to promote, protect and restore the health of the Defence population, as set out within the DMS Strategy.⁶
3. This paper forms the basis of the UK position in negotiations over the content of the revision to AJP 4.10(C) Allied Joint Medical Support Doctrine and will underpin the development of a hybrid NATO/UK Allied Joint Medical Support publication. No additional doctrine, concepts or mnemonics for clinical care to operational patients are to be inserted to any subordinate medical doctrine without reference to the appropriate concept sponsor shown at Annex A.

AIM

4. The aim of this paper is to describe the OPCP and subordinate concepts in order to define the clinical requirements for Defence Medical Operational Capability (DMOC).

² The role of trauma scoring in developing trauma governance in the Defence Medical Services. Russell RJ, Hodgetts TJ, McLeod J, Starkey K, Mahoney P, Harrison K and Bell E. *Philos Trans R Soc Lond B Biol Sci.* 2011 January 27; 366(1562): 171–191.

³ HSS includes all services performed, provided or arranged to promote, improve, conserve or restore the mental or physical well-being of personnel - NATO AAP-06.

⁴ The seven Military Tasks: MT1: provide strategic intelligence, MT2: provide nuclear deterrence, MT3: Defend the United Kingdom and its Overseas Territories, MT4: Support the civil emergency organisations in times of crisis, MT5: Provide a Defence contribution to UK influence, MT6: Defend UK interests by projecting power strategically and through expeditionary operations. MT7: Provide security for stabilisation.

⁵ There are 30 tasks on the Contingent Task List (CTL). DMOC is explicitly required to deliver CTL Task 7.3 Sustain: Provide Medical Support and Evacuate Patients however Med FEs are required to be able to integrate with FEs conducting all of the 30 CTLs.

⁶ Defence Medical Services Strategy 2012.

5. **Structure.** The OPCP is described in 4 sections in this paper (key concepts and words are highlighted in **bold**). It builds upon a concept for 'A Unified Emergency Care System'⁷ and maximises existing doctrine. It utilises imagery, mnemonics and other aids to learning that capture the key clinical and medical operational concepts to be taught to all members of the DMS. Annex A lists the purpose, sponsor and the principal Category 3 educational programme for each concept. However the whole package is designed to be introduced in all categories of DMS education.⁸

a. **The Context.** The Context describes the Health Care Cycle which summarises the relationship between medical operations and operational capability to Firm Base medical activity and capability. It also describes the Chain of Care that defines the clinical outcomes required from DMOC. The Duty of Care as defined in Defence Strategic Direction is reproduced in this section. The final element is a statement on Standards of Clinical Healthcare.

b. **The Operational Patient Care Pathway.** The OPCP provides a single framework for medical capabilities and clinical activities within DMOC. It is underpinned by definitions for: the Defence Population At Risk (PAR), the 'all-hazards environment' and the 10 Instruments of Military Health Care.

c. **Medical Incident Management.** Medical incident management describes the approach taken by the DMS to manage casualties at the scene of an incident.

d. **Medical Operational Reports and Returns.** This final section describes the key domains of information provided by medical operational reports and returns that enable the OPCP to be managed.

CONTEXT

6. **The Healthcare Cycle.** The Healthcare Cycle *is the 'patient-centred' provision of HSS to the Defence PAR by the DMS throughout their career.* It is summarised at Figure 1 (all Figures are reproduced in Landscape format at Annex B). DMOC are those activities carried out by Med FEs in order to provide HSS to the Defence PAR deployed on operations. Med FEs are Force Generated (FGen) by the SCs and are controlled by the Chief of Joint Operations (CJO) through the operational chain of command. SG is the end to end Process Owner for the whole Healthcare Cycle and is responsible for assuring the quality of healthcare delivered to Service and other entitled personnel.⁹ The DMOC is shaded in purple. Prior to, and on deployment, the DMS supports the provision of Force Health Protection (FHP) measures to Service personnel from the Defence PAR. Service personnel who become operational patients are supported by the 10 Instruments of Military Health Care (defined below) and, if necessary, are medically evacuated from the theatre of operations. Patients are accepted into the National Health Service (NHS) under the Reception Arrangements for Military Patients (RAMP) and are usually admitted to the clinical unit of the Royal Centre for Defence Medicine (RCDM). Those that require specialist rehabilitation are transferred to the Defence Medical Rehabilitation Centre (DMRC); those requiring less specialised rehabilitation will be managed at regional rehabilitation units (RRUs) within the Defence Primary Healthcare (DPHC) organisation. Mental health support is provided by Departments of Community Mental Health. In all cases, after completion of care within the DMOC, Service personnel return to the Defence PAR under the purview of DMS Firm Base medical activities and capability; administration is undertaken by their own unit, or through Personnel Recovery Units or Centres (PRUs and PRCs) that form the Defence Recovery Capability (DRC). Firm Base clinical

⁷ Morgan-Jones D and Hodgetts T.J. A Unified Emergency Care system from first aid to definitive care. JR Army Med Corps 1999;145:132-135.

⁸ DMS training and education is designed around 5 Levels: Category 1 – awareness – taught to all members of the DMS, Category 2 – basic – taught to all members of the DMS with a common role (e.g. clinical personnel), Category 3 – advanced – taught to members of the DMS of a specific professional group (e.g. doctors), Category 4 – specialist – taught to a sub-set of a professional group to provide subject matter expertise in a professional field, Category 5 – expert – taught to nominated individuals to provide reference subject matter expertise in a specialist field e.g. Defence Consultant Advisers, Specialist Nurse Advisers.

⁹ Defence Medical Services Strategy 2012.

services are provided on a Joint basis through DPHC, Defence Dental Services (DDS) and Defence Healthcare Commissioning.

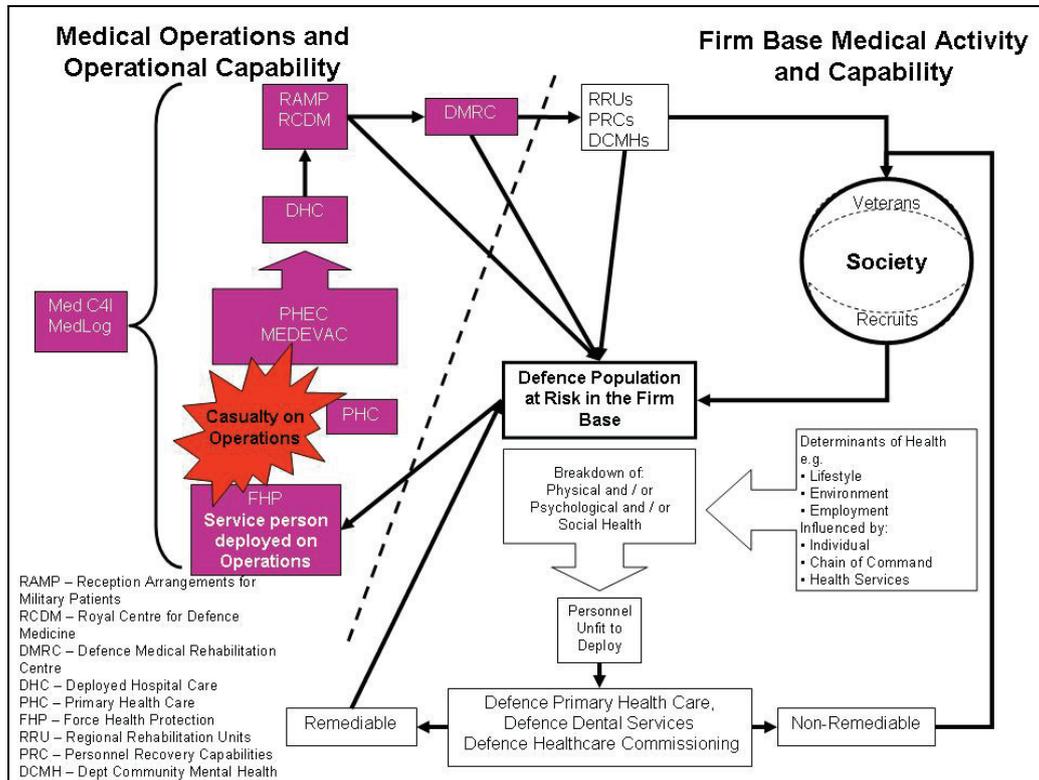


Figure 1 The Healthcare Cycle

7. The Chain of Care. The Chain of Care is the description of the clinical outcomes required from the OPCP. It is summarised at Figure 2. The Chain of Command and the DMS collectively contribute to the application of health protection measures to the Defence PAR as described in the Defence Health Strategy. If health protection fails, operational patients become sick or injured. First aid measures are essential **to save life, limb and eyesight**. The training of all personnel in essential first aid and a proportion of military personnel in extended first aid is the responsibility of the Chain of Command supported by technical training assistance from the DMS. The DMS trains clinical personnel to provide **Pre-Hospital Emergency Care (PHEC)** in order to take clinical responsibility from non-professional healthcare providers, and institute life-saving measures. **Progressive Resuscitation (PR)** extends these emergency measures from the **Pre-Hospital Care**¹⁰ environment to the capabilities of **Deployed Hospital Care (DHC)**. As the patient stabilises, the clinical focus shifts to **restoring physiological function** through clinical care and medical evacuation. Once the patient is physiologically stable, care shifts to **promoting healing** through wound care, nutrition and psychological support. Finally, the patient leaves hospital care. The DMS and the Chain of Command support the patient in **rehabilitation and return to physical, psychological and social function** enabling them to return to duty or prepare for discharge from Service on medical grounds. The size of the ovals is indicative of the scale of organisational effort (including, but not solely, numbers of personnel involved, proportion of command effort, financial cost etc) required to provide the clinical outcomes at each stage in the Chain of Care.

¹⁰ Pre-Hospital Care encompasses all aspects of HSS forward of DHC; it includes core functions of PHC, PHEC & Fwd MEDEVAC, and FHP, enabled by MedLog and Med C4I, organised as an agile, layered, networked healthcare system, configured to ensure the specific healthcare needs of the Defence PAR are supported and accessed within accepted timelines.

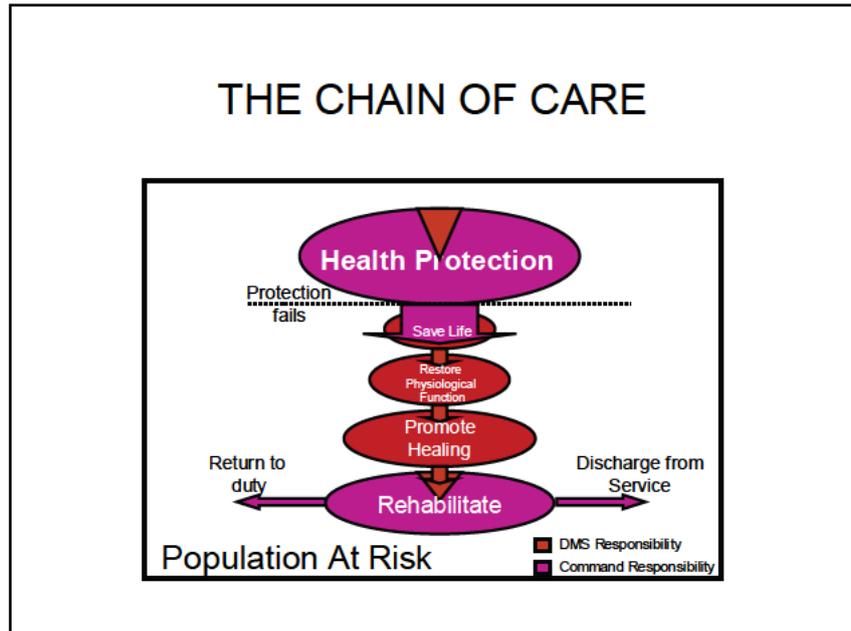


Figure 2 The Chain of Care

8. **Duty of Care.** Defence Strategic Direction provides policy on the duty of care and the management of risk and investment decisions.¹¹ It is reproduced below:

It is essential to bear in mind that we have a duty of care to minimise the risks to the lives of our Armed Forces personnel, and if they are wounded to ensure the provision of high quality healthcare, wherever they are serving, even while on patrol or in contact. Investment decisions that impact on capability provision for current and future operations must minimise the risk of our not being able to deploy a force that is adequately trained, equipped and sustained. Any risk to safety and health should be As Low As Reasonably Practicable and must be tolerable. There is also a comparable duty of care towards civilian personnel deployed on operations. Where a decision is taken not to procure, develop or fund equipment capability and other supporting structures (including Medical Services) which would otherwise have provided enhanced force protection, the reasons for this must be clearly documented. It should also be borne in mind that force protection is an essential element of military operations, maintaining freedom for the Joint Commander by countering and mitigating threats and hazards, and sustaining political and popular support for operations.'

9. **Standards of Clinical Healthcare.** The Standards of Clinical Healthcare are *the assured standard of clinical healthcare delivered by the DMS that is benchmarked against comparable NHS and international standards to the Defence PAR when deployed or in the Firm Base. DMS clinical practise will always comply with international law and professional ethical obligations.*

10. **The Golden Thread.** The standard of healthcare delivered on Operation HERRICK and resultant patient outcomes provide the baseline that the DMS aspires to deliver on future operations. It is recognised however, that constraints (political, operational, tactical and financial) may prevent its achievement. Any shortfall in medical capability or capacity that results in poorer patient outcomes during future operations could have an adverse impact on public support and political consequences. Risks identified by medical planners must be highlighted to operational commanders in order to be properly mitigated, or a decision taken to tolerate the risk.

¹¹ Defence Strategic Direction 2013. Part 1.

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11. **The OPCP** is the unified approach for clinical care to all operational patients arising from the Defence Population At Risk (PAR), exposed to the 'all-hazards environment', deployed on military operations. The application of the OPCP is informed by the 10-1-2+2 Medical Planning Guideline. It encompasses the 10 Instruments of Military Health Care and underpinning clinical concepts.

12. **The Operational Patient.** The term **Operational Patient** is an individual from the Defence PAR with physical, psychological or social ill-health who requires clinical care from the DMS on deployed operations encompassing battle casualties or disease and non-battle injuries (BC, DNBI). This definition has specifically been selected (vice Combat Casualty) to widen the focus from care of trauma patients¹² to holistic care of all patients who require HSS on operations. The term **Casualty** is an Operational Patient prior to their admission to a medical treatment facility, thus the commonly used terms '**Casualty Collection Point**' (CCP), '**Casualty Decontamination Area**' (CDA) and '**Casualty Clearing Station**' (CCS) are retained.

13. **The Defence PAR on Operations.** Joint Doctrine Publication (JDP) 4-03 *Joint Medical Doctrine*¹³ defines the factors that determine the Defence PAR for operations. *Eligibility for DMS HSS for a specific operation will be articulated in Medical Rules of Eligibility (MRoE) within operational orders. Members of all 3 Services are entitled to HSS, as are members of the Reserve forces, the Royal Fleet Auxiliary and civil servants deployed on operations. Captured personnel (CPERS) are also entitled. MOD contractors and nationals from NATO, the EU or other troop-contributing nations may be included, depending upon standing or other agreements. Eligibility for medical care for the wounded and sick is primarily derived from the provisions of International Humanitarian Law. Therefore, the deployed medical contingent requires the capability to appropriately treat the UK military PAR, non-UK military personnel and civilians (including children and the elderly). The DMS follows the general obligation to treat others; and for treating civilians in certain circumstances, abides by The Geneva Convention 1, Article 12. The healthcare needs of non-UK military and civilian populations may demand some capabilities which are not routinely available from the Regular component of the DMS. The DMS must have the organisational competence to manage HSS to the Defence PAR including access to competent medical personnel (Regular, Reserve, civilian or contracted), clinical equipment and clinical training.*

14. **The All-Hazards Environment.** The All-Hazards Environment is the list of potential hazards to the Defence PAR summarised by the mnemonic **CBRNE3T**. The Defence PAR may be at risk from a range of potential **Hazards** on military operations. A confirmed Hazard is defined as a **Threat** for a specific operation.¹⁴ This expands on the CBRNE acronym widely used in the civilian world for major incident planning and emphasises the importance of DNBI as the primary cause of health-related restrictions to human performance on operations. DMOC must be capable of supporting military operations whilst exposed to this All-Hazards Environment and be capable of providing clinical care to patients suffering from the consequences of exposure to one or more of these threats. The FHP estimate for a specific operation will determine the CBRNE3T threats to the Defence PAR defined in the MRoE. This will cover the impact of these threats across the 3 domains of health; physical, psychological and social. The CBRNE3T hazards are:

- a. **Chemical.** This covers conventional chemical agent threats plus toxic industrial chemicals, riot control agents and chemical hazards derived from pharmaceuticals.
- b. **Biological.** This covers live organisms, toxins and biological hazards deliberately employed to harm the Defence PAR.
- c. **Radiological.** This covers material or events that release ionising (alpha, beta, gamma radiation and neutrons) and non-ionising radiation (including directed energy).

¹² In addition 'Combat Casualty Care' is used to describe a particular research programme within DSTL focussed on trauma research.

¹³ JDP 4-03 Ed 3 Change 1. Joint Medical Doctrine Nov 12.

¹⁴ A hazard is a potential source of harm, a threat is a statement of intention to cause harm (Oxford English Dictionary).

- d. **Nuclear.** This covers weapons or events that result in nuclear fission/fusion reactions.
- e. **Explosive (and ballistic).** This covers all consequences of explosive activity on human bodies including gunshot wounds, indirect fire, improvised explosive devices, shells and bombs.
- f. **Environmental.** This covers environmental conditions likely to cause harm such as heat, cold, and altitude.
- g. **Endemic.** This covers infectious diseases (Biological Agents of Operational Significance) that pose a hazard to the health of the Defence PAR that are not deliberately released.
- h. **Trauma.** This covers the trauma element of non-battle injury threats to health in order to complement the explosives (and ballistic) threats that also cause injury.

The Operational Patient Care Pathway

15. The OPCP combines concepts from incident management for trauma patients and CBRN patients, links these to the clinical capabilities described in the 10 Instruments of Military Health Care and illustrates the continuous, seamless, escalatory increase in clinical care provided to the operational patient. It is summarised in Figure 3. There is a deliberate overlap in the boundaries between PHEC and PR in order to provide the maximum doctrinal freedom to medical operational planners in the specific employment of the clinical personnel and equipment in medical units.¹⁵ The key to successful delivery of the OPCP is the continuous and incremental provision of clinical care to meet the needs of the operational patient, independent of organisational boundaries.

16. The principles additionally apply to clinical support to the Defence PAR conducting training and other military activities but does not encompass additional clinical capabilities that are uniquely the purview of Firm Base health services support (even if delivered outside the United Kingdom).¹⁶

¹⁵ The Emergency Department (ED) function of a hospital does not need to be physically located within a DHC unit if the ED team has access to the key clinical capabilities that deliver PR (as demonstrated by the Medical Emergency Response Team (MERT) on Op HERRICK).

¹⁶ E.g. Maternity and obstetric care that may be needed for Service families accompanying the Defence PAR on overseas postings.

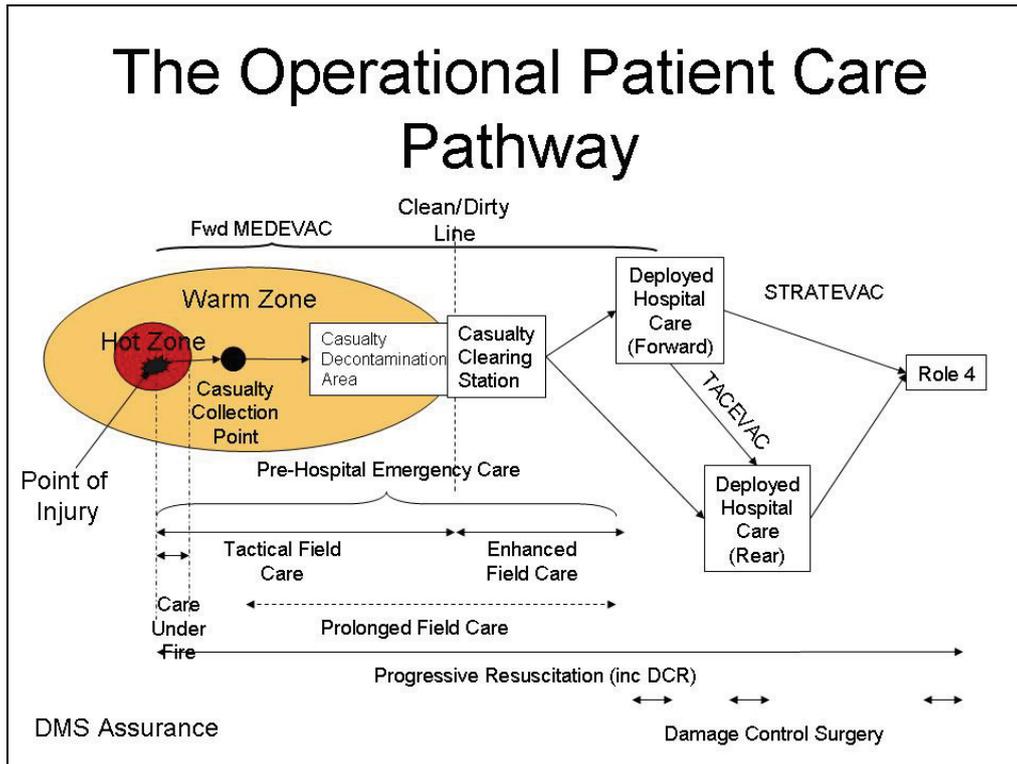


Figure 3 The Operational Patient Care Pathway

17. There are two Zones of Care:

- a. **Hot 'non-permissive' Zone.** The Hot Zone is a *non-permissive environment representing an immediate threat to personnel from direct fire or a known environmental threat*. Clinical care is limited to '**Care Under Fire (CUF)**' covering only those techniques necessary to provide immediate life-saving interventions whilst the patient is being extracted. This is likely to be provided as self administered or buddy-buddy first aid.
- b. **Warm 'semi-permissive' Zone.** The Warm Zone is a semi-permissive environment representing a specific secondary threat to personnel from indirect fire or other CBRNE3T threat. There is not likely to be a demonstrable 'hard edge' to the Warm Zone. Clinical care is described as '**Tactical Field Care (TFC)**' covering those interventions necessary to save/stabilise life and prepare the patient for medical evacuation. The CCP is likely to be within the Warm Zone. Conceptually the 'clean/dirty' line for the handover of casualties from the CDA is likely to be the edge of the Warm Zone with the CCS probably outside the Warm Zone.
- c. The area outside the 'warm' zone has explicitly NOT been labelled. There may be potential threats to the HSS system but these are not sufficiently specific to extend the radius of the Warm Zone.

18. Care of the casualty starts at the Point of Injury (POI) in the **Hot Zone**. The casualty receives CUF during extraction from the hot zone which extends to the remainder of the TFC capability. Casualties are amalgamated at the CCP. After initial triage, casualties are transported to a CDA where they are 'sanitised' to remove any threats to their health or that of their carers. If it is not possible to medically evacuate (**MEDEVAC**) them directly to DHC, casualties are transported to a CCS for **Enhanced Field Care (EFC)** pending MEDEVAC to DHC. DHC may be organised in echelons of care, illustrated schematically as 'forward' and 'rear'. **Prolonged Field Care (PFC)** is provided to casualties if there is likely to be a delay in meeting the **10-1-2+2 Medical Planning Guideline**. The movement of operational patients between DHC facilities is **TACEVAC** and their

movement from the Joint Operational Area (JOA) to Role 4 in the Firm Base is **STRATEVAC**. The DMS Inspector General is responsible for **DMS Assurance** of the OPCP under the direction of SG.

19. **10-1-2+2 Medical Planning Guideline.** The 10-1-2+2 Medical Planning Guideline is the guideline for the location of clinical capabilities by time in the OPCP. It is the default for medical operational planning and any excursion from this guideline must be owned by the Operational Commander. The speed and quality of medical care can reduce the mortality and morbidity of operational patients. The ideal is always to deliver expert care as soon as possible after wounding. Evacuation should be to the most appropriate facility for the treatment of the casualty, noting that the most appropriate facility may not necessarily be the closest.

20. All time delays carry clinical risk for patients. It is for commanders, advised by their medical staff, to balance these risks with operational and other factors and to determine whether or not the risks are acceptable. To achieve this in practice, the 10-1-2+2 Medical Planning Guideline informs decision-making regarding the configuration and location of the MEDEVAC and treatment assets needed to provide appropriate medical coverage to the supported force. Whilst primarily expressed as time for the trauma patient the principles apply to the non-trauma patient. The benchmark in civilian practice is rapid access within 8 minutes and hospital based surgery within one hour of injury. Where the civilian standard cannot be met, evidence from accumulated experience in Iraq, Afghanistan and earlier campaigns shows that there are three key timelines from PoI to first surgical intervention and a fourth for in-theatre specialist clinical care (specific terms are defined in the section on DHC). The first phase of the Medical Planning Guideline (10-1-2) is a cumulative time. The '+2' sets the location (by time) for In-theatre Surgery/Enhanced Diagnostics within the JOA.

- a. **10 minutes - Enhanced First Aid.** Enhanced first aid is those immediate life saving measures that are applied by personnel trained in enhanced first aid. Bleeding, airway control and administration of personal medical countermeasures for the most severely injured patients is to be achieved within 10 minutes of wounding (the so-called "platinum ten minutes"). For the UK setting the 10 minutes is predominantly met by the use of Team Medic qualified personnel, although DMS medical personnel may be tactically located to support this requirement.
- b. **1 hour – Enhanced Field Care.**¹⁷ EFC measures must be commenced by DMS medical personnel within 1 hour of wounding.¹⁸
- c. **2 hours - Damage Control Surgery and Acute Medicine.** Patients that require surgery should be under treatment in a facility manned and equipped for **Damage Control Surgery (DCS)** (noting the complexity of injuries on operations). Depending on the specific operational circumstances, the aim is to be able to provide DCS within 1 hour, but no later than 2 hours of wounding. Acute Medicine (AM) is the equivalent clinical capability for non-surgical emergencies. Both DCS and AM should always be supported by a Critical Care Unit. These interventions are designed to stabilise the operational patient pending further medical evacuation.
- d. **+2 hours – In-Theatre Surgery.** Further In-Theatre Surgery and enhanced diagnostics should be available within 2 hours of TACEVAC from DCS/AM for the severely injured and may require deployment of in-theatre specialist capabilities if Strategic Medical Evacuation (STRATEVAC) timelines prevent this guideline being met.¹⁹

¹⁷ Enhanced Field Care is defined under Pre-Hospital Emergency Care.

¹⁸ Progressive Resuscitation techniques are taught to all DMS personnel. The range of clinical interventions provided is determined by professional qualification and scope of practice.

¹⁹ DSTL is examining the specific time upon which to set this threshold. This JSP 950 leaflet will be amended when this is published.

21. It is also useful to think of the whole operational patient load in 3 groups based on their likely outcome. Not all will require emergency medical treatment to survive the immediate effects of their wounds. The 3 groups are:

- a. **Will Die.** A proportion will be so severely injured that they will inevitably die. These patients are predominantly within the first peak of patient death. If they reach medical care they must be properly treated. If it is clear they have non-survivable injuries, they must be supported to ensure a dignified, pain free death.
- b. **Will Survive.** A significant proportion is likely to survive the immediate effects of their wounds, almost irrespective of HSS. The main contribution that effective HSS makes to this group is to reduce morbidity and residual disability, and to improve quality of survival.
- c. **Could Die.** The lives of the remaining group will depend on an effective medical system. In common with the previous group, this will also reduce morbidity and residual disability. In broad terms, this group is of similar size to the group of inevitable deaths. The effectiveness of the medical system can be measured by the number of **unexpected survivors** defined as those who survive in spite of a clinical injury severity score that suggests that they would have died in a comparable civilian healthcare setting.

The 10 Instruments of Military Health Care

22. The **10 Instruments of Military Health Care** is a unified description of the medical capabilities required to be considered to generate and deliver effective HSS on operations. The DMS must be able to FGen Med FEs against these instruments, mission-tailored to the scale and complexity of a specific operation. Med FEs from environmental components will be integrated into a single HSS plan for the Joint Force. This may involve the use of multinational contributions to the HSS plan. The 10 Instruments of Military Health Care incorporate the **7 Operational Capabilities of Care**²⁰ as listed below:

- a. **Medical Command, Control, Communication, Computers and Information.** Medical Command, Control, Communication, Computers and Information (Med C4I) is the authority, processes, communications architecture and information management resources employed in managing the DMOC system. Med C4I is covered in more detail in the Joint applied concept paper titled 'HSS to the JOA'.²¹
- b. **Force Health Protection.** FHP is defined as the conservation of the fighting potential of a force so that it is healthy, fully combat effective 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. It considers force preparation measures, environmental health advice, in-theatre preventive measures, post-exposure measures and rehabilitation of the force. FHP must include competent medical advice in FHP for CBRN threats (in addition to the 'E3T'). FHP incorporates **Medical Intelligence** (MedInt). MedInt is intelligence derived from medical, bio-scientific, epidemiological, environmental and other information related to human or animal health.
- c. **Pre-Hospital Emergency Care.** PHEC is the continuum of emergency care provided to a casualty (by individuals or teams) from first clinical intervention at point of injury through to reception of the operational patient at DHC. The primary clinical output within PHEC is PR.

²⁰ Med C4I, FHP, PHEC, PHC, DHC, MEDEVAC & MedLog.

²¹ JtMedOpCapR 2014 HQ SG/MedOpCap/JtUser/04/04/06/JEF dated 19 Mar 14.

(1) **Progressive Resuscitation** (incorporating **Damage Control Resuscitation (DCR)**).²² *PR is the use of multiple techniques drawn from technical and organisational advances in clinical care for the restoration of physiological function for the critically ill or injured patient.*

(2) PR incorporates DCR for care of the trauma patient. DCR is defined as ‘a systemic approach to major trauma combining the <C>ABC (catastrophic bleeding, airway, breathing, circulation) paradigm with a series of clinical techniques from point of wounding to definitive treatment in order to minimise blood loss, maximise tissue oxygenation and optimise outcome²³.’

(3) PHEC comprises 4 clinical phases, 1 non-clinical node and 2 clinical nodes of care.

(a) **Tactical Field Care.** TFC is *those interventions necessary to save/stabilise life and prepare the casualty for medical evacuation.* It can be provided by any ‘extended-trained’ individual (incorporating Team Medic or other authorised extended qualification plus all DMS clinical personnel). TFC incorporates CUF.

(b) **Care Under Fire.** CUF is *those techniques necessary to provide immediate life-saving interventions to the casualty in the Hot Zone while the patient is being extracted.* The requirement for CUF is the basis of all first aid training taught to all members of the Armed Forces.

(c) **Enhanced Field Care.** EFC is *that emergency clinical care usually provided by a clinical team made possible by a more permissive environment using Battlefield Progressive Trauma Life Support (BATLS),²⁴ CBRN-EMT²⁵ and other progressive clinical techniques (as prescribed in Joint Service Publication (JSP) 999 Clinical Guidelines for Operations).*

(d) **Prolonged Field Care.** PFC is *those additional techniques that sustain the casualty if the 10-1-2+2 Medical Planning Guideline is likely to be exceeded.²⁶*

(4) **Casualty Decontamination Area.** The CDA is the location where contamination by threats (CBRNE3T) is removed from a casualty in order to remove any future threat to the health of the patient or the operational patient care system. This is NOT a clinical node of care and may be performed by non-medical personnel trained for this role, especially in a CBRN threat environment.

(5) **Casualty Collection Point.** The CCP is *the first location where operational casualties from an incident are collected after evacuation from the Hot Zone at which TFC is undertaken.* It is likely to be in the Warm Zone and manned by one or more designated DMS individuals. The Land environment equivalent is a Company Aid Post. The Maritime equivalent is the First Aid Post afloat.

(6) **Casualty Clearing Station.** The CCS is *the location of a Med FE that delivers EFC to operational patients, usually under the supervision of an independent practitioner.* The environment specific FE is likely to be a Unit Aid Post (Army), Medical Reception Station (Army), Sick Bay or First Aid Post (RN), Role 1(5) (RAF).

²² DCR is the use of hybrid resuscitation techniques including hypotensive resuscitation (the provision of sufficient intravenous fluids to maintain the radial pulse) plus combination blood replacement therapies for trauma.

²³ JDP 4-03 Ed 3.

²⁴ JSP 570 Battlefield Progressive Trauma Life Support.

²⁵ AMedP-6 Part 2 Medical Management of a CBRN Incident (study draft) – CBRN-Emergency Medical Treatment.

²⁶ Covered by the mnemonic **A**sk (about comfort), **F**luids, **I**nfection, **T**ubes, **A**nalgesia, **R**ecords, **S**anitation, protect from the **E**nvironment.

- d. **Primary Health Care.** PHC is *those comprehensive community medical services that contribute to the protection, maintenance and restoration of the health of the Defence PAR.*
- e. **Deployed Hospital Care.** DHC is *those clinical services provided by clinical personnel usually employed within hospitals.* Access to DHC within the 10-1-2+2 Medical Planning Guideline is an essential component of the OPCP. Where time/distance precludes provision by a single DHC facility, DHC may be echeloned into DHC facilities illustrated as 'Forward' and 'Rear' facilities though an individual may be treated in more than two DHC facilities.²⁷ DHC Forward facilities are likely to be mobile to enable the provision of PR and DCS within 2 hours. DHC Rear facilities are likely to be static and focused on the provision of In-Theatre Surgery and enhanced diagnostics within 2 hours of DCS.²⁸ DHC covers the following specific clinical concepts:
- (1) **Damage Control Surgery.** *DCS comprises of a range of surgical interventions targeted at halting deterioration of the patient's physiological condition rather than attempting definitive restoration of function.*
 - (2) DCS is required when the physiological derangement is so severe that it is unlikely the patient would survive prolonged surgery. It aims to rapidly control haemorrhage whilst maintaining perfusion of essential tissues and organs and limit on-going contamination. It is integral to PR and is an inter-disciplinary effort, rather than solely a surgical challenge. In particular, DCS will require critical care support either at that Medical Treatment Facility (MTF) or at an alternative MTF accessible by Critical Care Air Support Team level TACEVAC within an appropriate timeline. DCS should be followed later on by In-Theatre Surgery, which is delayed until the various physiological and other relevant parameters have been restored to as close to normal as possible. It can only occur within a DHC unit. This usually requires a combination of general and orthopaedic surgery and should include burns & plastic surgery wherever possible.
 - (3) **In-Theatre Surgery.** *In-Theatre Surgery may consist of several surgical procedures spread over a period of time and may require the movement of patients between MTFs within a theatre of operations.* The requirement for In-Theatre Surgery is dictated by both the patient's condition and operational circumstances. The factors to be considered when considering a patient's condition include the requirement to halt physiological deterioration and adequate debridement, anatomical repair and therapeutic intervention to allow safe evacuation to a definitive care facility; operational factors may include extended evacuation timelines that demand further definitive surgical interventions for patient safety; appropriate definitive surgery to permit deliberate retention in-theatre and appropriate definitive surgery for patients ineligible for evacuation out of theatre.
 - (4) **Enhanced Diagnostics.** *Enhanced diagnostics are those clinical support activities (e.g. CT scan if not available as part of DCS, interventional radiology, and specialist laboratory support including biochemistry, haematology and microbiology testing) that enable clinical therapies to address the specific cause of injury or illness that are additional to generic stabilising therapies.*
 - (5) **Mission Specific Clinical Capabilities.** *Mission specific clinical capabilities²⁹ are those clinical and clinical support capabilities that are mission-tailored for each specific operation dependent on the CBRNE3T and MRoE.*

²⁷ E.g. a patient may initially receive DCS in a Role 2 Light Manoeuvre unit, have general In-Theatre Surgery in a Role 2 Enhanced facility and then be transferred to a Role 3 facility for sub-specialist care (e.g. ophthalmology or neurosurgery) prior to STRATEVAC. This includes established facilities in the maritime environment.

²⁸ Maritime Role 3 is unlikely to be fixed and will probably be exposed to an increased threat in a forward position.

²⁹ E.g. Care of Captured Personnel. Emergency Care for Paediatric Patients, Tropical Medicine, GU Medicine.

f. **Medical Evacuation.** MEDEVAC is the movement of operational patients from point of injury/illness up to DHC, under medical supervision in a designated transport platform equipped for role. MEDEVAC is controlled by a **Patient Evacuation Co-ordination Cell (PECC)** that operates under the authority of the battle space owner to ensure that MEDEVAC platforms conform to the tactical environment. A PECC is responsible for ensuring the **right patient** is collected from the **right pick-up point**, transported to the **right destination** in the **right platform**, with the **right medical escort** in the **right time**. There are 3 categories of MEDEVAC.

(1) **Forward MEDEVAC (MEDEVAC)** which is the movement of casualties in a designated vehicle with medical escorts from point of injury up to the first DHC (including to/from the CCS).³⁰

(2) **Tactical MEDEVAC (TACEVAC)** which is the intra-theatre movement of patients between deployed hospital care facilities.

(3) **Strategic MEDEVAC (STRATEVAC)** which is the movement of patients from the theatre of operations (usually to Role 4 in the UK or a 1st world standard facility).

g. **Medical Logistics.** Medical Logistics (MedLog) is the process of procurement, storage, movement, distribution, maintenance and disposition of medical material and pharmaceuticals, including blood, blood components and medical gases, in order to provide effective HSS and the application of this process in planning and implementation.

h. **Firm Base.** The Firm Base includes those capabilities that provide HSS to the Defence PAR within the Firm Base less RCDM and DMRC which are Role 4 operational.³¹ The Firm Base plays a vital role in maintaining business as usual including the FGen of personnel to deploy on operations; maintaining FE@R; providing a manning and training margin for commitments and supporting Resilience in the UK.

i. **The Military Medical Contribution to Security & Stabilisation.** The Military Medical Contribution to Security & Stabilisation is those areas where HSS can play a definitive role in delivering operational effect in addition to the OPCP. These include Humanitarian Assistance and Disaster Relief Operations, Security Sector Reform and civilian Health Sector Development. Med FEs may be required to provide capability to support the delivery of effect in all of these areas.

j. **Research and Innovation.** Research and Innovation is the process of investigation and study that is used to develop concepts and practical applications that can contribute to the sustainment of health on operations. This is delivered by Medical Directorate and is supported through the operational healthcare cycle. Perpetual research and innovation enables the delivery of world leading HSS.

NATO Medical Treatment Facility Role Definitions

23. NATO MTF Role definitions are summary definitions for capability of military medical facilities in order to facilitate interoperability between NATO nations. These include:

a. **Role 1 MTF - Medical Response Capability.** A Role 1 MTF is a national responsibility focusing on provision of primary health care, specialised first aid, triage, resuscitation and stabilisation.

³⁰ The movement of casualties in a non-designated vehicle without a medical escort is termed casualty evacuation (CASEVAC).

³¹ These units are not specifically resourced within DMS20 to deliver this capability and it is done from within the existing FGen pool.

b. **Role 2 MTF - Initial Surgery Response Capability.** A Role 2 MTF provides an initial surgical response capability and is characterised by its ability to perform **surgical interventions** in addition to perform reception / triage of casualties; resuscitation and treatment of shock to a higher level than Role 1 facilities. There are two main types of Role 2 MTFs:

(1) A **Role 2 Basic MTF** must provide a surgical capability, including **damage control surgery** and surgical procedures for emergency surgical cases, to deliver life, limb and function saving medical treatment. The surgical capability should be provided within medical timelines.

(2) A **Role 2 Enhanced MTF** must provide all the capabilities of the Role 2 Basic, but has **enhanced capabilities** as a result of additional facilities and greater resources, including the capability of stabilising and preparing casualties for strategic aeromedical evacuation.

c. **Role 3 MTF - Hospital Response Capability.** A Role 3 MTF provides secondary health care at theatre level. This facility must provide all the capabilities of the Role 2E MTF and be able to conduct **specialised surgery, care and additional services** as dictated by mission and theatre requirements.

d. **Role 4 MTF - Definitive Hospital Response Capability.** A Role 4 MTF offers the full spectrum of definitive medical care that cannot be deployed to theatre or will be too time consuming to be conducted in theatre. Role 4 MTFs normally provide definitive care specialist surgical and medical procedures, reconstructive surgery and rehabilitation.

MEDICAL INCIDENT MANAGEMENT

24. Medical Incident Management is a common approach to the response from the DMS to an incident involving live casualties. A **Major Medical Incident (MMI)** is an incident where the **NUMBER, SEVERITY, or TYPE of LIVE casualties, or by its LOCATION, requires EXTRAORDINARY resources.** A MMI is declared 'bottom up', with each level of command considering whether it also needs to make the same declaration. A **Mass Casualty Incident (MASCAL)** is an MMI which, despite the use of extraordinary measures, has or will result in an over whelming of the available medical capability and/or capacity. This is declared 'top down' by the Theatre Commander Medical and is cascaded down the CoC. In a MASCAL, the Theatre Commander Medical may recommend to the Commander, at the operational level, that the T4 – Expectant triage category is initiated in order to focus the medical effort on the best outcome for the maximum number of survivors.

25. The principles of medical incident management are covered by the mnemonic **CSCATTTTER** (which builds on the mnemonic CSCATTT in common use for medical major incident planning):

a. **Command and Control.** Command and Control (C2) is the establishment of medical advice to the incident commander and control over the medical response to the incident using MedC4I capabilities.

b. **Safety.** Safety is the assessment of the CBRNE3T threats to the safety of the first responders (self), the scene, and the casualty. It will almost invariably involve the wearing of Individual Protective Equipment (IPE).³²

c. **Communications.** Communications is the provision of the communication architecture that enables all organisations to effectively respond to a medical incident.

³² IPE covers clothing, helmets, eye protection, body armour, respirator, CBRN protective outer layers etc.

- d. **Assess.** Assess is *the overall evaluation of the scene to determine the cause of the incident, the number and severity of operational patients, and the initial medical response to the incident.*
- e. **Triage.** Triage is defined at paragraph 25.
- f. **Treatment.** Treatment is *the application of PHEC to the care of the casualties.* It consists of the Primary Survey, PR, Secondary Survey and Definitive Care.
- g. **Transport.** Transport is *the application of MEDEVAC to clear the scene of operational patients.*
- h. **Exploit.** Exploit is *the collection and retention of evidence including medical evidence to allow the chain of command to exploit the response to the incident.*³³
- i. **Recover.** Recover is *the restoration of the response system to the pre-incident state plus the immediate after-action analysis to learn lessons from the incident.*

26. **Triage** is *the technique used to determine initial treatment priority for two or more operational patients and for assessing the priority for further treatment or MEDEVAC after primary survey.* This is a dynamic and repeated process. The specific definitions of triage sieve, triage sort, primary triage and secondary triage as separate phases to triage will be published as separate policy. The DMS will teach the use of a range of clinical scoring mechanisms to enable triage to be conducted in the most suitable manner for its purpose, dependant on clinical location (urgency, clinical precision, to determine priorities for different purposes etc).

27. **Triage Categories.** Subject to review.

<h2>Triage Categories</h2>			
Category and colour	Meaning	Implications	Notes
T1 – Red	Immediate	Requires life-saving interventions. Should be evacuated as fast as possible.	Evacuation times are specified in the '9 liner' MEDEVAC request
T2 – Yellow	Urgent	Requires interventions. Should be evacuated within 2 hours.	
T3 – Green	Delayed	Requires evacuation (clinical or operational reasons). Should be evacuated when possible/safe.	
DEAD – White on Black	Dead	No further medical intervention Requires movement.	
T4 - Blue	Expectant	Requirement for clinical intervention exceeds local capacity. Supportive care only.	Only used when authorised declaration of a Mass Casualty Incident.

Figure 4 Triage Categories

³³ **Exploit** includes retention of IPE to inform IPE development, detection and retention of evidence of CBRN agent use etc.

28. **Primary Survey.** The Primary Survey is a structured approach to the initial assessment and management of the operational patient at each stage in the OPCP. It comprises the following steps:

- a. **C**atastrophic compressible bleeding. This is bleeding that is immediately life-threatening without intervention and is amenable to control by use of direct pressure, a tourniquet or bleeding control interventions³⁴.
- b. **A**irway (with C-spine control) management and **a**ntidotes. This is the assessment of the airway plus clinical interventions required to maintain the airway, and the assessment and administration of life-saving antidotes to adsorbed toxic agents (mainly CBRN threats).
- c. **B**reathing. This is the assessment of adequacy of breathing and support to oxygen absorption.
- d. **C**irculation. This is the assessment of adequacy of circulation and support to tissue oxygenation including PR.
- e. **D**isability and **d**econtamination. **Disability** is the assessment of the head injured patient to establish a baseline of neurological function. **De-contamination**³⁵ is the removal of external CBRNE^{3T} threats in order to: stop further absorption of external agents, 'expose to treat' wounds³⁶ and to remove any hazard to personnel in the MEDEVAC system.
- f. **E**xposure, **E**nvironment, **E**xtremities, and **E**vacuation. **Exposure** is the removal of sufficient clothing to enable full clinical assessment of the Operational Patient, **Environment** is the packaging of the Operational Patient in order to protect them from the external environment during MEDEVAC, **Extremities** is the examination of the Operational Patient's limbs for un-assessed injuries and **Evacuation** is the arrangement of MEDEVAC for the operational patient to the next phase of their clinical care.

PJHQ MEDICAL HANDBOOK

29. Medical operational reports and returns are the pre-formatted information requirements to enable medical operations to be controlled and medical activity to be reported/collated/analysed/exploited. The medical operational reports and returns for a specific operation are proscribed in the medical annex of the Joint Force Commander's Directive and described in the PJHQ Medical Handbook. There are 4 types of medical operational reports and returns:

- a. **Event Reporting.** This is the reporting of a specific event to the medical chain of command. It comprises:
 - (1) **Initial Medical Incident Assessment.** This is the preformatted report from the senior medical representative at an incident to inform the chain of command of the medical assessment of an incident. It follows the mnemonic – **METHANE**.
 - (a) **My** call sign
 - (b) **Exact** location
 - (c) **Type** of Incident

³⁴ For example QuickClot, HaemCon®, HemCon® or other agents.

³⁵ Whilst Decontamination is usually considered as a 'counter' CBRN activity, it should cover all CBRNE³ threats including removing personal weapons/ordnance, mud and other contaminants etc.

³⁶ Prioritisation of decontamination to those areas which require clinical interventions such as wound sites and sites for intravenous/interosseous access.

- (d) **Hazards Identified**
- (e) **Assessment**
- (f) **Number and severity (triage category) of Patients**
- (g) **Emergency response required.**

(2) **Outbreak Reporting.** *This is the reporting of one or more cases of a pre-designated clinical condition.* Pre-formatted reports are the FMed 85 for infectious disease³⁷ and Climatic Injury Reporting.³⁸

(3) **Significant Event Reporting.** *This is an additional pre-defined requirement to report other significant medical events such as: loss of a medical capability or medical personnel, a major medical incident, presentation of a particular clinical condition.* This includes the requirement to report significant clinical events for healthcare governance and assurance purposes.

b. **MEDEVAC Control.** *This covers the request format for each stage in MEDEVAC.* Additionally the requests are collated to produce a report of MEDEVAC activity.

(1) **'9 Liner' MEDEVAC Request.** This comprises the NATO 9-liner for the group of operational patients and the MISTAT (mechanism/injuries/signs/treatment/age/time) report for each operational patient.

(2) **TACEVAC Request.** The TACEVAC request provides the organisational and clinical detail to enable the tasking of a MEDEVAC platform and medical escort to enable a operational patient to be moved at the right time from a medical facility to the right medical facility inside the JOA.

(3) **STRATEVAC Request.** The STRATEVAC requesting procedure is directed by HQ Air.

c. **Medical Activity Reporting.**

(1) **Health Surveillance.** Health surveillance is *the continuous, systematic collection, analysis and interpretation of the health-related data needed for the planning, implementation, and evaluation of operational patient care.* This serves a number of functions including: the detection of outbreaks of ill-health, the monitoring of medical force protection measures, and assessment of demand for DMOC. The health surveillance reporting system produces an analysis of causes of ill-health of the Defence PAR by clinical condition, time, place and person.

(2) **PHC Activity Reporting.** PHC activity reporting *summarises the clinical outputs of the PHC component of DMOC.*

(3) **DHC Activity Reporting.** DHC activity reporting *summarises the clinical outputs of the DHC component of DMOC by individual element of the DHC capability.*³⁹ This includes the completion of the Operational Trauma Audit Data Collection Form for trauma cases admitted to DHC on operations.⁴⁰

³⁷ JSP 950 *Communicable disease control (CDC) in the Armed Forces*, Leaflet 7-2-2, October 2010.

³⁸ JSP 539 *Climatic injuries in the Armed Forces: Prevention and Treatment*, January 2003.

³⁹ Covering clinical functions (emergency department, operating department, critical care department and intermediate care wards), clinical support functions (imaging and laboratory) and support functions (particularly MedLog and MedC4I).

⁴⁰ The template for the Operational Trauma Audit Data Collection Form is contained within JSP 999 CGOs.

(4) **Specific Clinical Activity Reporting.** There is *operation-specific clinical activity reporting* covering domains such as: compliance with specific FHP measures, use of clinical innovations, activities on specific populations (for example CPERS examinations).

d. **Medical Commander's Assessment – MEDASSESSREP.** This is *the periodic assessment of the medical situation by medical commanders to the chain of command*. It includes the requirement to report lessons and observations from operations in order to inform organisational learning.

Annexes:

- A. Table of definitions for each concept in the OPCP.
- B. Landscape Images of Figures 1-4.

TABLE OF DEFINITIONS FOR EACH CONCEPT IN THE OPERATIONAL PATIENT CARE PATHWAY

This table lists the title, definition, purpose, sponsor and Category 3 course for each key concept in the OPCP. Although the principal Category 3 educational programme is shown for each concept, the whole package is designed to be introduced at all Levels of DMS education¹.

Ser	Title	Definition	Purpose	Sponsor	Level 3 Course
1	The Health Care Cycle	<i>the 'patient-centred' provision of Health Services Support to the PAR by the DMS throughout their career.</i>	To provide a unified description of the DMS healthcare capabilities to support the Defence military PAR across their military career.	Hd MedOpCap	Joint Medical Operational Planning Course (JMOPC)
2	The Chain of Care	<i>the description of the clinical outcomes required from the OPCP</i>	To provide a unified concept for the responsibilities and clinical outcomes required to care for the Operational Patient.	Hd MedOpCap	JMOPC
3	Duty of Care	See main text	To provide a statement on the Duty of Care, including the management of risk and investment decisions.	Hd Strat Pol – to inform DSD	JMOPC
4	Standards of Clinical Healthcare	<i>The assured standard of clinical healthcare delivered to the Defence PAR by the DMS that is benchmarked against comparable NHS and international standards when deployed or in the Firm Base. DMS clinical practise will always comply with international law and</i>	To provide a statement on the standards of clinical care to be attained and assured by the DMS in caring for the Defence PAR.	Hd Strat Pol	JMOPC

¹ DMS training and education is designed around 5 Levels: Level 1 – awareness to all members of the DMS, Level 2 – basic – taught to all members of the DMS with a common role (e.g. clinical personnel), Level 3 – advanced – taught to members of the DMS of a specific professional group (e.g. doctors), Level 4 – specialist – taught to a sub-set of a professional group to provide subject matter expertise in a professional field, Level 5 – expert – taught to nominated individuals to provide reference subject matter expertise in a specialist field e.g. Defence Consultant Advisers, Specialist Nurse Advisers

Ser	Title	Definition	Purpose	Sponsor	Level 3 Course
5	The Operational Patient Care Pathway	<i>professional ethical obligations a unified approach for clinical care to all operational patients arising from the Defence PAR, exposed to the 'all-hazards environment', deployed on military operations</i>	To provide a unified concept of capabilities of clinical care for the operational patient in a Joint Operational Area.	Hd MedOpCap	JMPOC
6	The Operational Patient	<i>an individual from the Defence PAR with physical, psychological or social ill-health who requires clinical care from the DMS on deployed operations encompassing battle casualties or disease and non-battle injuries (BC, DNBI)</i>	To provide a comprehensive definition of the operational patient who requires clinical healthcare from the DMS.	Hd MedOpCap	JMOPC
7	A casualty	<i>an Operational Patient prior to their admission to a medical treatment facility</i>	To provide a comprehensive definition of the casualty who requires clinical healthcare from the DMS.	Hd MedOpCap	JMOPC
8	The Defence Population At Risk on operations	See main text	To provide a unified definition of the Defence PAR entitled to DMS medical support in a Joint Operational Area.	Hd MedOpCap.	JMOPC
9	The All-Hazards Environment	<i>the list of potential hazards to the Defence PAR summarised by the mnemonic CBRNE3T.</i> Subordinate definitions are contained in the main text.	To provide a unified concept for the potential hazards to which the Defence PAR may be exposed in a Joint Operational Area.	Hd MedOpCap	JMOPC
10	10-1-2+2 Medical Planning Guideline	<i>the guideline for the location of clinical capabilities by time in the OPCR.</i>	To provide a time-based guideline for the movement of operational patients from PHEC at point of injury to completion of DCR and, if required, In-Theatre Surgery.	Hd MedOpCap	JMOPC
11	10 Instruments of Military Healthcare	<i>the critical factors that require to be considered to generate and deliver effective HSS on operations.</i>	To provide a unified description of the medical factors required to be considered to provide HSS	Hd MedOpCap	JMOPC

Ser	Title	Definition	Purpose	Sponsor	Level 3 Course
12	The 7 Capabilities of Operational Healthcare	<i>the essential capabilities required for HSS on operations.</i>	in a Joint Operational Area. To provide a unified description of the medical capabilities required to provide HSS in a Joint Operational Area.	Hd MedOpCap	JMOPC
13	Pre-Hospital Care	<i>encompasses all aspects of HSS forward of DHC; it includes core functions of PHC, PHEC & Fwd MEDEVAC, and FHP, enabled by MedLog and Med C4I, organised as an agile, layered, networked healthcare system, configured to ensure the specific healthcare needs of the Defence PAR are supported and accessed within accepted timelines.</i>	To provide a unified concept to describe those clinical interventions provided prior to the operational patient arriving at DHC.	Hd Med Op Cap	JMOPC
14	Force Health Protection	<i>the conservation of the fighting potential of a force so that it is healthy, fully combat effective 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. Subordinate definitions are contained in the main text.</i>	To provide a unified concept for FHP advice to be provided by the Preventive Medicine professional groups ² of the DMS to prevent the operational patient.	Chair Force Health Protection Capability Group	Combat Health Advisers Course+ CBRN Medical Advisers Course
15	Pre-Hospital Emergency Care	<i>the continuum of emergency care provided to a casualty (by individuals or teams) from first clinical intervention at point of injury through to reception of the operational patient at DHC. Subordinate definitions are contained in the main text.</i>	To provide a unified concept for PHEC to be provided by clinical members of the DMS to the Operational Patient.	Chair Role 1 Clinical Capability Programme	Battlefield Advanced Trauma Life Support course
16	Primary Health Care	<i>those comprehensive community medical services that contribute to the protection, maintenance and restoration of the health of the Defence PAR.</i>	To provide a unified concept for PHC to be provided by clinical members of the DMS to the operational patient.	Chair Role 1 Clinical Capability Programme	Postgraduate Medical Officers course, Defence Medic course, Military Nurse

² The Preventive Medicine professional groups include: occupational health (OH), public health (PH), environmental health (EH) and infection prevention and control (IPC) subject matter experts, all of whom need to be competent in the military professional competency of preventive medicine.

Ser	Title	Definition	Purpose	Sponsor	Level 3 Course
17	Deployed Hospital Care	<i>those clinical services provided by clinical personnel usually employed within hospitals.</i>	To provide a unified concept for DHC to be provided by clinical members of the DMS to the operational patient.	Chair Role 3 Clinical Capability Programme	Practitioner course. Mission Specific Validation for DHC at the Army Medical Services Training Centre (for the Land environment) or by the RN (for the Maritime environment)
18	Progressive Resuscitation	<i>the use of multiple techniques drawn from technical and organisational advances in clinical care for the restoration of physiological function for the critically ill or injured patient. Subordinate definitions are contained in the main text.</i>	To provide a unified concept for Advanced Resuscitation to be provided by clinical members of the DMS to the operational patient.	DCA Anaesthetics and DCA Emergency Medicine	BATLS, CBRN MO course and Tri-Service Anaesthetics Apparatus Course
19	Damage Control Surgery	<i>comprises of a range of surgical interventions targeted at halting deterioration of the patient's physiological condition rather than attempting definitive restoration of function. Subordinate definitions are contained in the main text.</i>	To provide a unified concept for DCS to be provided by clinical members of the DMS to the Operational Patient.	DCA Surgery	Military Operational Surgical Training
20	In-Theatre Surgery	<i>may consist of several surgical procedures spread over a period of time and may require the movement of patients between MTFs within a theatre of operations. Subordinate definitions are contained in the main text.</i>	To provide a unified concept for In-Theatre Surgery to be provided by clinical members of the DMS to the Operational Patient.	DCA Surgery	Postgraduate training for DMS surgeons
21	Enhanced Diagnostics	<i>those clinical support activities (e.g. CT scan if not available as part of DCS, interventional radiology, and specialist laboratory support including biochemistry, haematology and microbiology testing) that enable clinical therapies to address the specific cause of injury or illness that are additional to generic stabilising therapies.</i>	To provide a unified concept for Enhanced Diagnostics to be provided by clinical members of the DMS to the Operational Patient.	DCA Medicine	Postgraduate training for clinicians' diagnostic specialities.

Ser	Title	Definition	Purpose	Sponsor	Level 3 Course
22	PAR Specific/condition specific clinical capabilities	<i>those clinical and clinical support capabilities within the Operational Patient Care Pathway that are mission-tailored for each specific operation dependant on the CBRNE3T threat and the MRoE.</i>	To provide a unified concept for clinical care to be provided to specialist PARs (e.g. paediatric, CPERS) and specific clinical conditions (e.g. tropical medicine, CBRN patients) by clinical members of the DMS to the operational patient.	relevant DCA, clinical specialist adviser	as specified in the JMC Schedule of Courses
23	Medical Evacuation (MEDEVAC)	<i>the movement of operational patients from point of injury/illness up to DHC, under medical supervision in a designated transport platform equipped for role.</i> Subordinate definitions are contained in the main text.	To provide a unified concept for MEDEVAC to be delivered by Med FEs to the operational patient.	Chair Air MEDEVAC Clinical Capability Programme	JMOPC
24	Medical Command, Control, Communication, Computers and Information (MedC4I)	<i>the authority, processes, communications architecture and information management resources employed in managing the DMOC system.</i>	To provide a unified concept for Med C4I to enable the management of the DMOC to support the Operational Patient.	Chair Defence Medical Services Information Steering Group for policy. PJHQ owns TTPs and the Joint Medical Operational Handbook.	JMOPC
25	Medical Logistics	<i>the process of procurement, storage, movement, distribution, maintenance and disposition of medical material and pharmaceuticals, including blood, blood components and medical gases, in order to provide effective medical support and the application of this process in planning and implementation.</i> <i>summary definitions for capability of military treatment medical facilities in order to facilitate interoperability between NATO nations.</i> Subordinate definitions are contained in the main text.	To provide a unified concept for MedLog to sustain the DMOC to support the Operational Patient	ACDS (Log Ops)	to be defined
26	NATO Medical Treatment Facility Roles	<i>summary definitions for capability of military treatment medical facilities in order to facilitate interoperability between NATO nations.</i> Subordinate definitions are contained in the main text.	To provide common definitions for medical treatment facilities in order to facilitate interoperability between NATO definitions.	COMEDs	To provide a unified concept for DCS to be provided by clinical members of the DMS to the

Ser	Title	Definition	Purpose	Sponsor	Level 3 Course
27	Medical Incident Management	a common approach to the response from the DMS to an incident involving live casualties. Subordinate definitions are contained in the main text.	To provide a structured approach to the tactical management of an incident causing patients.	Chair Role 1 Clinical Capability Programme	Operational Patient. Military MIMMS ³ .
28	Triage	the technique used to determine initial treatment priority for two or more operational patients and for assessing the priority for further treatment or MEDEVAC after primary survey. Subordinate definitions are contained in the main text.	To provide categorisation for operational patients to determine priority for clinical care and MEDEVAC.	Role 1 Clinical Capability Programme	Battlefield Advanced Trauma Life Support course and CBRN EMT(MO) course
29	Primary Survey	a structured approach to the initial assessment and management of the operational patient at each stage in the Operational Patient Care Pathway. Subordinate definitions are contained in the main text.	To provide a hierarchy for the immediate clinical assessment of the operational patient in order to determine the clinical need for life-saving interventions.	Chair Role 1 Clinical Capability Programme	Battlefield Advanced Trauma Life Support course and CBRN EMT(MO) course
30	Medical Operational Reports and Returns	the pre-formatted information requirements to enable medical operations to be controlled and medical activity to be reported/collated/analysed/exploited. Subordinate definitions are contained in the main text.	To provide common formats for controlling medical operations and reporting medical activities on operations.	Hd MedOpCap for requirement, PJHQ for formats	JMOPC.

³ Military MIMMS is the adaptation of the Major Incident Medical Management and Support Course for military use.