TREATMENT OF CHILDREN ON OPERATIONS

Introduction

1. Medical forces on operations are configured to support only the deployed force and medical manpower and materiel is scaled to that end. Current doctrine[1] provides that the medical force can deliver support to non-combatants including children as part of the overall campaign[2]. This medical support is provided in line with the theatre eligibility matrix. Doctrine specifies that any care given must be within existing capability, must not impact on the mission and must not create a dependency among the local population. This doctrine fully recognises the duty under Common Article 3 of the Geneva Conventions requiring that the wounded and sick be collected and cared for but does not fully acknowledge the moral and ethical imperative to render all necessary care to any individuals, including children who might present at military medical facilities whether or not it is within deployed capability. Whilst the proportion of patients under the age of 16 has been low on recent operations (Op TELIC 3%) impact is high with 70% of those requiring transfer to specialist services. During Op HERRICK 16B, 40% of paediatric patients required Intensive Therapy Unit (ITU) admission with hospital stays of up to 26 days. Commanders can be expected to make treat or not treat decisions regarding children on operations, decisions which can have consequences for unit effectiveness on both logistical and emotional levels. For the purposes of this letter children are defined as from birth up to the age of 15 and 364 days.

2. This tension between doctrine and reality has clinical governance implications and these were highlighted in a review of the Defence Medical Services (DMS) Support to Civilians on Operations[3]. This paper proposed sets of competencies that will be required of clinicians on operations in order to manage conditions presented by civilian cases. The Permanent Joint Headquarters (PJHQ) Note 345-12 Treatment of Non-Entitled Children on Operations lays out a competency framework for healthcare professionals within the DMS while acknowledging an ethical obligation to treat children, Defence doctrine remains that deployed military medical facilities are configured to support the deployed force.

3. DMS personnel have regularly been involved at the tactical level in reconciling strategic doctrine and tactical reality and have provided medical care to an exceptional standard to children who have presented at UK military Medical Treatment Facilities (MTF). They have adapted their skills and equipment to overcome the challenges set by treating these different populations and have managed the clinical governance risks. Medical personnel have submitted and continue to submit recommendations on policy, equipment, manning and training enhancements that would improve their confidence and competence and which would do much to reduce governance risks that will have to be managed by medical commanders. DMS personnel regularly express particular concern regarding the management of children in the deployed setting. The Deployed Paediatric Special Interest Group (DEPSIG) exists to guide policy, provide advice to medical commanders and Defence Consultant Advisors (DCA), produce clinical guidance and provide relevant and military specific paediatric medical training.

4. This policy provides a framework to help clinicians identify their clinical responsibilities, be maximally prepared for, and identify what actions need to be taken to ensure that civilian Paediatric cases are successfully returned either to the local health system or Non-Governmental Organisations (NGO) facilities at the earliest opportunity that their condition allows. It is not the intention of this policy letter to re-establish a Defence paediatric cadre however the training enhancements recommended in this document are to be considered for force generation and seek to advise commanders of the training requirements for forces held at readiness.

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1. JDP 4-03.

2. Defence Strategic Guidance 2005 describes Military Task (MT) 4.1 (Humanitarian Assistance and Disaster Relief) as one of the 7 MTs of Contingent

3. "Defence Medical Services Support To Civilians on Operations: Report of an evidence based review." Academic Department of Military Emergency Medicine, RCDM, 2003.

Aim

5. The aim of this policy is to provide general principles and specific detail on the training, equipment and materiel requirements to enable clinical staff to acquire the confidence as well as the competence to provide medical support to the paediatric population on operations.

Policy

6. **Ethical Rationale**. The ethical rationale for this policy is articulated below.

a. It is accepted that medical support to the deployed force will continue to be configured to provide only acute services and that all post-acute care, chronic care and long term rehabilitation will be undertaken in the home base. Implicit in this is that a wounded member of the deployed force, who has completed the acute phase of his care but who has on-going treatment needs, will be transferred from Deployed Hospital Care (DHC) into the rehabilitation phase of their treatment in the UK.

b. Consistent with this principle, a wounded member of the local population, if admitted to a UK MTF, would also transfer from an acute Service facility to a chronic provider in their home base no later than the point at which they had reached the end of the acute component of their care pathway. Where it is clear that this care is not available, clinicians and commanders need to consider the best course of action on a case-by-case basis. In some cases the initiation of treatment may not be appropriate even in life-threatening conditions. Examples of such situations regularly experienced on recent operations include, devastating brain injury, large surface area burns and high spinal cord injuries. Such considerations are in keeping with those made by NGO providers such as the International Committee of the Red Cross (ICRC) and are ethically appropriate. Ethical and difficult decision-making is discussed on Military Operational Surgical Training (MOST), HOSPEX and Military Advanced Paediatric Life Support (MAPLS).

c. Where cases have come to the end of the acute phase of their care and are ready for transfer to a post-acute or chronic care setting, it is acknowledged that in many operational theatres such a setting will be within the family/community or in medical facilities which may have significant capability and capacity shortcomings and may be associated with greater risks of morbidity and mortality. This is the reality of the resource-limited environment to which Defence medical staff are expected to deploy.

7. **Effects Based Operations (EBO)**. DMS accepts the ethical and moral imperative to provide urgent lifesaving care to all those in need and the inevitability that such cases will present to deployed medical treatment facilities from Role 1 via Pre Hospital Emergency Medicine (PHEM) assets such as the Medical Emergency Response Team (MERT) to the deployed emergency room. The required effect is that DMS personnel are better prepared to provide emergency treatment to a high standard in order to facilitate the safe transfer of the patient's care to the family/community or to local government or deployed NGO medical facilities at the earliest opportunity.

8. **Principles**. The following principles underpin this policy:

a. The current likely spectrum of operations; contingency, humanitarian and Non-combatant Evacuation Operation (NEO), impose a specified and implied task on DMS personnel to manage children. For many individuals this will be out with their core area of practice. As such, the DMS has a duty to train and equip its personnel to a minimum standard in order to provide appropriate care to those that present for assistance that is consistent with our core areas of practice

b. The balance of clinical activity will always be in favour of treating the military population. However, where personnel do become involved in treating paediatric cases,

training and equipment will be provided to allow them to undertake a suite of additional clinical interventions that will be required to meet the different clinical needs of these patients. It is not proposed that specialist staff will be deployed to augment capability to care for this patient population but that existing military healthcare personnel will possess the necessary competencies and that adequate access to specialist advice, local or remote will be enabled.

c. The essential levels of competence and training requirements that DMS personnel will need in order to manage paediatric patients are outlined in Annex A and have been determined by the need to achieve the desired effect as stated in paragraph 7. However, there is a requirement for deployed personnel to be able to access paediatric advice from specialists in the UK and this will best be achieved using current telemedicine capability via Birmingham Children's Hospital and the DEPSIG. (Contact details at Annex B).

d. On operations where genuinely unforeseen crises arise for which materiel and equipment has not been supplied or for which the deployed clinical staff have not had the basic training outlined in the Annex A, Ministry Of Defence (MOD) will still support and indemnify[4,5] its practitioners who operate in a "Good Samaritan" capacity using the skills, equipment and materiel to hand.

e. Treatment priority will continue to be according to clinical need.

9. **Command Implications**. Implementation of this policy imposes certain obligations on Medical Commanders.

a. Identify any organic paediatric expertise within the deploying unit. The most suitable individual should be instructed to oversee all paediatric care on operations. In a Role 2 setting this is most likely to be the Emergency Medicine (EM) Consultant but many individuals, particularly from the Reserve Forces have significant paediatric experience.

b. In addition to providing care to civilian populations there is a requirement for Force and Medical Commanders to be pro-active in identifying and liaising with key community leaders and any deployed NGO healthcare providers who will be involved in the provision of post-acute care. This includes local medical providers, members of the family of the casualty, and community leaders who will need to be advised as to what care is going to be provided within the MTF, at what point that care will come to an end, and, most importantly, informing them when a casualty has reached the end of the acute care pathway and is ready for discharge, or transfer to a local medical facility. This must be undertaken within the cultural context of the local population. Critical to this process will be developing links at Headquarters (HQ) level between DMS medical facilities and J5/J9 CIMIC staffs who lead on providing the interface between the military medical personnel and their civilian counterparts. An additional consideration will be the management of those children that have been admitted where there is no definitive information concerning their immediate family or expected location to where they might be transferred.

c. Deployed bed numbers are established on planning assumptions for Battle Casualties (BCs) and Disease Non-Battle Injuries (DNBI). Current expeditionary operations can reasonably anticipate the additional requirement to manage civilian casualties. Medical Commanders must therefore establish discharge routes for such casualties from deployed Role 2/3 facilities to ensure that beds remain available for BCs and DNBI cases from the deployed force.

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4. "Medical Indemnity for Doctors and Dentists working in the Defence Medical Services" SGPL 15/03 dated 18 Sep 03.

5. "Medical Indemnity for Nurses and Midwives working in the Defence Medical Services" SGPL 14/05 dated 10 Oct 05.

d. There is a requirement for Medical Commanders to brief personnel on how to hand over patients to the civil health economy which must also include comparative capabilities to allow the development of a care plan before discharge.

e. Medical Commanders must also provide appropriate moral support to clinical staff to help them overcome any negative feelings that they may have when discharging patients into an uncertain clinical setting.

f. PJHQ must provide direction on the eligibility, or otherwise, of paediatric patients to receive aeromedical evacuation from theatre to the UK or intermediary nation.

g. Medical Commanders must ensure that all clinical staff have received the correct level of safeguarding training appropriate to role. There must also be a nominated safeguarding lead for a deployed MTF and an appropriate governance structure to protect children. Children displaced from family and guardians are particularly vulnerable and whilst the cultural approach and resources available to safeguarding in a host nation may vary considerably from that of the UK we must ensure we do all that is reasonable to protect children in our care.

10. **Target Populations**. The target populations are all medical staff from Role 3 forward to Role 1.

11. **Training**.

a. There will be a training bill to enable personnel to obtain the confidence and competence to treat the paediatric population. DCAs will specify the individual requirements but JMC will be responsible for its delivery. Consultant Advisors (CA) will enable access to training by including the specified packages in the Statement Of Training Requirement (SOTR). Defence College of Healthcare Education and Training (DCHET) will perform periodic Training Needs Analysis (TNA) in order to generate training that is fit for purpose within a competency framework produced by PJHQ. PJHQ, Single Service Customer Agents staffs (HQ and Clinical) will continue to be responsible for the detailed development and implementation of the training with Subject Matter Expert input from DEPSIG. The outline detail is at Annex A.

b. It must be acknowledged that additional areas of training need will be identified in future iterations of policy concerning the provision of clinical services to other clinical groups. As this occurs there will be a requirement for all stakeholders (DMSD, DCHET, Single Services and delivery organisations) to ensure that the training is provided in such a way that minimises the effects on the individual and the organisation. The training programme will be influenced by the Continuing Professional Development (CPD) process whereby priority for training will be defined by the practitioners and their appraisers. Not only is it anticipated that this will ensure a sustainable method for delivering training, it will assist in the Agreed Annual Training Programme process. It is both an organisational and individual responsibility to identify professional development needs and enable appropriate training and experience.

12. **Equipment and Materiel**. Advances in technology and real time clinical lessons from operations regularly identify urgent equipment and materiel needs. In order to meet these needs, theatre clinical staffs, through defined Statement of User Requirement (SUR) or Urgent Operational Requirement (UOR) processes, are to submit requests for equipment and materiel uplifts in accordance with current procedures. Any requirement for UOR action identified by Theatre which is endorsed by PJHQ and the DCA (if necessary), will be considered alongside all other operational needs to ensure it realises the EBO approach. If supported by DMSD, DEC (ELS) will then ensure the timely procurement of any materiel through Med & GS IPT. Outside of the operational environment Clinical Equipment Advisory Group (CEAG) will continue to oversee

the continuous process of equipment review and development. DEPSIG will act as a point of contact and provide SME input to this process.

13. **Force Generation and Forces at Readiness**. The training being recommended is to be introduced into the force generation process. Deployed paediatric capability will be assessed as part of the validation process. Competency gaps will assessed as part of the overall validation and persistent shortfalls will be subject to risk assessment.

14. **Requests by Chain of Command for Medical Assessments**. There will be cases where the UK military chain of command requests non-emergency medical examinations for specific non-entitled children. These individuals will usually be of significant benefit to the overall operational effort, with requests for healthcare access intended to maintain or secure cooperation with UK forces. In such cases the operational benefits to be gained must be weighed against risk of discovering a medical condition that requires access to medical capability that is not available within the operational theatre.

15. **Access to UK Role 4**. This policy does not provide entitlement to strategic aeromedical evacuation or access to onward referral to Role 4 treatment in the UK. If this question is raised then the request is to be staffed through the Chain of Command, acknowledging political, financial, legal and personnel implications of any such request. Access to Role 4 may be possible within the specific eligibility matrix for a given operation; each case will be assessed individually.

16. **Child Soldiers.** There remains a threat that UK Service personnel may encounter children who have become combatants and that DMS personnel will be called upon to provide medical support to these individuals should they present at UK MTFs. Child soldiers are likely to have additional clinical needs and advice should be sought from the chain of command on the disposal of any children that have been involved as enemy combatants.

Implementation

17. Unless cancelled or otherwise revised, this policy will automatically be reviewed after 5 years. The Surgeon General (SG) will make this Policy Letter publicly available in accordance with the legislation concerning freedom of information. However, this policy letter is not to be published on the Internet without the express permission of the author. Where elements of this policy become further incorporated into single Service policies and procedures that might affect individuals from minority groups, action addressees are to ensure that the information is made available in a culturally appropriate manner, this includes providing translation where required.

18. In accordance with direction given by SG, action addresses are to ensure that this Policy Letter is promulgated to all medical personnel within their areas of responsibility. SG requires action addressees to confirm in writing to D Med Pol via SO2 Clinical Policy, within 30 days, that promulgation has taken place.

[*Original signed*]
[PR2] Surgeon General

Annex:

A. Paediatric Requirements For Delivery Of Treatment Of Non Entitled Medical Cases On Operations.
B. Contact Details

Distribution:

External:

Action:
DGAMS*
COS Health / DGMS(RAF)*
CE DMETA*
Fleet ACOS Medical*
DDS HQ COS*
PJHQ - DACOS Med*
Information:
MA to SG
MA to DCDS(H)
DG Healthcare*
DG Med Op Cap*
D Med Pol*
D Med F&S*
D Med Op Cap*
D Healthcare*
*sent electronically

PAEDIATRIC REQUIREMENTS FOR DELIVERY OF TREATMENT OF NON ENTITLED MEDICAL CASES ON OPERATIONS

1. The effect to be achieved is that DMS personnel are confident and competent to provide emergency treatment for paediatric cases to the point where the patient is ready for transfer to post-acute or chronic care in the family/community, local government, or deployed NGO medical facilities at the earliest safe opportunity.

2. **Procedures Required to Deliver The Effect;**

   a. Adequately assess the sick or injured child in accordance with the principles of military paediatric life support.

   b. Management of acute trauma in accordance with military damage control resuscitation and surgery principles.

   c. Acute management of common paediatric medical emergencies and conditions specific to the theatre of operation.

   d. Delivery of effective paediatric intensive care.

   e. Routine ward care of sick and injured children.

   f. Safeguard children in the medical treatment chain.

A detailed competency framework is available from PJHQ.

3. **Target Population.** All medical personnel involved in the care pathway from point of entry into the evacuation chain to discharge from the deployed medical treatment facility. This includes the pre hospital environment, the emergency department, the operating theatre and post operating theatre treatment areas.

4. **Training Priority.** The priority for training development and delivery is for deploying DMS personnel or those held at readiness.

5. **Specific Clinical Groups.**

   a. **Nursing Staff.** A training module for delivering ward-based paediatric care will be required. This will either be incorporated into the basic nursing syllabus for Defence student nurses and delivered as continuing professional development. The training areas required are:

      (1) The well and developing child.

      (2) Recognising a seriously ill or injured child.

      (3) Paediatric immediate life support including the Broselow system.

      (4) Care of the child with a thermal or traumatic injury.

      (5) Pre- and Post-operative care for sick children.

      (6) Nursing care of the paediatric intensive care patient.

(7) The fluid and nutritional requirements of a child.

(8) Pain assessment and management.

(9) Drug calculations, reconstitution and administration including fluid management.

(10) Care of the dying child.

(11) Cultural and welfare aspects of care.

Nurses in more autonomous posts should undertake either Military Pre-Hospital Paediatric Life Support Training (MPHPLS) or Military Advanced Life Support (MALS) training. Details of the provision of this training will be available on the Schedule of Training.

b. **General Practice (GP).** This has been reviewed and, whilst it is felt that virtually all GP registrars will gain paediatric experience in the course of their training, three elements of specialist training should be introduced. These are:

(1) Introduction of a common paediatric module for new entry medical officers (Tri-service).

(2) Acquisition of enhanced paediatric skills for all GPs unless clinical practice already routinely involves the care of acutely unwell children, the minimum qualification being MAPLS or MPHPLS courses.

(3) The provision of short-term paediatric attachments as a means of providing bespoke training against a need generated by specific operational requirements.

(4) Royal Centre for Defence Medicine (RCDM) Child Health Course for all principals in GP.

GPs will also be required to ensure that CPD reflects their potential scope of practice. This will be evident in each appraisal and revalidation cycle.

c. **Orthopaedics/Trauma, Emergency Medicine, Surgery and Vascular Surgery, Anaesthetics, Intensive Care Medicine and Pre-Hospital Emergency Medicine and Medicine.**

All clinicians must consider their scope of practice in their appraisal and revalidation process. Military clinicians will be expected to treat injured and unwell children in the operational environment, remote from specialist paediatric medical and surgical support. It is the individual clinician's responsibility to ensure that their continuous professional development and appraisal portfolios represent their scope of practice and the requirements of military deployment.

The Anaesthetic and EM cadres should contain an appropriate number of paediatric subspecialists. This is in order to maintain a sufficient level of subject matter expertise to guide defence policy and capability. Within the Anaesthetic and Intensive Care Medicine consultant cadre an aspiration of at least 10% of the cadre should have completed higher pediatric sub-specialty training. Within the EM consultant cadre, a minimum will hold a CCT in paediatric EM. This will consist of approximately 2 Navy, 3 Army and 2 RAF consultants.

(1) **Orthopaedics.** It is the opinion of DCA Orthopaedics that current higher specialist training and routine consultant activity delivers the appropriate level of competence in the management of paediatric orthopaedic trauma.

(2) **Emergency Medicine.** Is recognised that all higher specialty trainees will gain

paediatric experience in the course of their rotations. Where these rotations allow training in a dedicated paediatric emergency department should be undertaken. It is the direction of DCA EM that all consultant job plans should include regular exposure to emergency paediatric patients. All higher trainees and consultants should be current in Advance Paediatric Life Support (APLS) and MAPLS.

(3) **General and Vascular Surgery.** Whilst it is recognised that not all General and Vascular specialty trainees will be able to rotate through a formal paediatric surgery attachment during their training, the DCA Surgery advises that consultants should ensure that their own CPD is sufficient to reflect their deployed scope of practice. This should include exposure to paediatric surgery within each revalidation period. This does not mean job-planned paediatric surgery attachments but periodic 'scrubbed-in' time in order to re-familiarise the individual sufficiently to meet their deployed role requirements. Cases can be logged as evidence of activity.

(4) **Anaesthetic.** It is recognised that all higher specialty trainees will gain paediatric experience in the course of their rotations. DCA anaesthetics direction is that each individual should undertake relevant CPD, within the revalidation period, reflecting their scope of practice. All consultants should be current in APLS and MAPLS.

(5) **Intensive Care Medicine ICM).** Trainees in ICM will rotate through a Paediatric Intensive Care Unit (PICU) post during training. Consultants are responsible for ensuring that their individual CPD maintains capability in line with their scope of practice.

(6) **Pre-Hospital Emergency Medicine.** PHEM trainees will gain routine experience in their higher training. PHEM consultants should undertake relevant CPD in line with their scope of practice. Trainees in PHEM follow a civilian curriculum that includes the emergency management and primary retrieval of acutely injured and ill children. Consultants who sub-specialise in PHEM are required to maintain their competency by working for a pre-hospital provider such as an Air Ambulance for a minimum of one day every two weeks. As such the DMS is able to provide clinicians for deployment who are experienced in managing paediatric emergencies in the pre-hospital environment. DCA PHEM's direction is that all PHEM consultants should be current in APLS and MAPLS.

(7) **Medicine.** It is recognized that Physicians will not have routine exposure to paediatric patients during their training for their routine practice. DCA Medicine directs that all consultant deploying physicians should be current in APLS and MAPLS. There will be an opportunity to undertake a post-Certificate of Completion of Training (CCT) paediatric training programme, which will include a specific training period directed towards developing world paediatrics. This will consist of a 3 month paediatric medicine attachment being developed that will provide physicians with a skill set to assist in the care of paediatric patients on deployment.

d. **Pharmacists.** Paediatric specific training elements required for pharmacists are:

(1) Basic understanding of safe prescribing in paediatrics including pharmacokinetics and dynamics in and estimation of renal function.

(2) Basic understanding of the treatment of paediatric chronic illness such as asthma, epilepsy and diabetes.

(3) Understanding of the principles of rehydration, feeding and refeeding (including knowledge of normal fluid and nutritional requirements).

(4) Principles of paediatric pain management.

(5) Risk management in relation to paediatric formulations and licensing.

6. **Training Environments.** Training can be delivered during basic professional training, as part of postgraduate continuing professional development or as part of pre-deployment training. Much paediatric pre-deployment training could be established within current DMS capability and delivered cost effectively. In order for this to be possible an initial cost burden to cover training equipment is required. JMC should look to provide the equipment and facility to provide this training. The outline of such training is at Appendix 1 to Annex A.

7. **AEROMEDICAL Considerations.** There are a large number of general paediatric aeromedical evacuations undertaken each year. Most of the equipment 'sourced' from medical centres. The Aeromedical Squadron is not scaled for such equipment. Therefore, paediatric equipment and materiel enhancements are required provided to aeromedical evacuation teams and also to Aeromedical Staging Units (ASU). SME advice to aid this is available from the DEPSIG.

8. **General Courses.** There are a great many training opportunities that might be considered as highly desirable for clinical personnel and which could be attended as a result of identification of a training requirement during annual appraisal. Once included in the individual's training needs and agreed by appraiser and appraisee, funding would be made available by DPMD for individuals to attend the named courses. Such courses include;

a. For Commanders Medical: the Diploma in Humanitarian Assistance.

b. For Clinical Directors: the ICRC Health Emergencies in Large Populations.

c. For CIMIC Liaison Officers/Sqn OCs/HQ Staff Officers: Introduction to Disaster Relief Course (IDROC)

d. For DMS Doctors and Nurses in General: the Diploma in the Medical Care of Catastrophes (DMCC).

9. **Equipment and Materiel Enhancements.** Module 370/6 - Role 2 DCR Paediatric Module was reviewed in 2014 in order to bring in some essential paediatric enhancements to Role 2 MTF's. However, the need to provide additional, more specialised equipment across the DMS has been identified and complete module review with paediatric focus is in progress via the CEAG and DEPSIG. Any paediatric equipment concerns and issues requiring SME input can be addressed to the DEPSIG who are able to liaise with the relevant individuals and bodies. In the deployed setting immediate equipment requirements can be addressed through the UOR or SUR requirements whilst starting the process to consider bringing the equipment into core.

MILITARY PAEDIATRIC TRAINING PACKAGE

Level 1 – Military Paediatric Intermediate Paediatric Life Support

Target Audience – CMT/EMT, RAF Medic, MA, Nurse

Key Learning Topics

Physiological and anatomical differences relevant to practice
Recognition of the unwell child
Basic life support
Basic airway management
Emergency access and fluids
The injured child
The unwell child
Analgesia
Eligibility, ethics and decision making

Delivery

Online learning package
One day face to face

Level 2 – Military Pre-Hospital Paediatric Life Support

Target Audience – Role 1 MO, Role 1 NO, PHOS, MERT, Paramedic

Key Learning Topics

Physiological and anatomical differences relevant to practice
Recognition of the unwell child
Advanced life support
Advanced airway management
Emergency access and resuscitation
Managing injured child
Managing unwell child
Analgesia and sedation
Packaging and transport
Eligibility, ethics and decision-making

Delivery

Online learning package
Two day face to face

Level 3 – Military Advanced Paediatric Life Support

Target Audience – Role 2/3 clinicians

Key Learning Topics

Physiological and anatomical differences relevant to practice

Recognition of the unwell child
Advanced life support
Advanced airway management
Paediatric Rapid Sequence Induction
Vascular access and application of DCRS
Managing injured child
Managing unwell child
Analgesia and sedation
Fluid and drug prescription
Ward care of children
Eligibility, ethics and decision-making