**WAPPIG 27 September 2011. Paper: Fi**

|  |
| --- |
| **Title: Recruitment to the new sub-specialty of pre-hospital emergency medicine** |
| **Author:** |
| **Policy Group Sponsors:** |
| **Purpose**: **This paper ……** |
| **Desired outcome: WAPPIG members are asked to:** |
| **Circulation:** **WAPPIG members only at this stage** |

**Briefing note: Pre-hospital Emergency Medicine**

**1. Background to the sub-specialty**

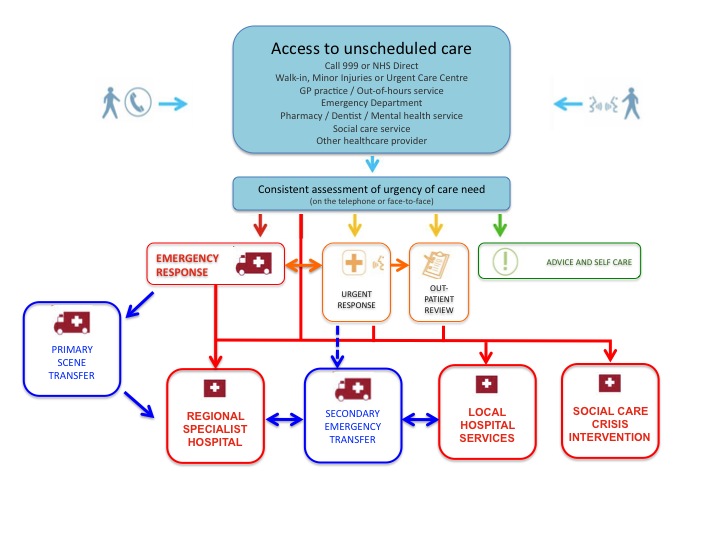
1.1 The term ‘pre-hospital care’ covers a wide range of medical conditions, medical interventions, clinical providers and physical locations. Medical conditions range from minor illness and injury to life threatening emergencies. Pre-hospital interventions therefore also range from simple first aid to advanced emergency care and pre-hospital emergency anaesthesia. Care providers may be lay first responders, ambulance professionals, nurses or physicians of varying backgrounds.

1.2. All of this activity can take place in urban, rural or remote settings and is generally mixed with wider out-of-hospital and unscheduled care. The complexity of unscheduled and urgent care provision is illustrated in figure 1.*[[1]](#footnote-1)* Another useful way to conceptualise this breadth of clinical providers is to use the levels of practice described in the Skills for Health Career Framework for Health (figure 2).[[2]](#footnote-2)

1.3. Sub-specialist Pre-hospital Emergency Medicine (PHEM) practice relates to the ***Primary Scene Transfer*** and ***Secondary Emergency Transfer*** functions highlighted in figure 1 at the level of the Consultant (level 8) practitioner illustrated in figure 2. PHEM relates to that area of *medical* care required for seriously ill or injured patients before they reach hospital (on-scene) or during emergency transfer to or between hospitals (in-transit). It represents a unique area of medical practice that requires the focused application of a defined range of knowledge and skills to a level not normally available outside hospital.

1.4. There is a long established tradition of provision of voluntary and charitable emergency pre-hospital care by physicians in the UK. Building on the success of these individuals and services, the aspiration of the IBTPHEM is that each NHS Ambulance Service should have consistent immediate access to deployable sub-specialist PHEM services 24 hours a day. Other key drivers for the development of PHEM as a medical sub-specialty are:

1. to meet existing demand for on-scene and in-transit medical support (sometimes referred to as pre-hospital ‘enhanced care’),[[3]](#footnote-3),[[4]](#footnote-4)
2. to improve the quality and standards of pre-hospital critical care,[[5]](#footnote-5)
3. to improve equity of access to on-scene and in-transit medical support,[[6]](#footnote-6)
4. to improve governance of pre-hospital care and inter-hospital transfer services,[[7]](#footnote-7)
5. to support the Care Quality Commission essential standards for quality and safety in pre-hospital care,[[8]](#footnote-8)
6. to improve professional training and development of pre-hospital personnel,[[9]](#footnote-9)
7. to provide a robust *medical* incident response (MERIT) [[10]](#footnote-10) capability and,
8. to provide *medical* leadership for pre-hospital care services and providers.[[11]](#footnote-11)



*Figure 1. Conceptual model of effective urgent care. Adapted from: Direction of Travel for Urgent Care: a discussion document. Department of Health, October 2006.*

*Figure 2. Skills for Health Career Framework*

**2. Historical timeline**

Table 1 outlines the evolution of the PHEM sub-specialty and its progression through the stakeholder engagement and General Medical Council (GMC) approval processes.

|  |  |
| --- | --- |
| **Date** | **Event** |
| Jul 2007 | Faculty of Pre-hospital Care sub-specialty working group convened |
| Mar 2008 | Faculty Training Fellowship programme (pre-prototype training programme) launched |
| Jun 2008 | Initial meeting of members of the Academy of Medical Royal Colleges – Chaired by Sir Peter Simpson |
| May 2009 | First formal meeting of new Intercollegiate Board for Training in Pre-hospital Emergency Medicine (IBTPHEM) |
| Oct 2010 | Faculty of Pre-hospital Care, on behalf of the IBTPHEM, submitted a step 1 application (Rationale for new sub-specialty) to the GMC for the introduction of Pre-hospital Emergency Medicine (PHEM) as a new sub-specialty of Emergency Medicine and Anaesthetics. |
| Nov 2010 | GMC accepted the rationale for the new sub-specialty and authorised progression to step 2 of the protocol. |
| Jan 2011 | Faculty, on behalf of the IBTPHEM submitted step 2 application to GMC (Approval of curriculum and assessment systems) |
| Feb 2011 | Curriculum approved by the GMC |
| Jul 2011 | Assessment system approved by the GMC |
| **Present** | **Regional postgraduate deaneries asked to prepare application for approval of training programmes** |
| *Aug 2012* | *First intake of PHEM sub-specialty trainees* |

*Table 1. Evolution of PHEM sub-specialty*

**3. The Intercollegiate Board**

3.1 PHEM training is supervised by the Intercollegiate Board for Training in Pre-hospital Emergency Medicine (IBTPHEM) on behalf of four lead colleges:

* + The Royal College of Surgeons of Edinburgh (Faculty of Pre-Hospital Care)
  + The College of Emergency Medicine
  + The Royal College of Anaesthetists
  + The Royal College of General Practitioners

3.2 The IBTPHEM is responsible for determining the duration, content and assessment of training and has published a guide to assist trainees, trainers, local education providers, employers and Deaneries. The terms of reference and membership of the IBTPHEM and its Curriculum, Training and Assessment Sub-committee are provided at Annex A.

3.3 The IBTPHEM website (www.ibtphem.org.uk) provides useful additional information. The most up-to-date versions of the Guide, the curriculum framework, the assessment system and the associated workplace based assessments are available from the website.

**4. Training**

4.1 Sub-specialty training in PHEM takes place in the context of UK wide specialty training in Emergency Medicine and Anaesthetics.

4.2 The PHEM trainee is required to undertake a minimum of 12 months whole time equivalent sub-specialist training in PHEM (in approved PHEM training programmes) and successfully complete the required formative and summative assessments in order to be recommended for a certificate of completion PHEM sub-specialty training.

4.3 Training may be undertaken before or after completion of the core CCT programme in Emergency Medicine or Anaesthetics. For trainees who are pre-CCT, PHEM training is undertaken *after* the fourth year of specialty training (ST4). For post-CCT trainees, PHEM training may be undertaken at any stage.

4.4 All PHEM training programmes will take place after ST4 and will extend core specialty training by one year. Deaneries and LEPs are able to design training programmes that integrate the recommended minimum 12 months whole time equivalent PHEM training into core specialty training. Although there are many possible ways of integrating PHEM sub-specialty training with core CCT training, the IBTPHEM recommend one of three options:

1. a 24 month period of PHEM training blended with core CCT training (Scheme A) – figure 3
2. a 24 month period of alternating 6 month blocks of sub-specialty PHEM and core CCT training (Scheme B) – figure 3
3. a 12 month period of PHEM training inserted into core CCT training (Scheme C) – figure 4

*Figure 3. Diagrammatic representation of Scheme A and B training programmes*

*Figure 4. Diagrammatic representation of Scheme C training programme*

4.5 Recruitment will be managed nationally on an annual basis through a lead Deanery (currently the East of England Multi-professional Deanery) and a grid scheme. The grid scheme recognises that not all regions will be able to deliver sub-specialty training and aims to:

1. provide equity of access to approved training programmes
2. foster fair, criterion-referenced and competitive entry to programmes
3. support quality management of training programmes
4. guide workforce development and planning

4.6 The IBTPHEM are currently developing supporting literature similar to that used for the paediatric grid process.[[12]](#footnote-12) It is anticipated that this material, and the supporting infrastructure, will be finalised in late 2011. It is also anticipated that the PHEM grid would be active for recruitment, pending approval of Deanery training programmes, LEPs and training posts, from early 2012 with a first intake of PHEM sub-specialty trainees in August 2012.

4.7 The requirements for entry to training can be summarised as follows:

1. The earliest application for pre-CCT training is at ST3
2. The earliest commencement of PHEM sub-specialty training is at the end of ST4
3. Applicants must have been awarded core specialty NTN for Emergency Medicine

or Anaesthetics

1. Applicants must have MCEM or primary FRCA or equivalent
2. Entry is conditional on successful ST4 ARCP

**5. Workforce implications**

The aspiration of the sub-specialty is that each NHS Ambulance Service region of the UK has access to consultant led PHEM services 24 hours a day. This would require 10 Full Time Equivalent (FTE) consultants per region. However, many regions encompass large populations and/or geographical areas and two distinct PHEM services will be justified in several parts of the UK (perhaps more closely aligned to Major Trauma Centre outreach services or Air Ambulance Services than to NHS Ambulance Services). Early IBTPHEM estimates were therefore based on 200 to 250 FTE consultants in PHEM across the UK. Given that all will have at least a 50% commitment to their base specialty and some supporting professional activities unrelated to PHEM, this FTE would relate to a head count of 600 to 750 sub-specialty trained doctors.

We believe that up to 200 existing consultants in Emergency Medicine and Anaesthetics who currently undertake (or have previously undertaken) elements of PHEM practice on a voluntary or ad-hoc basis would seek to formalise their PHEM practice if the sub-specialty comes into existence. The remaining posts would have to be filled through new sub-specialty training over time. The number of trainees who could be supported in any one year will depend on the capacity and number of training providers who can deliver the curriculum and maintain the Care Quality Commission standards for quality and safety. As services and training programmes become more established, it is likely that approximately 25 trainees could be supported in any one year.

These estimates have been provided to the core specialty College workforce leads and the Centre for Workforce Intelligence (CfWI) - assistance from both has been sought in clarifying the likely number of career and training grade posts required to build and sustain the sub-specialty. The IBTPHEM also contributed to the CfWI Regional Trauma Network (RTN) project and emphasised the potential influence of the PHEM sub-specialty on recruitment to Emergency Medicine and future demand for both Emergency Medicine and Anaesthetics. This was not further defined in the RTN project.[[13]](#footnote-13)

Whether sub-specialty training will impact adversely on core CCT training is debated. PHEM is already popular with these trainees as it is considered to compliment core training. Many currently apply for out-of-programme time to experience established PHEM services in the UK or overseas. There are, for example, approximately 10 services in the UK which recruit trainees – usually on out-of-programme time – for periods of between 6 and 12 months experience. With the development of the sub-specialty, the ICB envisage that time currently taken ‘out-of-programme for experience’ (OOPE) would be converted to in-programme or ‘out-of-programme for training’ (OOPT) time – thus reducing the impact of the new sub-specialty on core CCT training. The ICB also anticipate that a large proportion of PHEM trainees will come from within the Defence Medical Services (DMS) cadre and, in effect, will not significantly extend training beyond that which is already undertaken by DMS trainees.

**Additional reading**

***For Debate…: A license to practise pre-hospital and retrieval medicine***

Emergency Medicine Journal 2005;22:286-293 doi:10.1136/emj.2004.020636

***Views regarding the provision of prehospital critical care in the UK***.

Emergency Medicine Journal 2009;26:365–370. doi:10.1136/emj.2008.062588

***Specialist Trauma Response Teams***

House of Commons Debate 11 June 2008 vol 477 cc67-88WH (available at http://www.publications.parliament.uk /pa/cm200708/cmhansrd/cm080611/halltext/80611h0001.htm#column\_67WH).

***NHS Doctors [to treat critically injured and ill patients outside hospital]***

House of Lords Debate 23 March 2009 vol 709 cc519-529 (available at http://www.publications.parliament.uk /pa/ld200809/ldhansrd/text/90323-0011.htm#09032337000377).

***Regional Networks for Major Trauma - NHS Clinical Advisory Groups Report***

September 2010. http://www.excellence.eastmidlands.nhs.uk/welcome/improving-care/emergency-urgent-care/major-trauma/nhs-clinical-advisory-group/

***Major Trauma Care in England***

National Audit Office, February 2010. (full report available at: http://www.nao.org.uk/publications/0910/major\_trauma\_care.aspx).

***Trauma: Who cares?***

National Confidential Enquiry into Patient Outcomes and Death, September 2007. (full report available at: http://www.ncepod.org.uk/2007t.htm)

***Better care for the severely injured***

Royal College of Surgeons of Edinburgh and British Orthopaedics Association, July 2000. (full report available at: http://www.rcseng.ac.uk/publications/docs/ severely\_injured.html).

**Annex A. Terms of Reference and Membership of IBTPHEM and CTA sub-committee**

**Introduction**

This annex describes the terms of reference of the Intercollegiate Board for Training in Pre-hospital Emergency Medicine, lists the current membership and describes the terms of reference for the Curriculum, Training and Assessment Sub-committee.

**Intercollegiate Board – Terms of Reference**

**Definitions**

1. (a) In these terms of reference the words or phrases in the left hand column have the meaning in the right hand column.

**The Board** The Intercollegiate Board For Training In Pre-Hospital Emergency Medicine (IBTPHEM)

**The Lead Colleges** The Royal College of Surgeons of Edinburgh (through the Faculty of Pre-Hospital Care)

The Royal College of Anaesthetists

The College of Emergency Medicine

The Royal College of General Practitioners

**Other Organisations** The Royal College of Physicians of London

The Royal College of Paediatrics and Child Health

The Royal College of Psychiatrists

The Joint Committee on Surgical Training of the Royal Colleges of Surgeons of England, Edinburgh and Glasgow

The Joint Royal Colleges of Physicians Training Board of the Royal Colleges of Physicians of London, Edinburgh and Glasgow

The Inter-Collegiate Board for Training in Intensive Care Medicine

The Academy of Medical Royal Colleges

The Defence Medical Services

The Departments of Health for England, Scotland, Northern Ireland and Wales

**Pre-hospital Emergency Medicine** is defined in the following sub-paragraph:

1. Subject to paragraph 4(a) of these terms of reference Pre Hospital Emergency Medicine means that area of medical care required for seriously ill or injured patients before they reach hospital or during transfer between hospitals. The main area of care will be for critically ill patients.

**Constitution**

2. (a) Following agreement by the Colleges and Faculties concerned, the Board’s constitution shall be:

A Chairman

Two members each nominated by: The Royal College of Surgeons of Edinburgh (through the Faculty of Pre-Hospital Care)

The Royal College of Anaesthetists

The College of Emergency Medicine

The Royal College of General Practitioners

One Member each nominated by:

The Royal College of Paediatrics and Child Health

The Royal College of Physicians of London

The Royal College of Psychiatrists

The Joint Committee on Surgical Training

The Joint Royal Colleges of Physicians Training Board

Co-Opted Members from

Chair of IBTPHEM Curriculum Development Group

The Conference of Postgraduate Medical Deans

The Defence Medical Services

The Departments of Health of England, Scotland, Northern Ireland and Wales (Joint Representative)

The Inter-Collegiate Board for Training in Intensive Care Medicine

Trainee

Lay representative

Any additional co-optees required to inform discussions, as decided at a meeting of the Board.

1. Only full members of the Board shall be entitled to vote. The Chairman shall not have an independent vote, but only a casting vote in the event of the votes on any matter otherwise being equal.
2. The Chairman, who shall be nominated by one of the Lead Colleges, shall serve for a maximum period of two years and may not be nominated for a second term. The nominating body will rotate between the Royal College of Surgeons of Edinburgh (through the Faculty of Pre-Hospital Care), the College of Emergency Medicine, the Royal College of Anaesthetists and the Royal College of General Practitioners.
3. The new Chairman shall be nominated by the appropriate Lead College one year before the end of the serving Chairman’s term of office. The Chairman-elect will then serve as Vice-Chairman for that year. On completion of his/her term of office the retiring Chairman will serve as Vice-Chairman until the nomination of a Chairman-elect.
4. In the event of the Chairman relinquishing office during his or her first year of office the current Vice-Chairman will occupy the chair until a new Chairman has been nominated, to take office immediately, together with the nomination of a new Chairman-elect.
5. In the event of the Chairman relinquishing office during his or her second year of office the current Vice-Chairman will assume the chair for a two-year term and a new Vice-Chairman will be nominated at the earliest opportunity.
6. If the nominated period of a member of the Board who is subsequently nominated as Chairman or Vice-Chairman expires before the end of the term of office, then he/she will extend his/her period on the Board to complete a full term as Chairman or Vice-Chairman.
7. Members shall serve for three years and, if nominated again by their nominating body, will be eligible to serve for one more term of the same period. No Board member may serve for longer than a total of six years, excluding any period spent as Chairman or Vice-Chairman.
8. In the event of a member ceasing, for whatever reason, to be a member of the Board before the completion of the term of service for which that member was nominated, the body responsible for the nomination shall nominate another person to serve for the unexpired period of the term. Such a term of office shall be disregarded in relation to any subsequent term or terms of service for which that person may be nominated.
9. A single nominated member from another interested Faculty or College may be appointed to the Board at some future date, with the agreement of a two thirds majority of the current Board members.

**The Powers, Objects and Functions of the Board**

3. The powers of the Board shall be such as may be delegated to it by the Colleges and Faculties on all matters related to training in Pre-Hospital Emergency Medicine whether to be exercised by the formulation of recommendations by the Board subject to the approval of and, where appropriate, amendment by the Colleges and Faculties, before being put into effect by the Board or whether, when the delegation so provides, by the taking of decisions to be given effect directly by the Board without the requirement of such prior approval. Such further powers may from time to time be delegated to the Board by the Colleges and Faculties, as may be necessary for the proper performance of the functions specified in these terms of reference.

**Functions Relating to Scope and Status of Pre Hospital Emergency Medicine**

4. Included amongst the matters delegated to the Board by the Colleges and Faculties shall be the functions of:

1. Keeping the definition of pre-hospital emergency medicine under review and, if it should appear necessary or desirable, of making, from time to time appropriate modifications to the definition having, when necessary, undertaken such consultations for that purpose as shall appear desirable to the Board.

In addition:

5. The Principal Objects and Functions of the Board, within the terms of the delegation by the Colleges and Faculties, shall be:

(a) to keep under review the practice of pre-hospital emergency medicine;

(b) to determine the duration, content and assessment of training in pre-hospital emergency medicine and make recommendations to individual Colleges, Faculties and to the Postgraduate Medical Education and Training Board;

(c) to recommend minimum standards for training in an environment recognised for training by the relevant Colleges and Faculties;

(d) to act, if requested, as the advisory body to PMETB on applications received by the Colleges and Faculties, from individual training units for recognition for training purposes;

(e) to exercise in relation to pre-hospital emergency medicine such other training and education functions on behalf of the Colleges and Faculties as would be relevant to a sub specialty;

(f) to institute, through the Colleges and Faculties and in conjunction with PMETB, mechanisms of accreditation and assessment, as required, for awarding qualifications in pre-hospital emergency medicine.

6. **Administration**

(a) It shall be a function of the Board to initiate and keep under review the administrative arrangements necessary for the performance of the Board’s function.

(b) One of the Lead Colleges will act as agent for the Board for the purpose of ensuring compliance with regulatory matters including annual sub-specialty reporting. This Lead College will ordinarily be the College that holds the chair.

7. **Finances**

It shall be a function of the Lead Colleges to approve the recommendations of the Board, concerning the funds needed for administration, accommodation and other costs, including, for example, those connected with members’ expenses, registration of trainees, the development of databases, the conduct of assessment procedures and meetings of advisors. The Board will prepare regular budgets for those costs and oversee the receipt and expenditure of all sums connected therewith. In exercising this function it will be the responsibility of the Board to achieve the greatest possible economy and at the same time to seek to make the activities of the Board self-financing.

To this end the Board will produce a detailed annual budget delineating its proposals for the generation of income from its activities, by such means as fees in respect of registration for training and of admission to formal assessment procedures, charging for publications where appropriate, and through the recovery of expenses in relation to visits to units on behalf of PMETB for the purpose of assessment and approval.

One of the Lead Colleges will act as agent for the Board for the purpose of receiving, holding and expending any monies, subject to the recovery of any sums in accordance with the aforementioned agreement. This College shall furnish the other Lead Colleges with periodical statements of accounts at intervals of not more than one year.

Any proposed initiative or other action on the part of the Board, that would lead to an overspend of the planned and agreed budget, must be agreed in advance by the Lead Colleges. Unforeseen circumstances, that would lead to an overspend of the planned and agreed budget must be brought to the notice of the Lead Colleges immediately. The costs associated with the Board’s activities will be met by the Lead Colleges on a pro rata basis, depending upon the relative number of Board members from each Lead College. With each Lead College having two Board members, the current share will be 25% of the total.

Travel and subsistence costs will be borne by those Colleges, Faculties and organisations represented by the individual Board members.

**General Professional Responsibilities**

8. All members of the Board will be responsible for its professional activities. The Lead Colleges will be additionally responsible for the governance of the Board’s activities, in terms of its financial responsibilities and professional indemnity.

The Board shall:

1. take any action necessary, not specifically indicated in the foregoing functions, to meet any requirement resulting from the provisions of the European Specialist Medical Qualifications Order 1995, and
2. Act in accordance with any lawful requirements of the General and Specialist Medical Practice (Education, Training and Qualifications) Order 2003, the General Medical Council or the Colleges.

**Future Revisions**

9. Any recommendations from the Board for changes to the constitution shall be put to the Colleges and Faculties for their approval.

10. The constitution shall be regularly reviewed by the Board and, in the first instance, two years after inception of the Board’s activities.

December 2010

**Intercollegiate Board – Current Membership**

**Lead colleges**

The Royal College of Surgeons of Edinburgh Prof Sir K Porter (Chair)

(Faculty of Pre-Hospital Care) Dr R Fairhurst

The Royal College of Anaesthetists Prof C Dodds

Dr J Nolan

The College of Emergency Medicine Prof T Coats

Dr J Black

The Royal College of General Practitioners Dr H Bloom

Dr F Jewkes

**Other organisations**

The Royal College of Paediatrics and Child Health Dr P Hardy

The Royal College of Physicians of London Prof D Bell

The Royal College of Psychiatrists Prof R Williams

The Joint Committee on Surgical Training Mr C Munsch

The Joint Royal Colleges of Physicians Training Dr M Jones

Board

Chair of Curriculum Development Group Dr R Mackenzie

The Conference of Postgraduate Medical Deans Prof A McGowan

The Defence Medical Services Grp Cpt N McGuire

Col D Parkhouse

The Departments of Health of England, Scotland, Dr P Hamilton

Northern Ireland and Wales Dr A Carr (Deputy)

(Joint Representative)

The Inter-Collegiate Board for Training in Dr B Foëx

Intensive Care Medicine

Trainee Dr A Booth

Lay representative Mr D Brown

**Intercollegiate Board – Curriculum, Training and Assessment Sub-committee Terms of Reference and Membership**

**1. Purpose**

Key functions of the Intercollegiate Board (ICB) for Training in Pre-hospital Emergency Medicine include:

* determination of the duration, content and assessment of training in pre-hospital emergency medicine;
* making recommendations for minimum standards for training;
* making recommendations for mechanisms of accreditation and assessment.

To assist in fulfilling these functions, the ICB created a Curriculum, training and assessment sub-committee.

**2. Objective**

To develop a curriculum for Pre-hospital Emergency Medicine which is fully mapped to lead college curricula and is compliant with existing PMETB standards for curriculum, training and assessment.

**3. Membership**

Sub-committee chair Dr R Mackenzie (Chair)

Curriculum framework lead Dr R Mackenzie

Training programme leads Dr S Lewis

Dr S Hearns

Assessment blueprint leads Dr J Klein

Dr M Bloch

**College Curriculum Committee representatives**

College of Emergency Medicine Dr M Clancy

Royal College of Anaesthetists Dr J Henning

Faculty of Pre-hospital Care Dr R Fairhurst

Royal College of General Practitioners Dr M Russell

Royal College of Paediatrics

and Child Health Ms L Smith

**Other organisation representatives**

Royal College of Psychiatrists Prof R Williams

Centre for Workforce Intelligence Dr H Simpson

Postgraduate Deanery Dr M Dronfield

London HEMS Dr A Weaver

NHS Ambulance Service Dr J Black

Defence Medical Services Wg Cmd C Whittle

**Trainee representatives**

Anaesthetics Dr A Steel

Emergency Medicine Dr R Major

Paediatrics Dr P Hyde

General Practice Sqn Ldr A Manson

ST1-3 Dr R Browne

**Co-opted members**

Dr M Folman (General Practitioner)

Dr A Booth (Faculty Training Fellow in PHEM)

Sqn Ldr C Adcock (Faculty Training Fellow in PHEM)

Flt Lt R James (DMS doctor seconded to sub-specialty development programme)

Flt Lt O Hawksley (DMS doctor seconded to sub-specialty development programme)

Mr J Martin (Paramedic, East of England Ambulance Service)

Mr D Cody (Critical Care Paramedic, East of England Ambulance Service)

Mr S Standen (Critical Care Paramedic, East of England Ambulance Service)

1. Direction of Travel for Urgent Care: a discussion document. Department of Health, October 2006 [↑](#footnote-ref-1)
2. See <http://www.skillsforhealth.org.uk/page/career-frameworks> [↑](#footnote-ref-2)
3. A license to practice pre-hospital and retrieval medicine. *Emerg Med J* 2005;**22**:286-293. [↑](#footnote-ref-3)
4. NHS Clinical Advisory Groups Report. Regional Networks for Major Trauma. 2010. [↑](#footnote-ref-4)
5. Views regarding the provision of prehospital critical care in the UK. *Emerg Med J* 2009;**26**:365-370. [↑](#footnote-ref-5)
6. Availability and utilisation of physician-based pre-hospital critical care support to the NHS ambulance service in England, Wales and Northern Ireland. *Emerg Med J* 2011;**00**:000-000. [↑](#footnote-ref-6)
7. Clinical governance in pre-hospital care. *J R Soc Med,* 2001;94(Suppl 39):38–42. [↑](#footnote-ref-7)
8. Care Quality Commission. *Essential standards for quality and safety.* March 2010. [↑](#footnote-ref-8)
9. Competence in prehospital care: evolving concepts*Emerg. Med. J.* 2005;**22**;516-519 [↑](#footnote-ref-9)
10. Department of Health. NHS Emergency Planning Guidance: Planning for the development and deployment of Medical Emergency Response Incident Teams in the provision of advanced medical care at the scene of an incident. 2009. [↑](#footnote-ref-10)
11. As defined within the Medical Leadership Competency Framework available at www.institute.nhs.uk [↑](#footnote-ref-11)
12. see http://www.rcpch.ac.uk/Training/NTN-Grid-Scheme [↑](#footnote-ref-12)
13. Regional Trauma Networks: NHS Clinical Advisory Group on Major Trauma Workforce. FWI Regional Trauma Network Team. March 2011. [↑](#footnote-ref-13)