

## Appendix Outline

<b>C.1</b>	Curriculum Development	1
<b>C.2</b>	Rationale for Learning Outcomes	3
<b>C.3</b>	Curriculum Feasibility, Practicality and Sustainability	4
<b>C.4</b>	Communication of the Curriculum and Programme of Assessment	5
<b>C.5</b>	Input and Feedback	5
<b>C.6</b>	Equality, Diversity and Inclusion	6

## C.1 Curriculum Development

---

**C.1.1** This is the third edition of the PHEM curriculum. The original 2012 curriculum was designed using consensus development processes (Appendix A) and subsequent revisions have combined consensus perspectives with experience of trainees and trainers.

**C.1.2** The curriculum, syllabus and assessment system are managed by the IBTPHEM and its Curriculum, Training and Assessment Committees. The administrative lead College and host for the IBTPHEM is the Royal College of Surgeons of Edinburgh. The IBTPHEM Curriculum Committee includes representatives from each of the following organisations:

- Royal College of Surgeons of Edinburgh
- Royal College of Emergency Medicine
- Royal College of Anaesthetists

- Royal College of General Practitioners
- Royal College of Paediatrics and Child Health
- Faculty of Intensive Care Medicine
- Faculty of Pre-Hospital Care
- Joint Committee on Surgical Training
- Defence Medical Services
- Association of Ambulance Chief Executives
- National Ambulance Service Medical Directors
- College of Paramedics
- Royal College of Nursing
- Lead Deanery for PHEM
- Intercollegiate Board for Training in PHEM
- IBTPHEM Training Committee
- IBTPHEM Assessment Committee
- PHEM Trainees' Association

**C.1.3** This third edition capitalises on six years of experience of the 2015 curriculum, for the benefit of patients, trainees, trainers and employers. It also aligns with the most recent GMC guidance, including *Excellence by design: Standards for postgraduate curricula* and the *Generic Professional Capabilities Framework*.<sup>1,2</sup>

**C.1.4** The membership of the IBTPHEM Curriculum Committee has always been multi-professional, reflecting pre-hospital working and medical training environments. The committee terms of reference are regularly updated and enable the co-opting of lay representatives and members with specific expertise and special interest in, for example, medical education, equality, diversity and inclusion, and mental health.

**C.1.5** This curriculum's Statement of Purpose (Part One, Section 2), which incorporates the principles from the Shape of Training review<sup>3</sup> and formed the application for strategic support from the GMC, was developed by the Curriculum Committee and approved by the IBTPHEM.

**C.1.6** A working group was convened to design the new curriculum and review the entire syllabus, in line with GMC standards and requirements. The working group was open to both established PHEM trainers as well as new trainers, who had themselves completed PHEM subspecialty training. Invitations were cascaded by the Training Committee Chair to all regional training programme directors (TPDs)

---

<sup>1</sup>[www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/excellence-by-design](http://www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/excellence-by-design)

<sup>2</sup>[www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/generic-professional-capabilities-framework](http://www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/generic-professional-capabilities-framework)

<sup>3</sup>[www.gmc-uk.org/-/media/documents/Shape\\_of\\_training\\_FINAL\\_Report.pdf\\_53977887.pdf](http://www.gmc-uk.org/-/media/documents/Shape_of_training_FINAL_Report.pdf_53977887.pdf)

and local education providers (LEPs). The 16 working group members included representatives of the specialties of Emergency Medicine, Anaesthesia, Intensive Care Medicine and Paediatrics, the Defence Medical Services, the Paramedic and Nursing professions, the IBTPHEM and its three Committees, the PHEM Trainee's Association, and medical directors of Air Ambulance Charities and of Major Trauma Centres and Networks.

**C.1.7** Key working group proposals included:

- articulation of 9 high-level learning outcomes for each of the 3 phases of subspecialty training, each underpinned by a list of capabilities in practice and a range of possible descriptors
- increasing the indicative minimum direct consultant supervision during phase 1(b) to 50%, in order to provide a more gradual taper across the phases from 100% to 20%, in the interests of patient and trainee safety and of developmental training
- significant reductions in the required numbers of different workplace-based assessments (WPBAs)
- significant shift in the linkage of portfolio evidence to the PHEM syllabus, from the level of each individual descriptor, to the broader level of capabilities in practice
- introduction of trainee and educational supervisor sign-off of achievement of each capability in practice
- introduction of a Faculty Educational Governance Statement (FEGS)
- updates to the syllabus, including introduction of novel descriptors, removal of those no longer relevant, and refinement of those still relevant

**C.1.8** These proposals subsequently informed revision of the entire PHEM curriculum, syllabus and assessment system, prior to a wider stakeholder consultation phase for further input, feedback and optimisation.

## **C.2 Rationale for Learning Outcomes**

---

**C.2.1** The 9 learning outcomes are derived from the original curriculum themes. These represent defined areas of PHEM professional practice. Learning outcomes are articulated for each of the introductory, developmental and consolidation phases of PHEM training. These learning outcomes make expected levels of performance and achievement clearer for both trainees and trainers throughout PHEM training, in addition to standardising expectations across LEPs, regions and nations.

**C.2.2** Of all the WPBAs, the Observed Shift Assessment Tool (OSAT) has proven especially useful for trainers and trainees, as well as for informing educational panel judgements at the completion of PHEM training. This is therefore the only WPBA

with a recommended number for completion across each of phases 1 and 2. Prior to the introduction of the OSAT, WPBA rating scales were based on the presence or absence of learning points and how urgently these should be addressed. In contrast, the OSAT rates observed performance against the level expected at the end of each phase of PHEM training. Considering the fact that every patient, clinical interaction and procedure provides a unique opportunity to learn and develop, even in the context of excellent practice, the rating scales of all WPBAs have been aligned with those of the OSAT, and therefore the learning outcomes of each phase of PHEM training. This ensures that the learning outcomes guide assessment of whether a trainee has attained the required learning.

**C.2.3** These revisions recognise the variation in both the learning styles of, and the unique learning opportunities encountered by, individual trainees. They allow each trainee to create a unique portfolio of evidence, whilst ensuring that educational panel judgements are sufficiently informed throughout training. Broader portfolio linkage recognises both the unique experience of each trainee at a local level, and the full breadth of PHEM practice and future consultant career or employment roles across the UK. This reduces the administrative burden on trainees and trainers, and prioritises learning dialogue, whilst maintaining engagement with the syllabus and preparation for the national summative assessments. Finally, the introduction of trainee and educational supervisor sign-off of achievement of each capability in practice, and the introduction of the FEGS, better shares responsibility for assessment of training at local and national levels. This facilitates earlier acknowledgement of excellence, earlier identification of trainees in need of support, and optimal educational panel judgements on completion of PHEM training.

### **C.3 Curriculum Feasibility, Practicality and Sustainability**

---

**C.3.1** The feasibility of the PHEM curriculum has been proven by the more than 100 doctors who have successfully completed PHEM training, since the creation of the subspecialty in 2012. Ten approved training programmes have been established across the UK:

- Health Education England
  - East of England
  - Kent, Surrey & Sussex
  - London
  - North East
  - South West
  - Thames Valley
  - Wessex
  - West Midlands
- NHS Education Scotland
- Health Education and Improvement Wales

**C.3.2** Some posts even facilitate trainees rotating between and gaining experience from not only multiple LEPs across the same region, but also multiple training programmes across the UK.

**C.3.3** Organisations with statutory responsibility for postgraduate training (e.g., Local Education and Training Boards in England, the NHS Education Scotland Deaneries, the Welsh Deanery and the Northern Ireland Medical and Dental Training Agency) who wish to implement the curriculum are advised to consult the IBTPHEM so that lessons identified by established training programmes can be shared.

**C.3.4** The consensus development processes and collaborative revisions underpinning the PHEM curriculum ensure its practicality. The progression from PHEM training posts into roles as consultants, trainers and leaders locally, regionally and nationally helps ensure that PHEM continues to evolve and the curriculum remains practical and sustainable.

## **C.4 Communication of the Curriculum and Programme of Assessment**

---

**C.4.1** The most up-to-date version of the curriculum, syllabus and assessment system is available online for learners, the public and all those involved in delivering training at:

[www.ibtpphem.org.uk](http://www.ibtpphem.org.uk)

**C.4.2** Hard copies of the curriculum, syllabus and assessment system are provided to trainees on commencement of PHEM training. The IBTPHEM Training Committee communicates all changes to the curriculum, syllabus and assessment system via PHEMTA to all trainees and via all TPDs to all educational and clinical supervisors, LEPs and the Allied Healthcare Professionals supporting PHEM training. Wherever possible, changes and updates are implemented at the start of the academic year, in order to maximise notice and ensure smooth transitions.

## **C.5 Input and Feedback**

---

**C.5.1** PHEM was the first medical subspecialty to be approved by the GMC and that process between 2008 and 2011 involved very wide consultation and extensive input and feedback. The IBTPHEM was intentionally created as a multi-disciplinary and multi-professional governing body to enable this level of input and feedback to continue. The third edition of the curriculum has also benefited from experience gained from delivering training, changes in our understanding of postgraduate training more broadly and the expertise of those involved in curricular design and assessment.

**C.5.2** The wider stakeholder consultation phase involved sharing the entire draft 2022 curriculum with each organisation represented on the IBTPHEM and

its Curriculum Committee, in addition to those listed below. The draft was also made available online with the option to provide individual feedback. Opportunity to provide feedback, refinement and endorsement was further enhanced by presentation at existing stakeholder meetings and the provision of bitesize summaries of the proposed changes online. This approach also ensured clarity, fairness and optimal evolution of the curriculum. The additional organisations involved in the stakeholder consultation phase, included:

- General Medical Council
- All TPDs, educational and clinical supervisors
- All LEPs and their Allied Healthcare Professionals
- All current and previous PHEM trainees
- NHS Employers
- Air Ambulances UK and Air Ambulance Charity:
  - Chief Executive Officers
  - Medical Directors
  - Directors of Operations
- National Ambulance Lead Paramedic Group
- British Association for Immediate Care (BASICS) and BASICS Scotland
- National Clinical Directors for:
  - Major Trauma
  - Urgent and Emergency Care
- NHS England Clinical Reference Groups for:
  - Major Trauma
  - Adult Critical Care
  - Emergency Preparedness, Resilience and Response
- British Medical Association
- Healthwatch UK
- National Voices

**C.5.3** The list above emphasises the close relationship between PHEM LEPs and regional charity sector air ambulance providers. This link provides unique access to the lay membership of the boards and charity management teams as well as the wider pool of patients and supporters from all walks of life. The rich diversity of input and feedback gives us confidence that the curriculum, syllabus and assessment system are fit for purpose.

## C.6 Equality, Diversity and Inclusion

---

**C.6.1** Equality and diversity are embedded in the curriculum to help ensure:

- equality – that each trainee has equal access to and experience of subspecialty training, including learning environments and resources

- equity – that each trainee’s unique learning needs are met to provide them with an equal chance of success in training.
- inclusion – that diversity amongst patients, colleagues, trainees and trainers is embraced for the benefit of everyone involved with training and the wider subspecialty.

**C.6.2** The IBTPHEM and all LEPs will comply and ensure compliance with the requirements of equality and diversity legislation set out in the Equality Act 2010 and the equality and diversity standards for postgraduate medical training as set by GMC.

**C.6.3** The curriculum is designed to ensure that it does not disadvantage any trainees because of their background or characteristics and the recruitment practices, sponsored by deaneries, are quality assured to represent the diversity of contemporary society. Our approach involves:

- monitoring recruitment processes
- ensuring that all those involved in trainee interview/appointment committees or processes undertake equality and diversity training every 3 years
- ensuring that all IBTPHEM Board and Committee members, all TPDs and all examiners have attended appropriate training sessions prior to or within 12 months of appointment
- ensuring that all medical trainers (clinical and educational supervisors) undertake equality and diversity training (for example, an e-learning module) every 3 years
- ensuring that trainees and trainers have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. Deaneries, TPDs and medical trainers must ensure that trainees are made aware of the route by which inappropriate or discriminatory behaviour can be reported and supplied with contact names and numbers. Deaneries must also ensure contingency mechanisms are in place if trainees feel unhappy with the response or uncomfortable with the contact individual.
- providing resources to trainees needing support (for example, through access to a professional support unit or equivalent)
- monitoring of national summative assessments (examinations) and ensuring that they discriminate on objective and appropriate criteria and do not unfairly advantage or disadvantage trainees with any of the characteristics protected by the Equality Act 2010

**C.6.4** The IBTPHEM also seeks to explore further how equality of opportunity can be more broadly applied to PHEM clinical practice. A key challenge is that PHEM clinical practice often involves working in high-tempo, high-hazard and high-risk operational environments which, by virtue of the nature of the incident

and the rapidity of emergency service response, may be physically demanding. In recognition of this, Emergency Services, including the NHS Ambulance Services, undertake an assessment of functional capability and physical fitness as part of the selection process for pre-hospital work. In order to protect patients, trainees and trainers, the IBTPHEM recommends that the standards and processes applied to Ambulance Service recruitment are applied to PHEM trainee selection. The Ambulance Service recruitment process requires applicants to have successfully completed the occupational fitness assessments used for recruitment to the paramedic higher education institutions. These assessments are specifically designed to look at a trainee's ability to carry out the physical requirements of a set of typical PHEM duties. They aim to ensure that an individual's functional capability matches the demands of the work role in areas such as mobility, fitness, stamina, strength, agility, coordination and dexterity.

**C.6.5** The IBTPHEM believes that the PHEM workforce should be more equitable and reflective of the diverse world we live in. Every effort is made to enable the participation of trainees with a disability through reasonable adjustments and recognising that not all disabilities are visible. Where necessary, PHEM training in the introductory phase, which focuses specifically on working safely in the operational environment, may be used to develop a better understanding of the scale and complexity of any adjustments that might be required.

**C.6.6** Fairness and equity of access are a cornerstone of the need for PHEM services, is a common theme throughout the curriculum and assessment system, and is embedded in the syllabus.

**C.6.7** The evolution of gender equality within the emergency services and the PHEM subspecialty is described in Appendix B (The Shape of Training) at paragraphs B.4.4 and B.4.5.

**C.6.8** From a curriculum design and review perspective, Equality and Diversity monitoring was undertaken throughout development of this curriculum, demonstrating the involvement of a broad range of individuals. Stakeholder consultation also invited suggestion of any potential barriers to access or sources of discrimination or bias. Further monitoring following transition to the new curriculum will ensure that any unanticipated discrimination or bias is identified and addressed.

**C.6.9** Nationally coordinated recruitment to all approved training programmes ensures fair, equitable access to approved training posts. Flexibility in terms of year of entry and training scheme optimises access, regardless of an individual's base speciality or seniority. Less than full-time training, post-CCT training and academic trainees can all be accommodated. Training posts are ranked in order of individual applicant preference, considering geography and personal circumstances, and appointments made in order of merit demonstrated during the selection process. Entry into subspecialty training is further described in Appendix E. Full recruitment



information, including the national person specification and other guidance is provided on the Health Education England, East of England office website at:

[heeo.ee.hee.nhs.uk/recruitment/pre-hospital-emergency-medicine-phem](http://heeo.ee.hee.nhs.uk/recruitment/pre-hospital-emergency-medicine-phem)

**C.6.10** During PHEM training, the learning outcomes associated with each of the 9 curriculum themes encourage a shared mental model amongst trainers regarding expected levels of performance, regardless of training programme or historical personal or LEP expectations. This informs decisions regarding performance at local, regional and national levels.

**C.6.11** Fairness in national summative assessments is assured through robust examiner training, standard setting and psychometric analysis, in addition to annual external review. Equality, Diversity and Inclusion are also evident in the examination regulations, which take a considerate approach to different religions and beliefs to strike a balance between ensuring valid assessment and embracing diversity.

**C.6.12** The national Training Assessment Panel comprises at least 4 TPDs and reviews every single piece of submitted portfolio evidence. Assessors are allocated individual WPBA types across all trainees, rather than all assessments across individual trainees. This minimises bias regarding individual trainees or assessors, and provides a national perspective regarding the content and quality of WPBA completion, so that judgements regarding progression of each trainee are fair and consistent, and trainees, trainers and training programmes can be provided with feedback regarding areas of good practice and areas for development.

