

# Harmonising Outcomes of ICM Training

**CoBaTrICE is an international partnership** of professional organisations and critical care clinicians working together to harmonise training in intensive care medicine worldwide. The CoBaTrICE Collaboration was formed in 2003 to define outcomes of specialist ICM training and to develop an international training programme in ICM for Europe and other world regions.

**The underlying principle** is the concept that a specialist in intensive care medicine trained in one country should have the same core skills and abilities as one trained in another. The initial project had four main phases.

**Over 40 countries** in Europe, North America, Latin America, Asia, Australasia, West Africa and the Gulf region have participated so far. Each country has a national co-ordinator who has been nominated with the support of their national training organisation to

participate in and disseminate information about the project.

### Four phases:

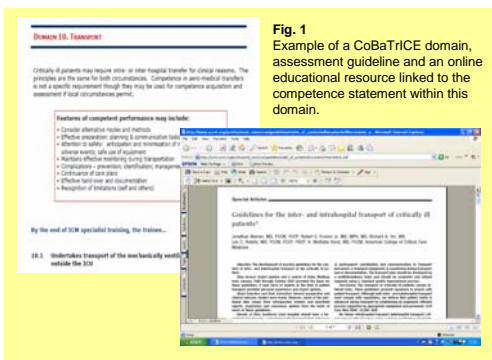
1. **International survey of training in adult intensive care medicine**  
(Oct. 2003 - June. 2004)
2. **Consensus development of core competencies linked to a comprehensive syllabus**  
(March 2004 - March 2006)
3. **Development of assessment guidelines**  
(Jan. 2005 - Sept. 2006)
4. **Linking competencies to educational resources**  
(Sept. 2005 - Sept. 2006)

### Survey of adult ICM training programmes

Conducted in 2003 - 2004, this survey<sup>1</sup> demonstrated wide national variability in access, ownership, structure and duration of training in intensive care medicine; we identified 54 different training programmes in 41 countries. Few programmes at that time defined the outcomes of ICM training in terms of competencies.

### Development of the core competencies

Consensus methods were used to harness the combined wisdom and experience of 535 clinicians and 1391 intensive care patients and relatives to generate ideas for common 'competencies' for specialists in intensive care medicine across national and professional boundaries. These ideas were edited, and submitted to an expert group to determine level of expertise and rate importance. Following iterative review, this process generated a final set of 102 competencies grouped into 12 domains which form the heart of the CoBaTrICE programme<sup>2</sup>.



### Linking competencies to a syllabus

Content analysis of international guidelines, English-language curricula of national ICM training programmes, and personal communications from other countries was used to develop a common set of knowledge, skills, attitudes and behaviours linked to each competence. The syllabus can be viewed online either linked to a specific competence or grouped by domain (i.e. the aggregate syllabus for a group of competencies).

### Assessment guidelines

Assessment of competence must be conducted in a manner which is transparent, fair, and repeatable, aids personal learning, and minimises the burden on trainers who are busy clinicians. We used an expert group to consider how best to approach workplace-based assessment, and have developed indicators of competent performance as a guide to trainers and trainees (see fig.1). These indicators can be used during routine clinical practice; they are supported by an assessment toolbox summarising different methods, and a portfolio template (CoBaFolio) for documenting training activities and progress.

### Educational resources

Online educational resources have been identified, evaluated, and linked to competencies to support trainers and trainees (see fig.1). These include research articles, e-learning resources, slide presentations, lecture notes and basic sciences texts. This component of the programme requires constant revision and updating.

### CoBaTrICE online

The CoBaTrICE programme has been developed in electronic format using curriculum mapping to link the various components so that competencies can be explored in terms of knowledge elements in the syllabus, hyperlinked to relevant educational resources, and evaluated using a range of assessment tools. We have also provided electronic documents for recording evidence of training and competence in the form of a portfolio which can be tailored to the requirements of individual national training programmes.

CoBaTrICE online is not a static product, but will mature and develop with time. The content of the training programme and the competencies themselves will undergo modification through regular review by the European Board of Intensive Care Medicine and the ESICM division of professional development working in close collaboration with a Forum of national training organisations. This dynamic process is essential for incorporating new knowledge into the training of individual practitioners, thereby facilitating translation of validated research into best practice.

**International collaboration has enabled the development of The CoBaTrICE Programme:** an internationally applicable web-based training programme that defines the core competencies of a specialist in intensive care, the syllabus which underpin these, methods for their assessment, and educational resources which support their acquisition.

### REFERENCES

1. The CoBaTrICE Collaboration. An international survey of training in adult intensive care medicine. *Intensive Care Med* (2005) 31:553-561.
2. The CoBaTrICE Collaboration. Development of core competencies for an international training programme in intensive care medicine. *Intensive Care Med* (2006). 32:1371-1383.