Proposal to incorporate Intensive Care Medicine in Directive 2005/36/EC of the European Parliament & Council on the recognition of professional qualifications, as a particular medical competence

Professor Hugo Van Aken

Chair, MJCICM

Professor Julian Bion

Chair, EBICM

U.E.M.S.

EUROPEAN SOCIETY OF INTENSIVE CARE MEDICINE

CoBaTrICE

COMPETENCY-BASED TRAINING IN INTENSIVE CARE MEDICINE IN EUROPE

Why should intensive care medicine be incorporated in the Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications as a particular medical competence in Europe ?

H. Van Aken

President of the multidisciplinary joint commitee of intensive care medicine

Proposal to incorporate Intensive Care Medicine as a particular medical competence in the Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications in Europe, in Annex 5.1.3., 'Titles of training courses in specialised medicine'.

Intensive care medicine is an independent speciality in only one of the European member states. In most European countries, intensive care medicine can be obtained as a 'particular competence' with a common training programme for specialists with Board certification in a variety of base disciplines: **Anaesthesiology, cardiac surgery, cardiology, internal medicine, neurology, neurosurgery, paediatrics, pneumology, and surgery**. A particular competence is an area of expertise in addition to a primary speciality, where extra expertise outside the domain of the specific speciality is required to provide high quality patient care by multidisciplinary input from doctors from various medical specialities.

The European Directive on recognition of professional qualifications (Directive 2005/36/EC of the European Parliament) does not identify intensive care medicine as a primary medical speciality. The European Union requires that, to become a specialty, it must be recognized in at least 2/5th of the Member States and at the same time, by a particular majority (a weighted vote that is determined by the population of each country and other factors and giving what is called a "qualified majority") in a committee on Qualification of the European Commission (not only for medical professions but generally for all protected professions). Furthermore, to create a Specialist Section for Intensive Care Medicine within the UEMS, ICM has to be recognized as an independent speciality by more than one third of the E.U. Member States and must be registered in the Official Journal of the European Commission (Medical Directives).

These requirements for a primary speciality are not fulfilled for Intensive Care Medicine and therefore the aim should be the incorporation of Intensive Care Medicine as a **PARTICULAR COMPETENCE** in the European Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications. This terminology is consistent with all forms of training based on acquisition of competencies.

Proposal to incorporate Intensive Care Medicine as a particular medical competence in the Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications in Europe, in Annex 5.1.3., 'Titles of training courses in specialised medicine'.

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III Road Map to incorporate Intensive Care Medicine in the Directive 2005/36/EV of the European Parliament and of the Council on the recognition of professional qualifications as a particular medical competence in Europe in Annex 5.1.3. Titles of training courses in specialized medicine.

These requirements for a primary speciality are not fulfilled for Intensive Care Medicine and therefore the aim should be the incorporation of Intensive Care Medicine as a PARTICULAR COMPETENCE in the European Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications. This terminology is consistent with all forms of training based on acquisition of competencies.

IV Road Map to incorporate Intensive Care Medicine in the Directive 2005/36/EV of the European Parliament and of the Council on the recognition of professional qualifications as a particular medical competence in Europe in Annex 5.1.3. Titles of training courses in specialized medicine.

The CoBaTrICE programme which is supported by a grant from the European Community's Leonardo Programme, undertook an international survey of training in adult intensive care medicine (1) and defined the core (minimum) competencies required of a specialist in adult intensive care medicine (2). In the survey of training programmes in different EU Member States the minimum duration of training in months, for intensive care medicine varies, but the median time in Europe is 24 months (1, Table 2). The findings of the CoBaTrICE study in terms of competency based training can be applied to intensive care medicine training as a particular competence.

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DOI 10.1007/s00134-005-2583-7

ORIGINAL

H. Barrett
J. F. Bion

An international survey of training in adult intensive care medicine

Received: 17 September 2004
Accepted: 3 February 2005
Published online: 5 March 2005

Abstract *Objective:* The aim of this international survey of training in adult intensive care medicine (ICM) was to characterise current structures, processes, and outcomes to determine

training programme; in nine (24%) training was only available within anaesthesia. The minimum duration of ICM training required for recognition as a specialist varied from

Intensive Care Med 2005

Intensive Care Med (2006) 32:1371–1383
DOI 10.1007/s00134-006-0215-5

ORIGINAL

The CoBaTrICE Collaboration

Development of core competencies for an international training programme in intensive care medicine

Received: 24 January 2006
Accepted: 2 May 2006
Published online: 14 July 2006

Abstract *Objective:* The aim of this study was to define the core (minimum) competencies required of a specialist in adult intensive care medicine (ICM). This is the

encapsulate these suggestions within 164 competence stems and 5 behavioural themes. For each of these items the nominal group selected the minimum level of expertise required

Intensive Care Med 2006

V **Road Map to incorporate Intensive Care Medicine in the Directive 2005/36/EV of the European Parliament and of the Council on the recognition of professional qualifications as a particular medical competence in Europe in Annex 5.1.3. Titles of training courses in specialized medicine.**

An important additional factor to consider, is how would changes to the status of intensive care medicine affect the quality of patient care. Current evidence indicates that patient outcomes are better when patients are cared for by trained intensivists. In Europe this can be achieved by facilitating the acquisition of harmonised competencies in intensive care

Effect of a Full-Time, 24-Hour Attendance Intensive Care Specialist on Mortality

	before	after
APACHE II	19 ± 9	18 ± 8
Mortality (%)	28	13*

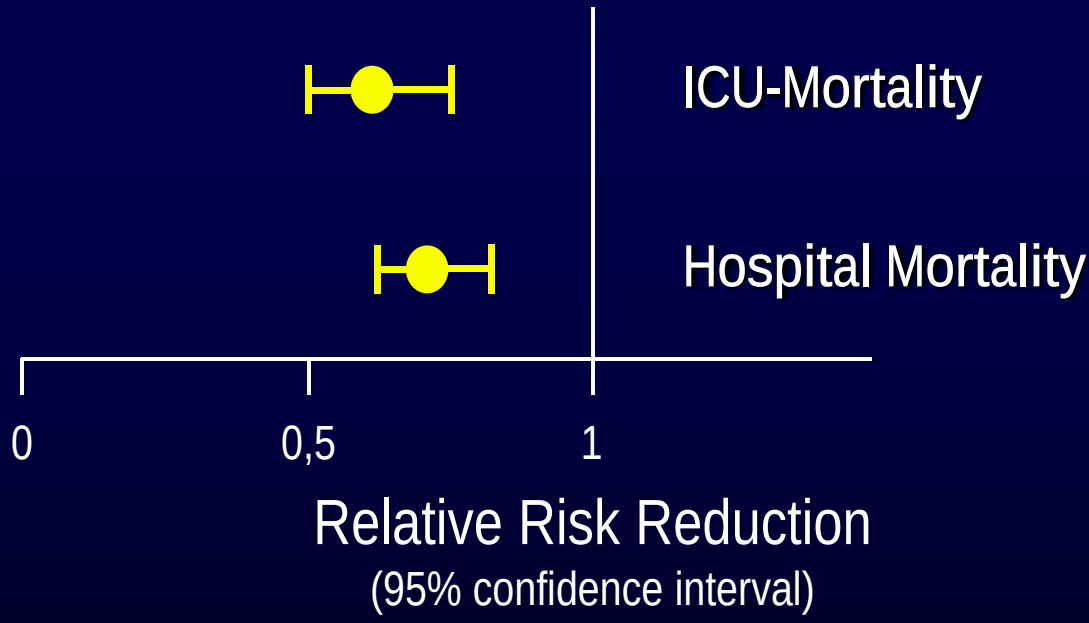
Brown et al., Chest 1989; 96: 127-129

Treatment by ICU-Physicians Improves Patient Outcome

Full time treatment by specialized ICU-Physicians

vs.

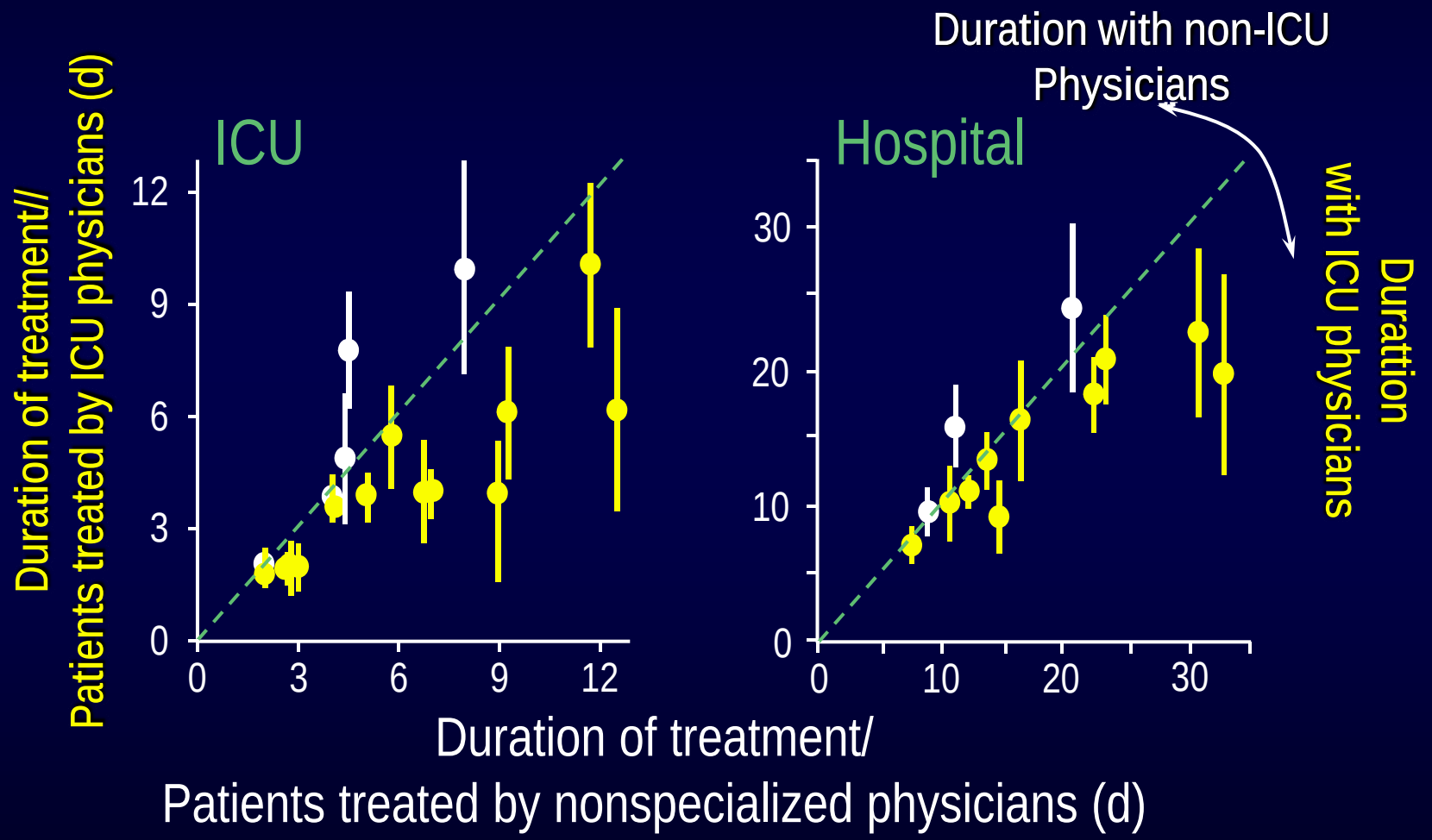
consultation only or treatment by non-ICU physicians



Metaanalysis
26 studies published 1984 - 2002

Pronovost et al.;JAMA 2002; 288: 2151

Treatment by Specialized ICU-Physicians: Reduction in Hospital Length of Stay



Metaanalysis
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COMPETENCY-BASED TRAINING IN INTENSIVE CARE MEDICINE IN EUROPE

Competency Based Training in Intensive Care Medicine in Europe

(and Elsewhere)

www.cobatrice.org

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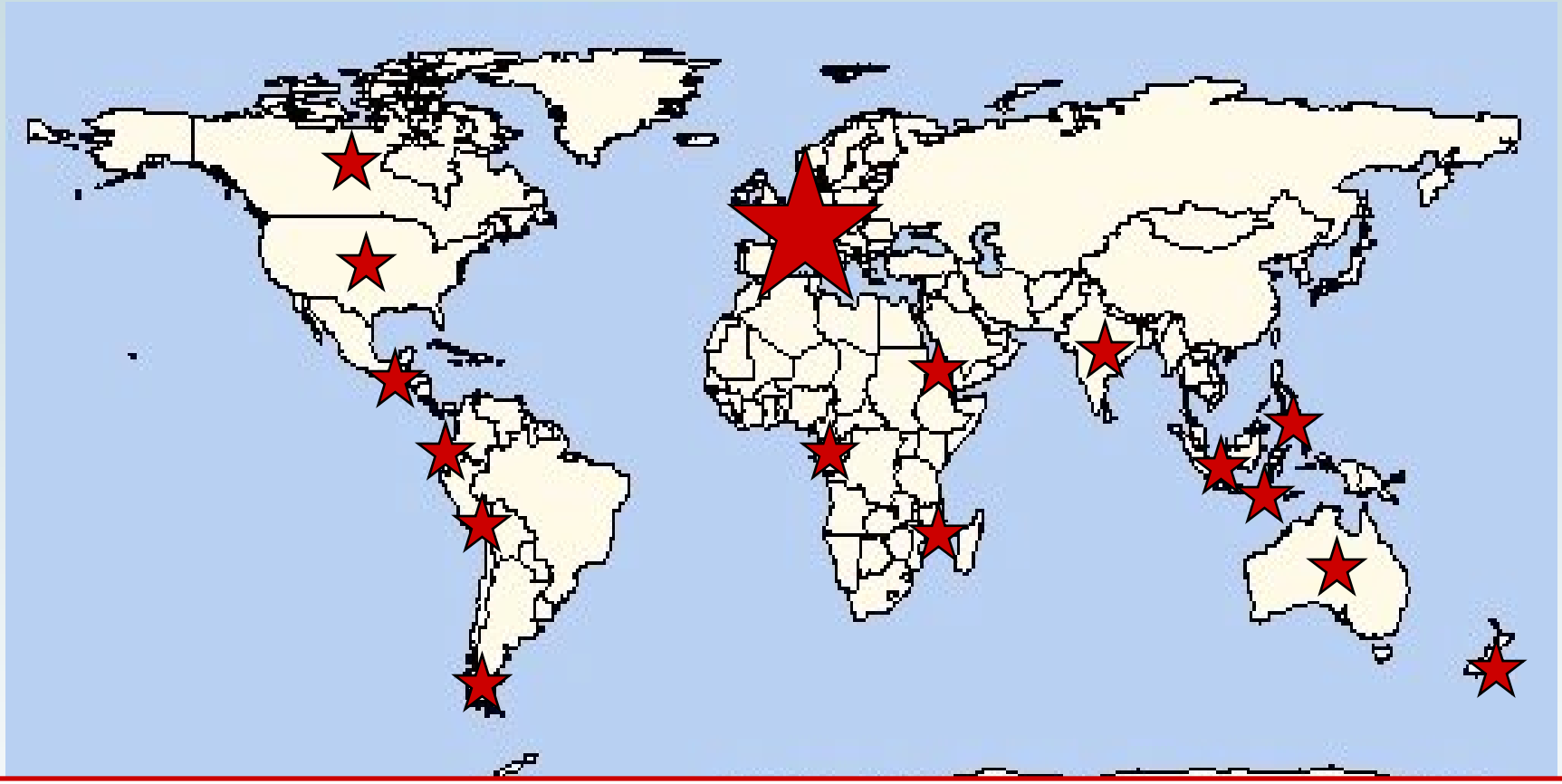
CoBaTrICE is supported by an EU FP6 grant, Leonardo da Vinci Programme.

CoBaTrICE: international coverage



The CoBaTrICE collaboration covers 42 countries from all over the world

E.g. Europe, Canada, Chile, Costa Rica, India, Hong Kong, USA…

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COMPETENCY-BASED TRAINING IN INTENSIVE CARE MEDICINE IN EUROPE

- Underlying premise is that front-line clinicians and ‘consumers’ should determine the ‘product specification’
- No predetermined pedagogical structure
- Competencies developed by consensus
- Syllabus derived from competencies
- Multiple linkages to syllabus, educational resources, and training support.

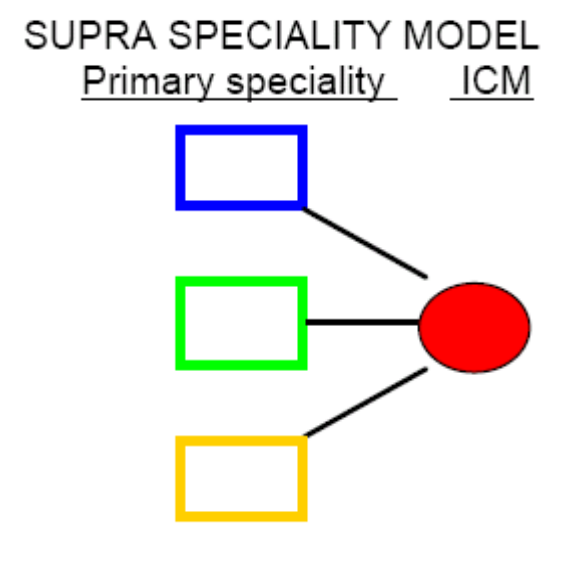
Survey of ICM Training

- 41 countries:
- Formal adult ICM training in 36 (95%)
- **54 different training programmes**
- **Variations in structure, duration & format**
- **Median training 24 months (3-36)**
- Ownership
  - 55% supraspeciality (multidisciplinary access with common programme)
  - 30% anaesthesia only
  - 15% multiple subspeciality

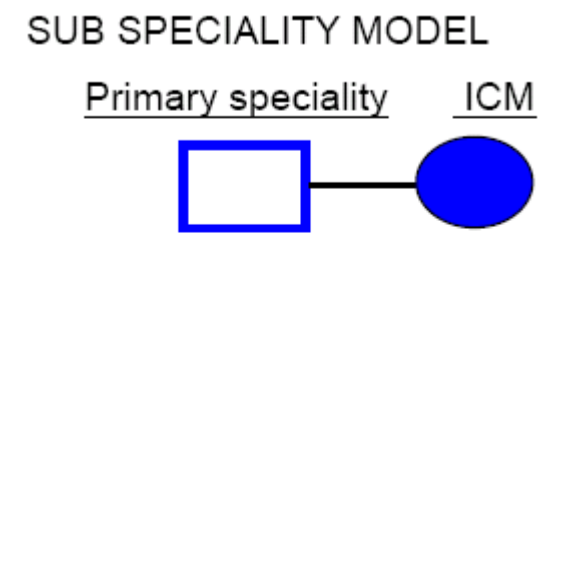
Region	Countries surveyed	ICM training programmes
Europe	29	37
Asia	4	6
North America	2	5
South America	2	2
Australasia	2	1
Arab	1	3
West Africa	1	0 *

* Emergency Medicine Programme includes principles of ICM

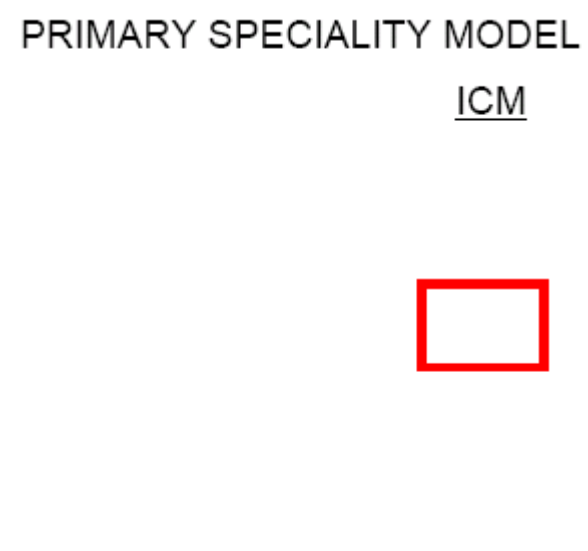
Training Structures in Europe



- Multidisciplinary access from different primary specialities to common ICM training



- Single speciality access
- ICM is 'owned' by parent primary speciality
- One or multiple sub speciality programmes



- ICM is an independent primary speciality
- Access after medical school
- +/- combination with other speciality

Accreditation standards & support

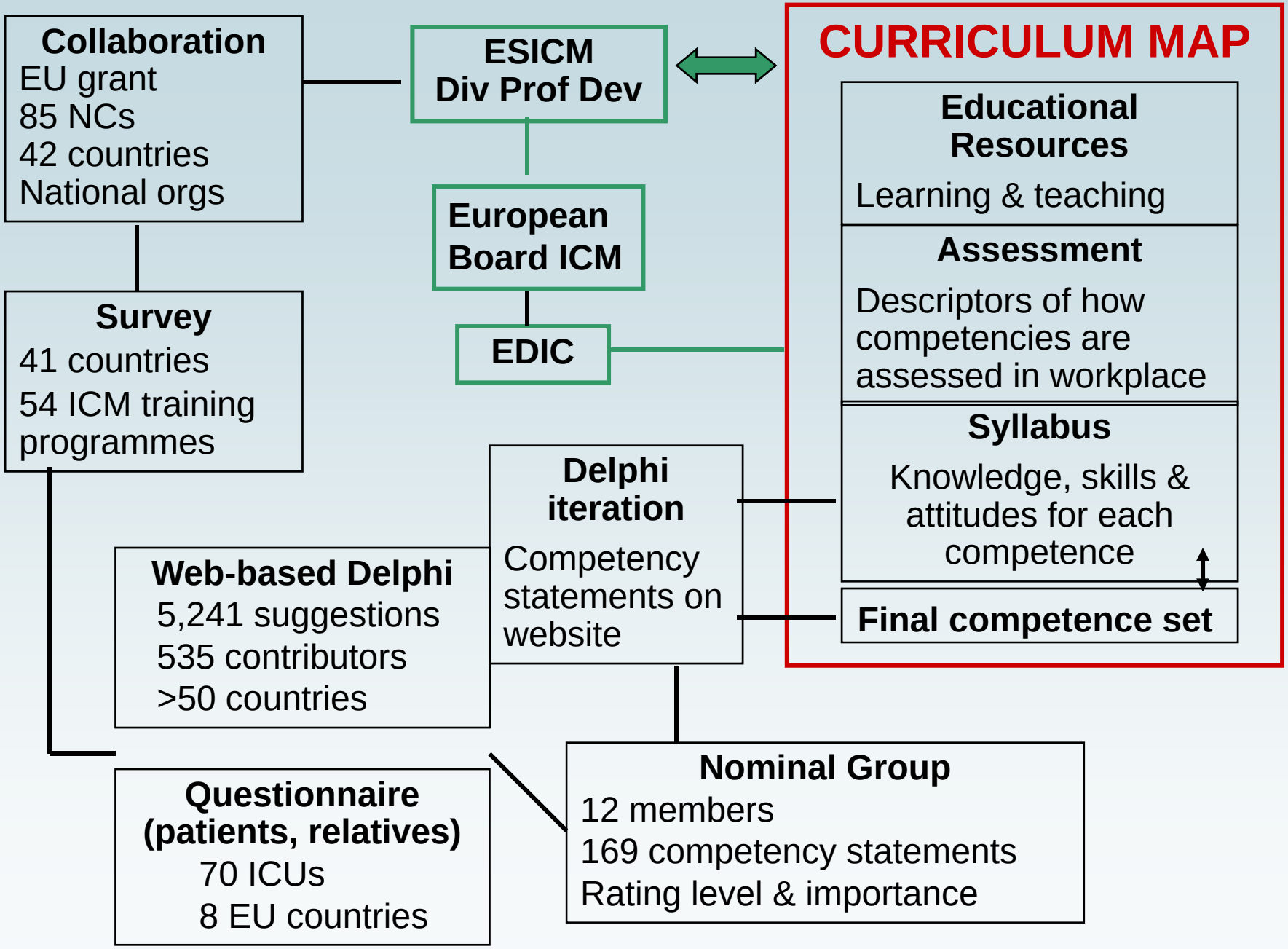
- ICUs formally approved as suitable for training in 33 (87 %) countries or regions
- 17 (45%) external visiting programme
- Minimum national criteria vary – based on unit size, bed occupancy, case mix, 24 hour cover, staff skill mix and hospital facilities
- 27 (71%) – inadequate teaching time for trainers
- 13 (34%) – inadequate learning time for trainees

Competency-based training...

- Defines competent practitioners in terms of the outcomes of training – knowledge, skills, attitudes
- Tolerant of variations in educational structures
- Can be transdisciplinary & promotes teamworking
- Incorporates elements of professionalism: attitudes & behaviours
- Harmonisation across national (and speciality) boundaries should be (is) possible
- E-learning: link competencies to assessment methods, educational resources & documentation
- Can be used to support life-long learning

Implications of CBT

- Competencies become a ‘product specification’
- Workplace-based assessment of training outcomes
- Competencies determine curriculum, not exams
- Exams may become a quality indicator
- Duration of training determined in part by competence acquisition
- Criticisms of CBT
  - Assessment methods unreliable
  - Demotes the physician to status of craftsman / technician
  - Fails to promote excellence: encourages the minimum

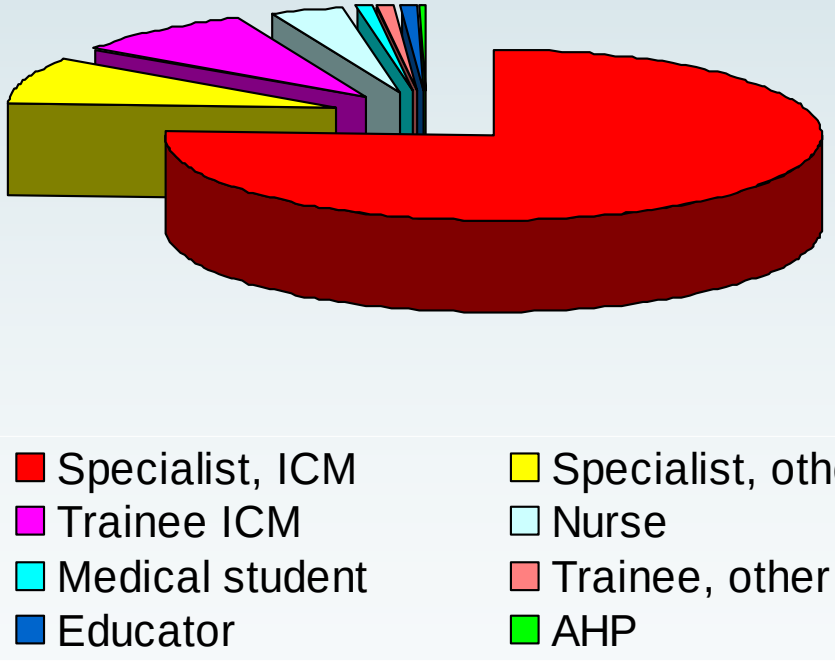

Collaboration
EU grant
85 NCs
42 countries
National orgs
ESICM
Div Prof Dev
European
Board ICM
EDIC
Survey
41 countries
54 ICM training
programmes
CURRICULUM MAP
Educational
Resources
Learning & teaching
Assessment
Descriptors of how
competencies are
assessed in workplace
Syllabus
Knowledge, skills &
attitudes for each
competence
Final competence set
Delphi
iteration
Competency
statements on
website
Web-based Delphi
5,241 suggestions
535 contributors
>50 countries
Questionnaire
(patients, relatives)
70 ICUs
8 EU countries
Nominal Group
12 members
169 competency statements
Rating level & importance

CoBa Phase II: Web-based Delphi
Involving front-line clinicians

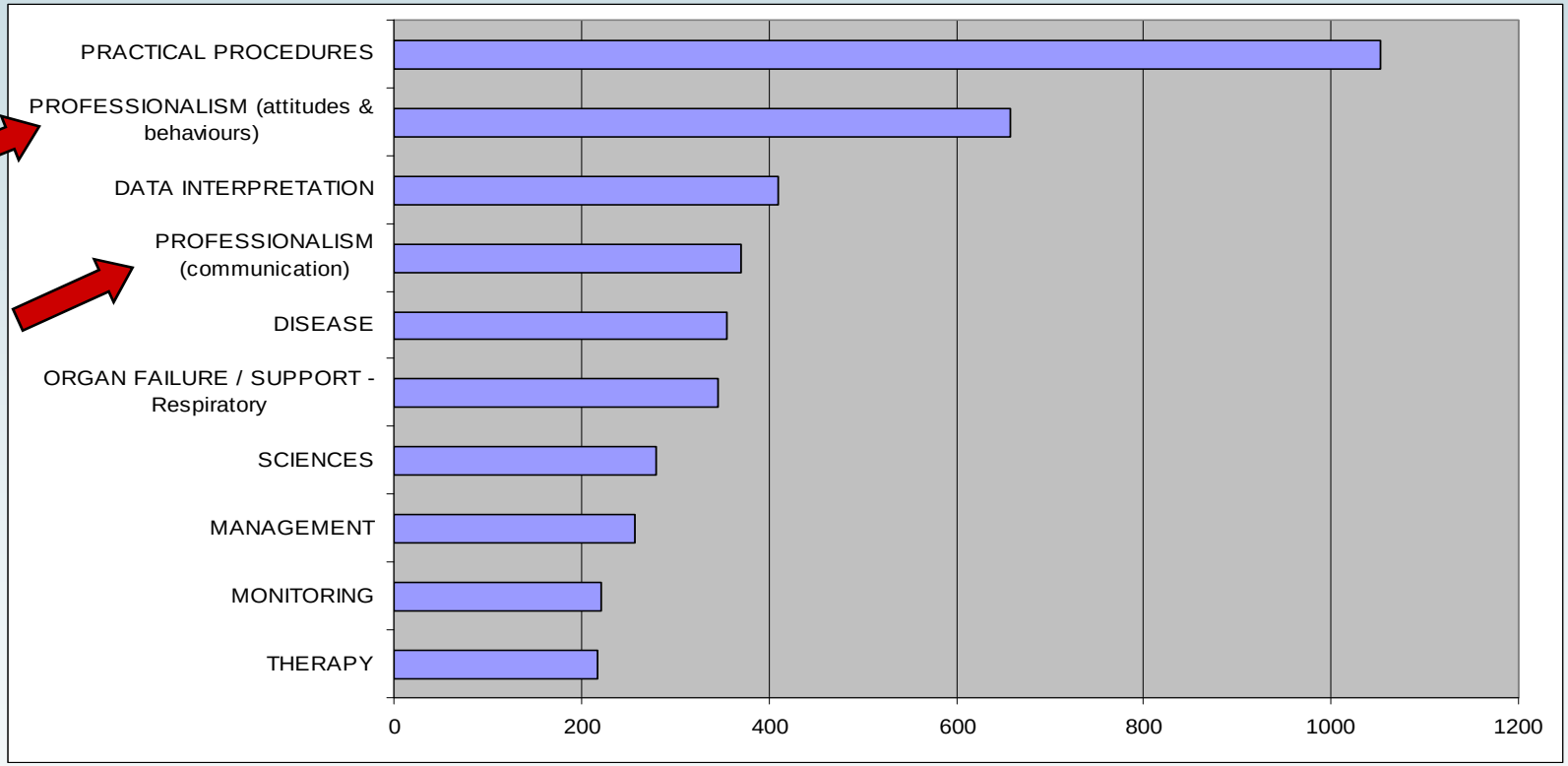
Data collection: Online free-text survey - 6 month period

- 536 respondents
- 58 countries
- 8 languages
- 5241 suggestions
- 1 – 134 suggestions per person (mode = 10)

- Suggestions categorised using 35 pre-determined keywords



Frequency of suggestions: top 10 categories



Practical procedures the most frequently cited single category, but attitudes and behaviour (professionalism and communication) equally cited

Final editorial review process

- **Common themes merged: reduce repetition & remove discrepancies**
- **102 competence statements grouped into 12 domains:**

A	**Resuscitation & initial management of the acutely ill patient**
B	**Assessment, investigation, monitoring and data interpretation**
C	**Diagnosis and disease management**
D	**Therapeutic interventions / organ system support**
E	**Practical procedures**
F	**Peri-operative care**
GH	**Continuity, comfort and recovery**
I	**End of life care**
J	**Paediatric care**
K	**Transport**
L	**Patient safety & systems management**
M	**Professionalism**

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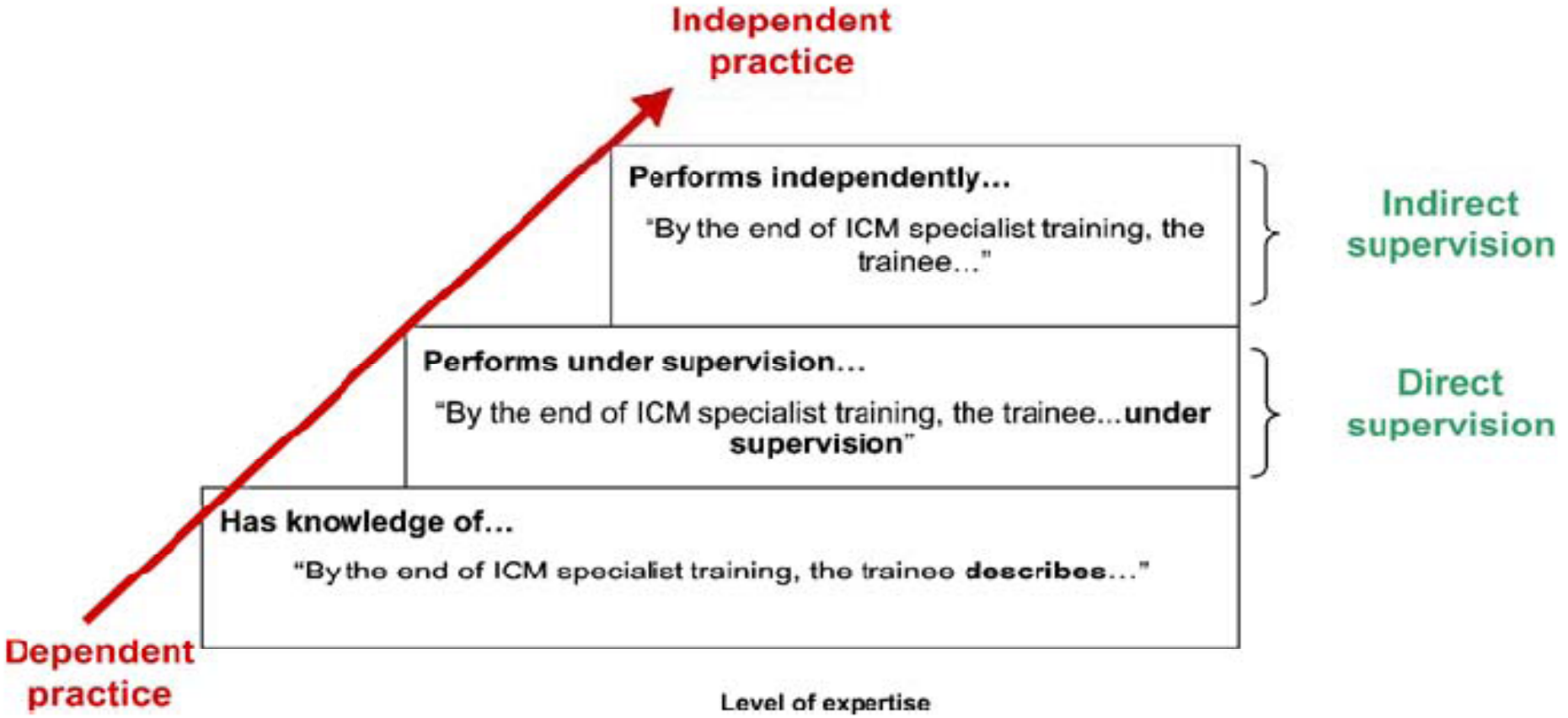

Example: Domain 11: Patient safety & health systems management

These competencies will include, where relevant, attention to:

- Professionalism
- Identification and minimisation of risks and safety issues
- Monitoring
- Complications: prevention; identification; management
- Prescribing and therapeutics
- Communication and documentation tasks
- Equipment: safety; prevention of adverse events; trouble-shooting
- Development of collaborative care plans

By the end of ICM specialist training, the trainee…

11.1 Leads a daily multidisciplinary ward round

11.2 Complies with local infection control measures

11.3 Identifies environmental hazards and promotes safety for patients & staff

11.4 Identifies and minimises risk of critical incidents and adverse events (including complications of critical illness)

11.5 Organises a case conference

11.6 Critically appraises and applies guidelines, protocols, and care bundles

11.7 Describes commonly used scoring systems for assessment of severity of illness, case mix and workload

11.8 Demonstrates an understanding of the managerial & administrative responsibilities of the ICM specialist

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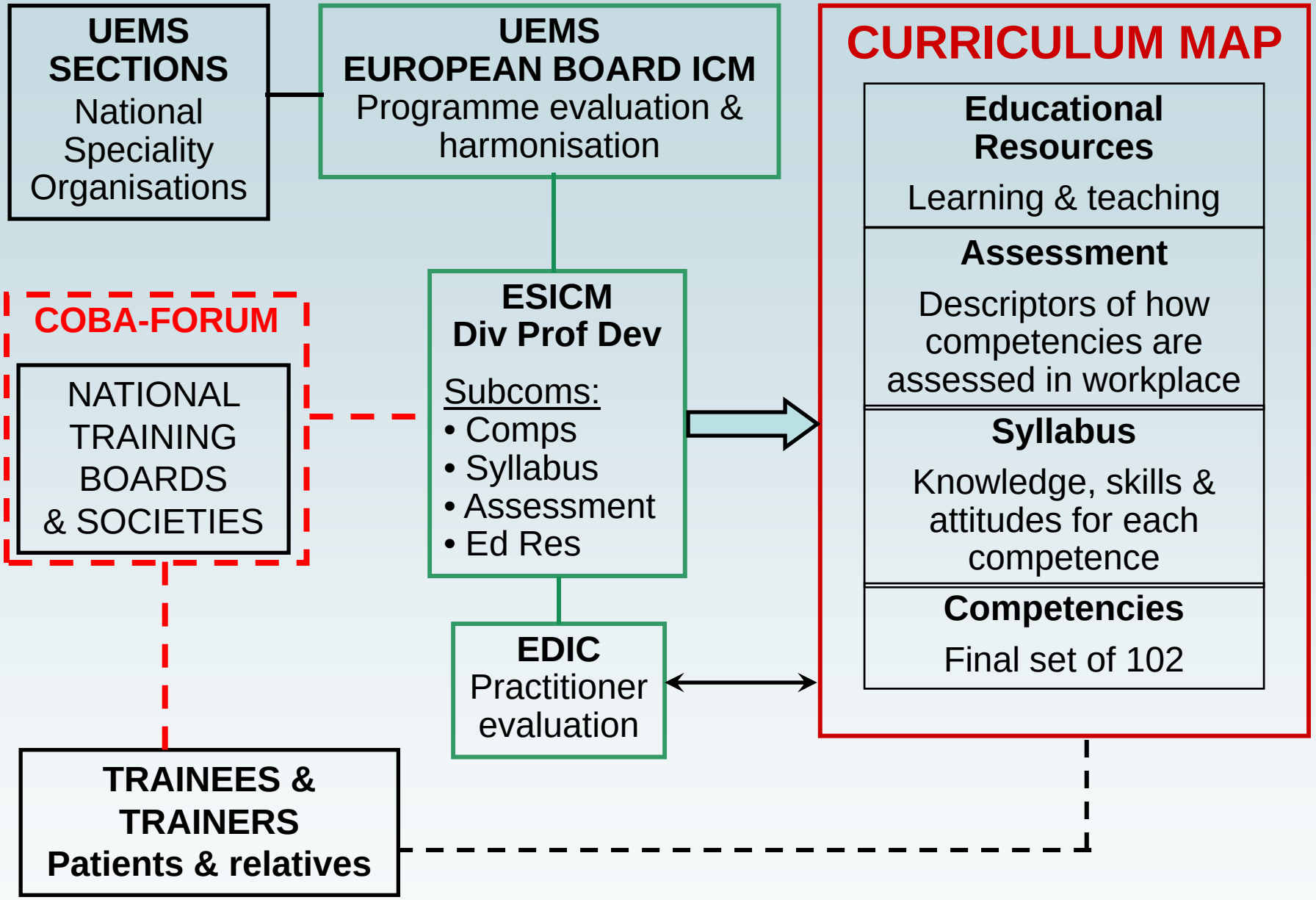
Visit the website and see for yourself



A proposed structure for the CoBaTrICE programme, 2006 onwards

JB Sept 30th 2006

CoBaTrICE-IT 2007-2009

1. **Establish a European Forum** for national ICM training organisations
   - Function as expert group, and acquire ownership over future developments
   - Link via ESICM Div Prof Dev to European Board of ICM
2. **Survey current education and training** provision & needs in ICM at national level.
   - identify current challenges for trainers and trainees
   - develop a database for benchmarking & accreditation (objective 3).
3. **Develop minimum standards for accreditation** (QA) of programmes of training in ICM, using consensus techniques
   - Aim: harmonise minimum accreditation standards across the EU.
4. **Develop workplace-based methods of assessment** of individual competence
   - Including case-based discussion, simulation techniques, multi-source feedback
   - Link assessment methods to competencies
   - Identify quality indicators within these measures
5. **Web-based tools for E&T support & life-long learning** for trainers and trainees
   - Translate materials into national languages
   - Develop learning tools and resources (video clips, case histories, clinical scenarios, laboratory data) linked to competencies
   - E-portfolio
   - Link materials to other acute care disciplines
6. Evaluation of impact
   - Surveys of uptake and utility

Conclusions

- Common core competencies in critical care have been developed using consensus techniques
- Harmonisation: the CoBaTrICE competencies are being adopted in many countries worldwide
- Transdisciplinary uptake: CoBa resources are freely available to all disciplines – have already been incorporated in nurse practitioner programmes in UK
- Flexible system: additional competencies or quality indicators can be incorporated
- Shared competencies will simplify training, accreditation and regulation of standards
- Shared competencies are likely to improve reliability of care for patients and families

April 18th 2008

The UEMS Council has unanimously supported the proposals that

1. Intensive Care Medicine be included in Directive 2005/36/EC of the European Parliament & Council on the recognition of professional qualifications, as a Particular Medical Competence
2. The content of training be defined and managed through the CoBaTrICE collaboration and monitored via the EBICM