

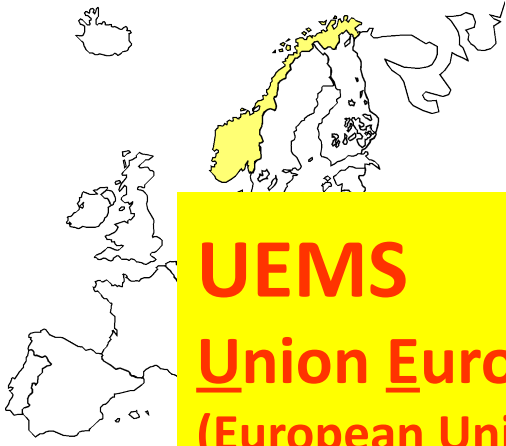
THE NEED FOR SHARED STANDARDS IN PGM Specialist Training: **UEMS PROPOSAL**

current challenges and opportunities
for harmonization of postgraduate specialist medical training in Europe

Zlatko FRAS, MD, PhD, FESC

President – UEMS, European Union of Medical Specialists
Specialist in Internal Medicine – Cardiology&Vasc.Med.

Medical Director, UMC Ljubljana – Div Internal Medicine
Assoc.Professor, Medical Faculty – University of Ljubljana
Chairman, Committee for Specialist Postgraduate Training
Medical Chamber of Slovenia

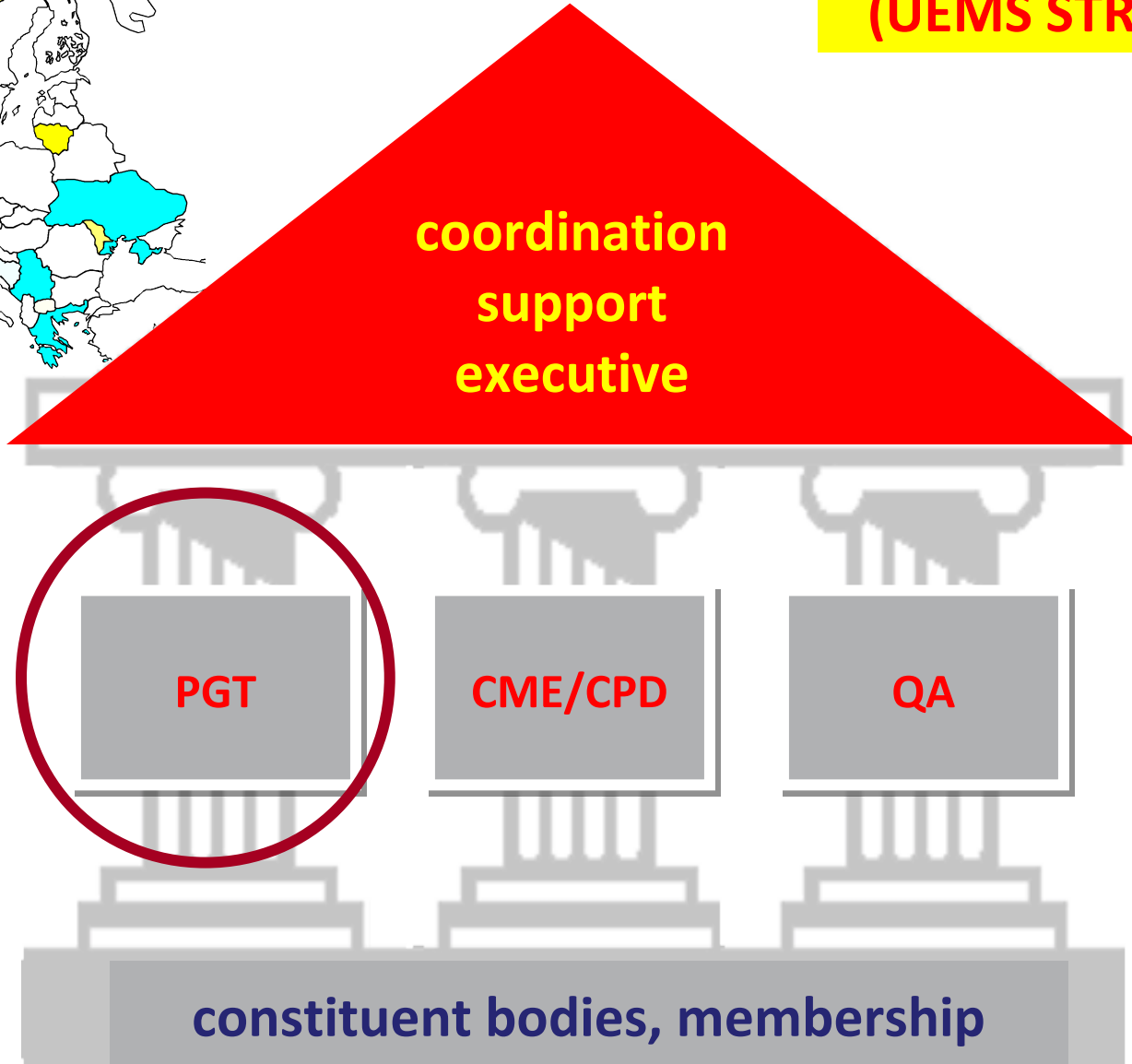
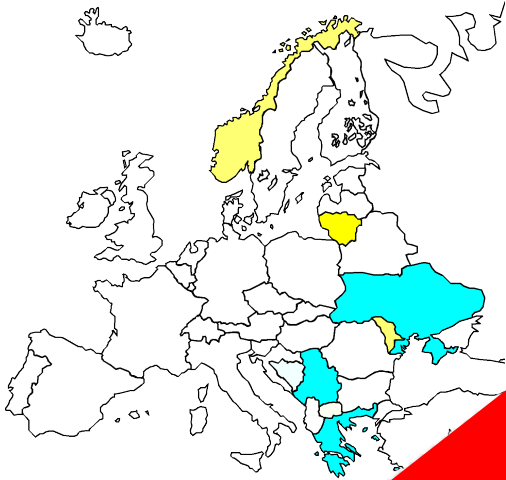


UEMS

Union Européenne des Médecins Spécialistes (European Union of Medical Specialists)

- **Founded in 1958, a year after the Treaty of Rome**
- **The oldest among the European Medical Organisations**
- **Represents approx 1,4 million specialist doctors**
- **30 full members (NMAs), 5 associated members**
- **Non-governmental organisation**
- **UEMS is registered under Belgian law**
- **Secretariat (staff 4) in Brussels**

VISION (UEMS STRATEGY 2008)



Standing Committee for CME

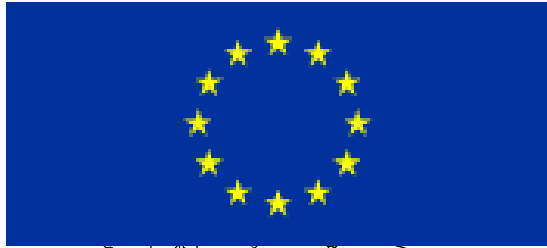


Standing Committee for PGT



Standing Committee for QA





Keywords in Europe...

A map of Europe with several countries highlighted in cyan, including Greece, Bulgaria, Romania, and parts of the Balkans and Eastern Europe. A red-bordered box containing the word 'Mobility!' is overlaid on the map.

Mobility !

- **Free movement of students**
 - Bologna process
- **Free movement of doctors**
 - Directive on Recognition of Qualifications
(new version in 2012?)
- **Free movement of patients**
 - Directive on Health Care Services (to come?) –
recently the draft of the Directive on Cross Border Health Care was issued *(approved by 2014?)*

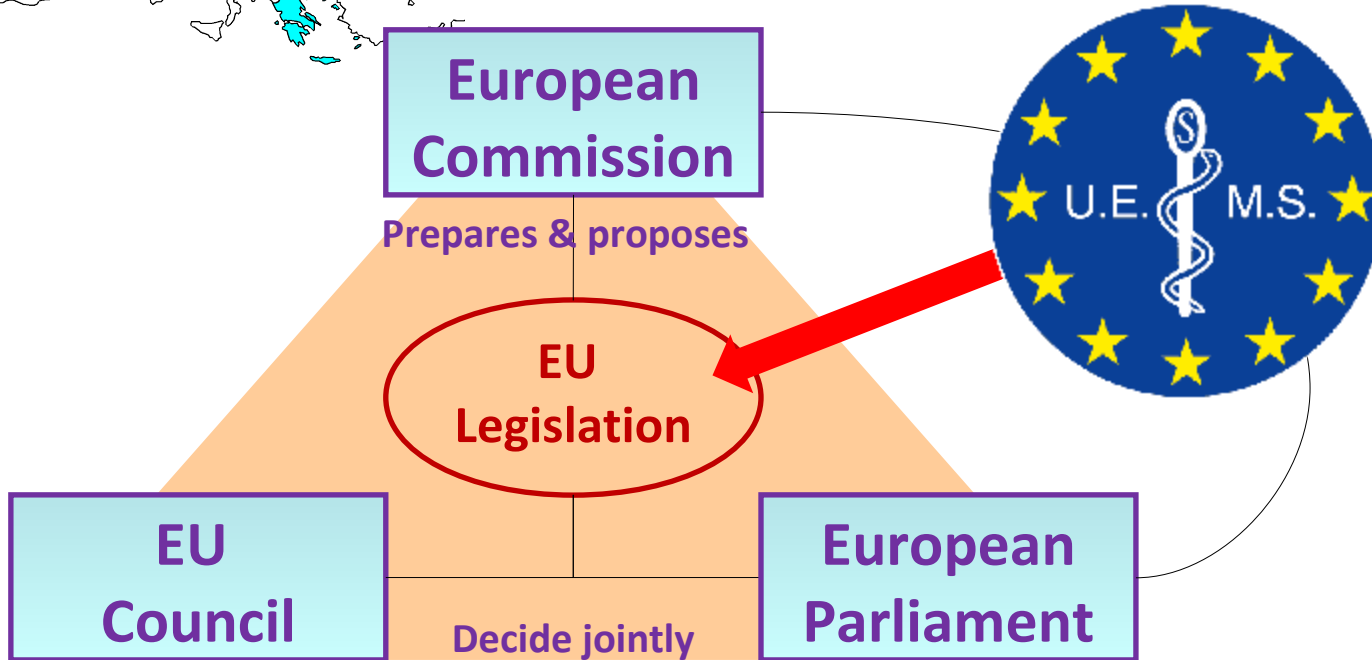
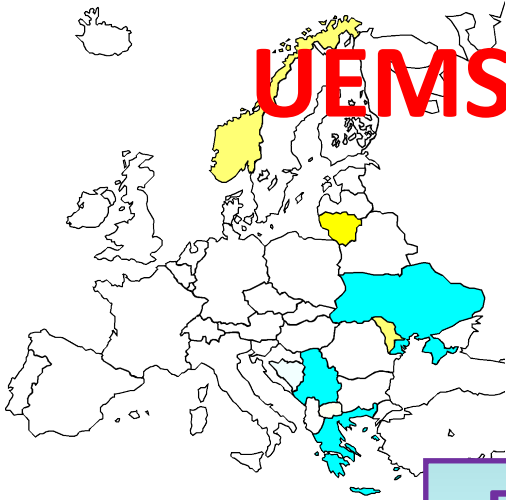


Health and the EU



- **Subsidiarity** - the organisation and delivery of health care is the responsibility of each member state
- Subsidiarity and medical specialist training:
 - national rules and regulations prevail
 - not as in educational matters where the EU can have effects
 - directives can be introduced
 - difficulties to implement them at the national level
- **Co-ordination** of health issues is **difficult** at the European level

UEMS political involvement in EU Affairs



Consultation with
other European
Medical
Organisations:

AEMH – CEOM –
CPME – EANA –
PWG – UEMO

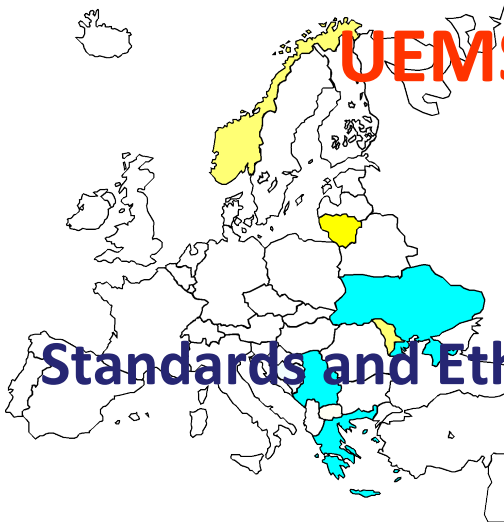
The EU institutional triangle
(simplified)

A map of Europe with several regions highlighted in yellow and cyan. The highlighted regions include Iceland, Norway, Sweden, Finland, Denmark, Poland, Czech Republic, Slovakia, Austria, Hungary, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Greece, and Turkey. A large yellow banner with a black border is overlaid on the map, containing the title.

Relevant UEMS Policies

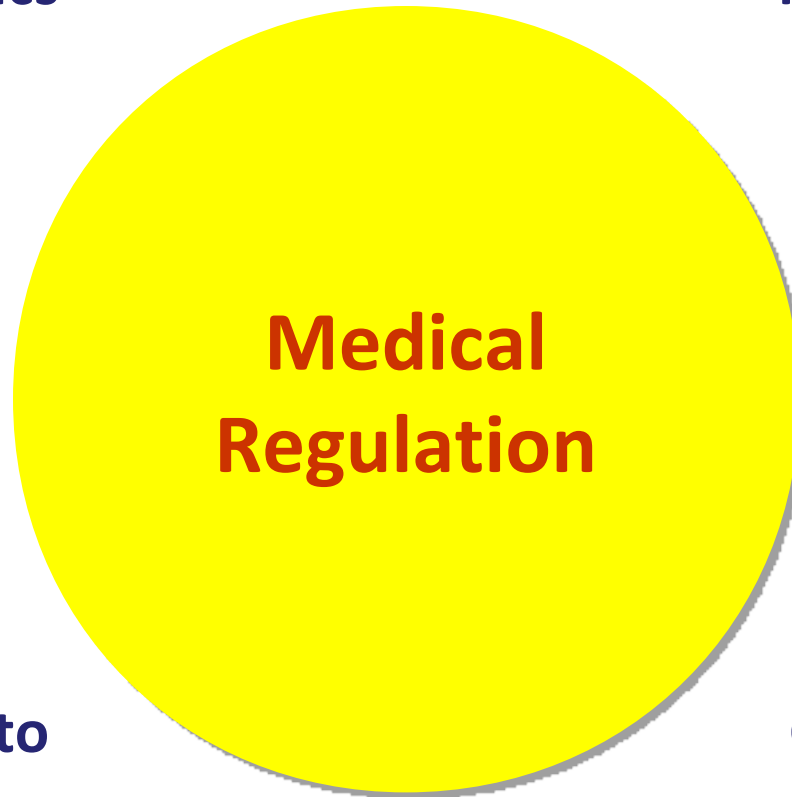
- **Charter on Training of Medical Specialists (1993)**
- **Charter on Continuing Medical Education (1994)**
- **The European Training Charter (1995)**
- **Charter on Quality Assurance in Specialist Practice in EU (1996)**
- **Charter on Visitation of Training Centres (1997)**
- **Charter on CPD - Basel Declaration (2001)**
- **Policy Statement on Assessments during PGT (2006)**

UEMS Policy on Ensuring Quality of Care: functions



Standards and Ethics

Medical Education



**Medical
Regulation**

**Ensuring fitness to
practise**

**Certification &
Registration**

Medicine: Art & Science in motion

- Need for regular knowledge and skills renewal
- Notions of: Continuing Professional Development
Competence-based Training
- Directives on the recognition of professional qualifications
patient's rights in cross-border healthcare

Trusting Doctors' competence

An issue of

- **Patient Safety**
- **Quality of care**

Competence-based Training

- Knowledge
- Skills
- Attitude

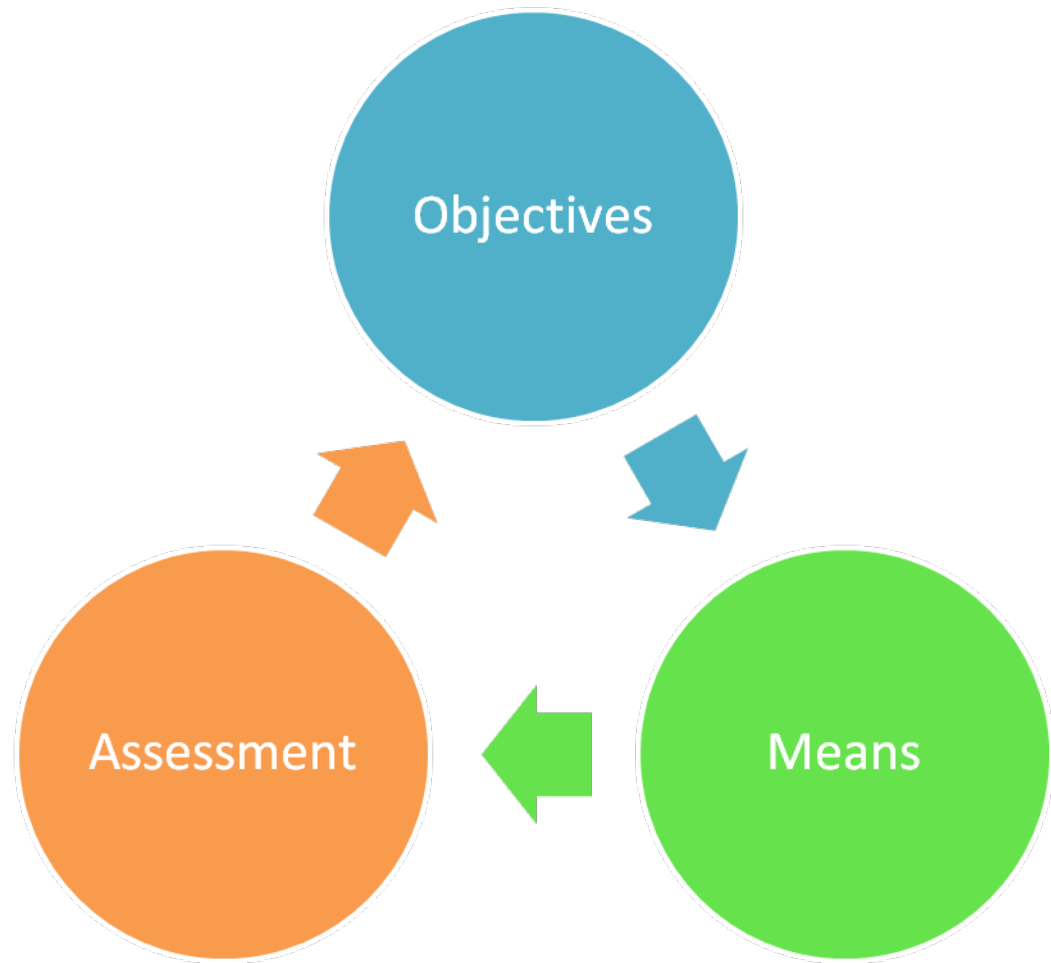


= COMPETENCE

The 7 competencies

1. Communication
2. Problem solving
3. Applying knowledge and science
4. Patient examination
5. Patient management / treatment
6. Using the social and community contexts of health care
7. (Self)-Reflection

Educational process



Specialist training in Europe as a whole

- main issues for harmonization (accreditation?)

- Programmes: contents, theory vs. practice, accreditation systems
 - List of competencies for different groups of HC professionals?
 - Assessments/examinations (when, what and how) - “European” exams?
 - Certification, Licensing, Titles
-
- New technologies development and new professions?
 - Way of practicing (how much professional freedom?)
 - Working time?

Harmonization of PGSMT at the European level

- **Establish standards of postgraduate medical education & training**
 - Setting of standards and requirements
- **Quality assurance**
- **Certification**

European core curricula

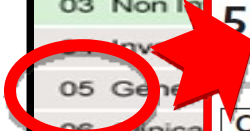
Criteria for assessment of K-S-B under curriculum item #5

5. Genetics

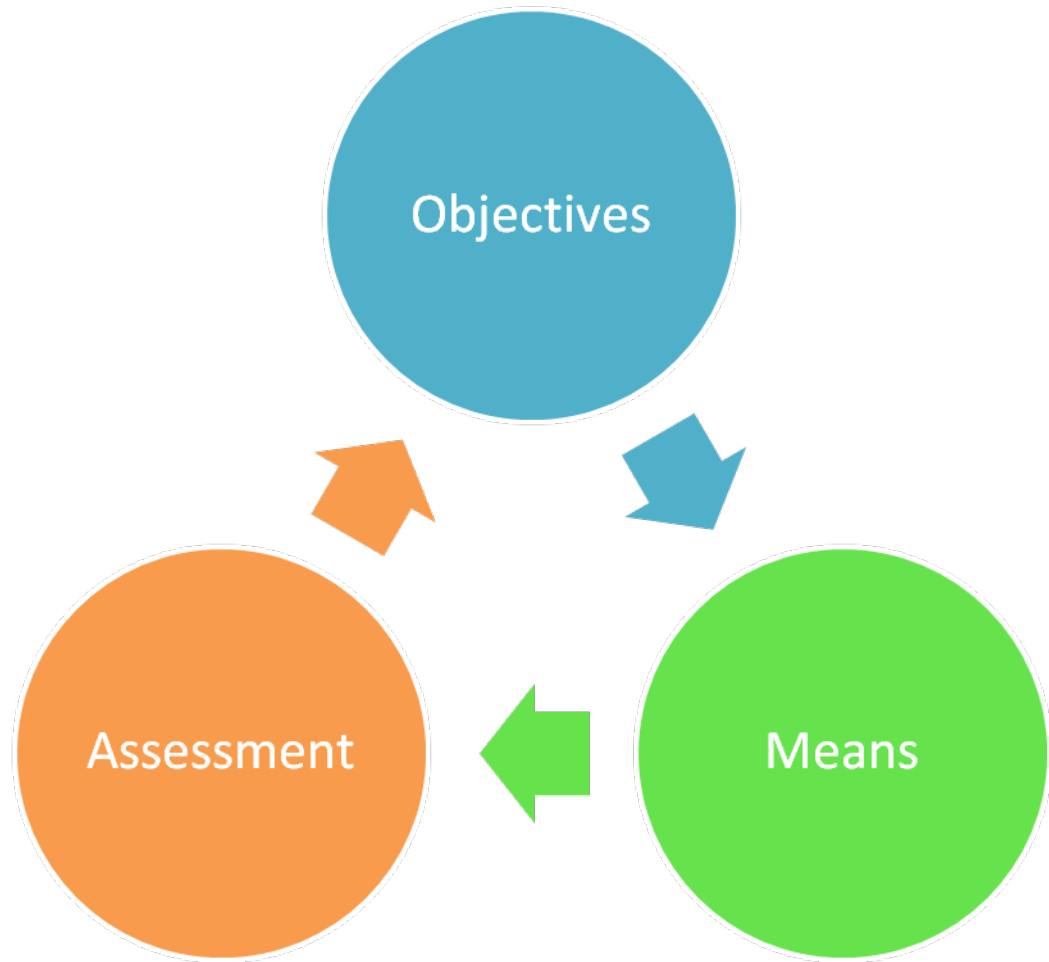


Objectives	Knowledge	Skills	Behaviours
<ul style="list-style-type: none"> To be able to perform general cardiological assessment and treatment of patients with inherited or familial cardiovascular disease. 	<ul style="list-style-type: none"> Describe the incidence and prevalence of inherited cardiovascular disorders in the local community. State the basic knowledge of cardiac embryology and major gene families involved in cardiogenesis. Describe the principles of Mendelian inheritance. Describe the principles of polygenic cardiovascular diseases (such as hypertension, diabetes and dyslipidaemias) Recall knowledge of major monogenic cardiovascular diseases; hypertrophic cardiomyopathy, familial aortopathies such as the Marfan syndrome, Ehlers Danlos syndrome, and William's syndrome; familial dilated cardiomyopathies; familial channelopathies; familial disorders of septation; familial basis of conotruncal anomalies; trisomies in particular trisomy 21; familial dyslipidaemias in particular disorders of the low density lipoprotein receptor. Explain the familial basis of inherited cardiac tumours 	<ul style="list-style-type: none"> Take a relevant history and perform an appropriate clinical examination. Evaluate relevant family history and construct a family pedigree. Distinguish autosomal dominant, autosomal recessive, X-linked, and mitochondrial patterns of inheritance. Demonstrate how to counsel index cases, family members at risk on the probability of being affected by a genetic cardiovascular disorder. Recognise problems with pedigree interpretation such as incomplete penetrance, variable expressivity, and age related patterns of expressivity. 	<ul style="list-style-type: none"> Cooperate with clinical geneticists Develop a systematic method of approaching a family with a potentially inherited cardiovascular disease. Adopt appropriate counseling skills to explain, educate and inform patients fully of the nature of their disease, the diagnostic tests used to make a diagnosis and the inherent strengths and weaknesses of such diagnostic tests in individuals at risk. Consult with patients and their family members improving recognition and management of familial cardiovascular disease Consult with medical professionals of other specialties on patients with genetic disorders

- 01 History
- 02 The El
- 03 Non In
- 04 Inv
- 05 **Genetics**
- 06 Clinica
- 07 Cardiv
- 08 Acute C
- 09 Chroni
- 10 Myoca
- 11 Pericar
- 12 Cardia
- 13 Conge
- 14 Pregna
- 15 Valvula
- 16 Infectiv
- 17 Heart F
- 18 Pulmor
- 19 Rehab
- 20 Arrythr
- 21 Atrial F
- 22 Syncop
- 23 Sudder
- 24 Diseas
- 25 Peripe
- 26 Trombo
- 27 The Ca



Educational process



Assessment & Certification...

Professionalism

Decision making, communication and leadership are core competencies for Medical Specialists.

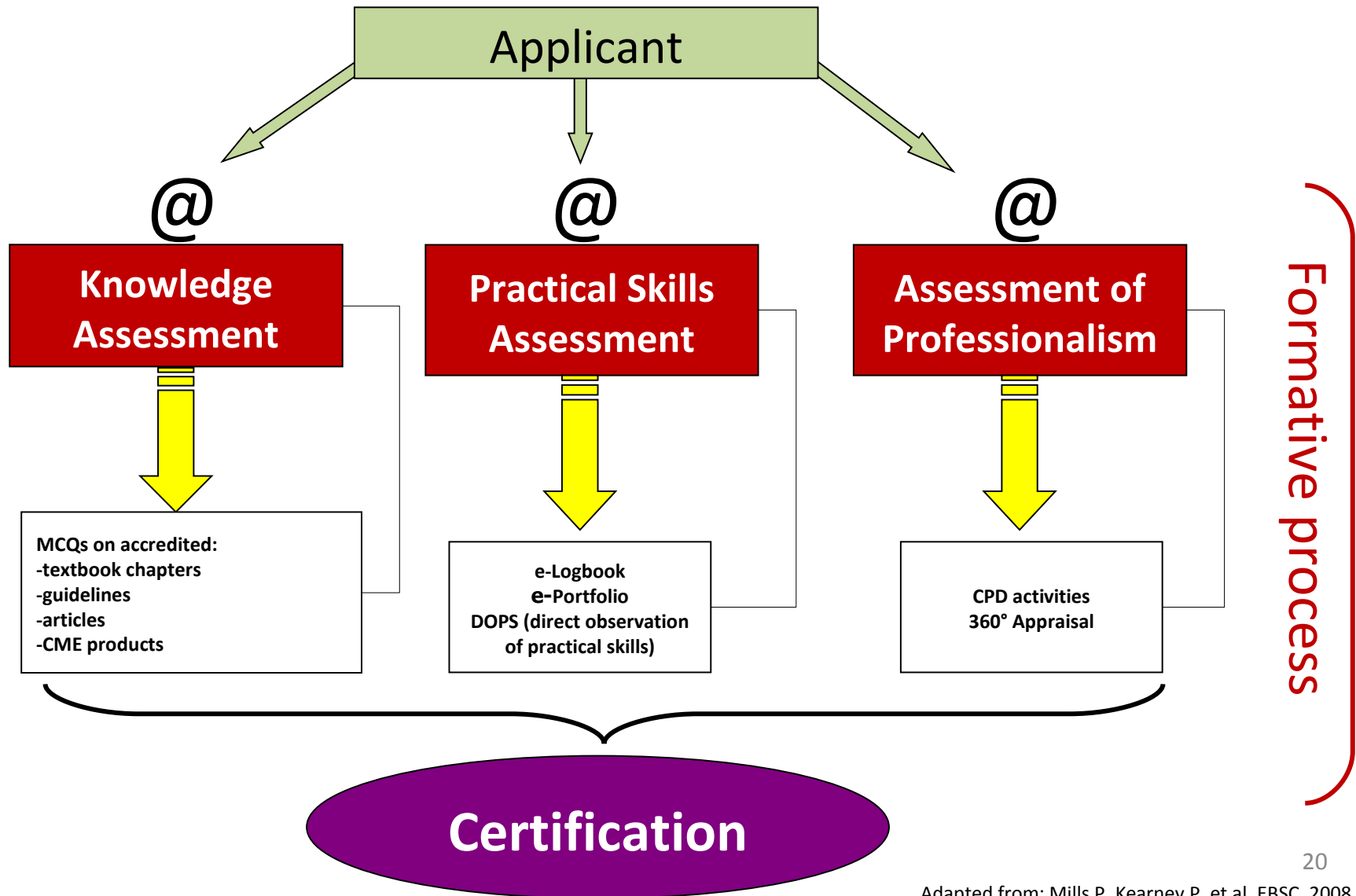
Continued Medical Education (CME) and Continued Professional Development (CPD) are generally accepted performance metrics for professionalism.

Multidisciplinary team training in realistic environment allows Medical Specialists to train and be assessed by colleagues. Reflection upon outcome, the trainee is likely to improve behaviours and attitudes.

Tools: log of CME/CPD, assessment using multi-source feedback (360° Appraisal), scenario based simulation training and assessment

Tools: curriculum, educational content, MCQ's

...supported electronically



e-Platform Pilot Project

ORIZONE

- Pilot Project agreed for a period of 2 years with Orzone

- Specialties involved:

Anaesthesiology

Cardiology

Intensive Care Medicine

Radiology

- After evaluation, possible extension to other specialties

Key functionalities and features

Trainee

- Logbook for procedures and activities
- Access to up to date European/National educational content
- Unlimited amount of formative tests
- Overview of training program through curriculum planner

Trainer

- Structured training program through curriculum planner
- Continuous reports on trainees' progress
- Less need for gathering educational material

Key functionalities and features

Specialist

- Logbook for procedures for future revalidation process
- Logbook of CME/CPD activities
- Access to subspeciality curriculum, guidelines and formative tests

Key functionalities and features

EU/National Administrator

- User friendly administration for content creation
- Simplified process for MCQ creation and approval process
- Creation of unlimited amount of formative and summative tests

National Authority / National Society

- Facilitates integration of National/European curriculum
- National reports of trainees' performance metrics
- Quality assurance
- Summative tests easily administered



Curriculum planner

All Active

Timescale:

Month



Year

Today: Dec 15

Angiography



13 Congenital Heart Disease in Adult Patients

09 Chronic Ischaemic Heart Disease



10 Myocardial Disease
Topic not started

Dec

Jan

Feb

Mar

Calendar



December 2009



	M	T	W	T	F	S	S
v49	1	2	3	4	5	6	7
v50	8	9	10	11	12	13	14
v51	15	16	17	18	19	20	21
v52	22	23	24	25	26	27	28
v53	29	30					

Curriculum news

Rural STEMI Patients Benefit from Routine Early PCI Post-Thrombolysis

European Society of Cardiology

090904 Patients with ST segment elevation myocardial infarction (STEMI) who live in remote areas and receive initial thrombolysis fare better...

FAME 18-Month Data: FFR Continues to Improve Outcomes vs. Angiography

Cardiology Bulletin

090904 In an 18 month update of the FAME trial, use of fractional flow reserve (FFR) measurement to guide percutaneous coronary intervention...

In Pilot Study, EPO Improves Ejection Fraction in Cardiomyopathy Patient

Medinews Network

090904 Use of low dose epoetin β (EPO) improves ejection fraction without any adverse events in cardiomyopathy patients following percutaneous...

Positive Signs from Phase 2 Trial of Factor Xa

Recent events

All

To do 3

Tests 5

Activities 28

Date	Type	Event
Yesterday		Approved: Ambulatory ECG
Yesterday		Approved: Ambulatory ECG
091201		Approved: ECG
091129		Passed: Formative test 06, Topic 09



ESC General Cardiology Core Curriculum

Curriculum information

The Core Curriculum for the General Cardiologist, first published in 2006, expands on the syllabus by defining; teaching, learning and assessment methods. The Update 2008 is now available following consultation with all ESC Constituent Bodies.

More on the curriculum

- ▶ Foreword and Introduction
- ▶ Rationale
- ▶ General Aspects of Training in the Specialty
- ▶ Assessment methodology

- ▶ Learning objectives
- ▶ Knowledge
- ▶ Skills
- ▶ Professionalism
- ▶ Levels of competence

Topics

- 01 History taking and clinical examination
- 02 The Electrocardiogram: standard ECG, amb...
- 03 Non Invasive Imaging - Echocardiography, ...
- 04 Invasive Imaging - Cardiac Catheterisation ...
- 05 Genetics
- 06 Clinical Pharmacology
- 07 Cardiovascular Disease Prevention
- 08 Acute Coronary Syndromes (ACS)
- 09 Chronic Ischaemic Heart Disease
- 10 Myocardial Disease
- 11 Pericardial Disease
- 12 Cardiac Tumours
- 13 Congenital Heart Disease in Adult Patients
- 14 Pregnancy and Heart Disease

Educational material

A



Acute and Chronic Heart Failure (Diagnosis and Treatment)

17 Heart Failure (HF)

User rating: ●●●●●Your rating: ●●●●●

Versions	Published	Size	Format
Executive summary	2007 02 16	353 kB	Adobe PDF
Full text	2006 05 31	2 237 kB	Adobe PDF
Pocket guidelines	2006 06 04	435 kB	Word document
Web site	-	-	-

Authors:

Ian Graham FESC, Chairperson, Dan Atar FESC, Knut Borch-Johnsen, Gudrun Boysen, Gunilla Burell, Renata Cifkova FESC, Jean Dallongeville, Guy De Backer FESC, Shah Ebrahim, Bjørn Gjelsvik, Christoph Herrmann-Lingen, Arno Hoes, Steve Humphries, Mike Knapton, Joep Perk FESC, Silvia G. Priori FESC, Kalevi Pyörälä FESC, Zeljko Reiner FESC, Luis M. Ruiloba FESC, Susana Sans-Menendez, Wilma Scholte

Knowledge

Knowledge overview

Topics

- *Breast radiology
- *Cardiac Radiology**
- *Chest Radiology
- Gastrointestinal and Abdominal Radiology
- Head and Neck Radiology
- *Interventional Radiology
- Musculoskeletal Radiology
- Neuroradiology
- Paediatric Radiology
- Urogenital Radiology

*Cardiac Radiology

Formative tests



Currently there are no tests available

Summative tests



Currently there are no tests available

Objectives and Educational Content



Topic objectives

- ▶ **Cardiac radiology is an important and rapidly developing field in radiology. The use of cardiac imaging has progressed over the last decade to invol ...**
- ▶ **The principle is to acquire:**

- ▼ **The following manifestations of cardiovascular disease, including trauma, have to be covered during the general radiological training. This should i ...**

The following manifestations of cardiovascular disease, including trauma, have to be covered during the general radiological training. This should include formal teaching and exposure to clinical case material.

Knowledge objectives

Coronary artery disease including acute coronary syndromes - Myocardial ischaemia - Myocardial infarction - Post myocardial infarction syndrome ...

Valve disease - Stenosis and incompetence of cardiac valves - Endocarditis - Sub and supra-valvar disease - Subvalvar apparatus disease:

- Valve disease
- Stenosis and incompetence of cardiac valves
 - Endocarditis
 - Sub and supra-valvar disease
 - Subvalvar apparatus disease

The pericardium - Tamponade and restrictive disease - Acute pericarditis - Tuberculous disease - Malignant pericardial disease

Cardiac tumours - Intracardiac tumours, i.e. myxomas, haemangiomas, and sarcomas - Secondary tumours - Tumours invading the heart

Cardiomyopathy - Acute myocarditis - Dilated cardiomyopathy - Restrictive and obstructive cardiomyopathy - Cardiomyopathy related to systemic di ...

Time remaining: **1h 30m**



[Instructions](#)

[Complete test](#)

Pages: 1 2 3 4 5 6

Navigation controls: Previous, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, Next

Status: 5 of 120 questions answered.

Legend: Unanswered Answered Current Uncertain

Question 115 / 120

A 64-year-old man was admitted with an 8 hour history of chest pain. ECG showed acute anterior ST elevation myocardial infarction. BP was 120/80 mmHG and he was cold and clammy. He underwent PCI to the LAD with a good angiographic result. No other coronary stenoses were noted. He continued to complain of shortness of breath with a BP of 120/80 mmHg and a poor urine output.

Following PCI, a chest X-ray showed pulmonary oedema, unresponsive to a furosemide bolus. An echocardiogram revealed a substantial antero-septal wall motion abnormality with a hypokinetic postero-lateral wall and a moderate jet of central mitral regurgitation.

Right heart pressures (mmHg)

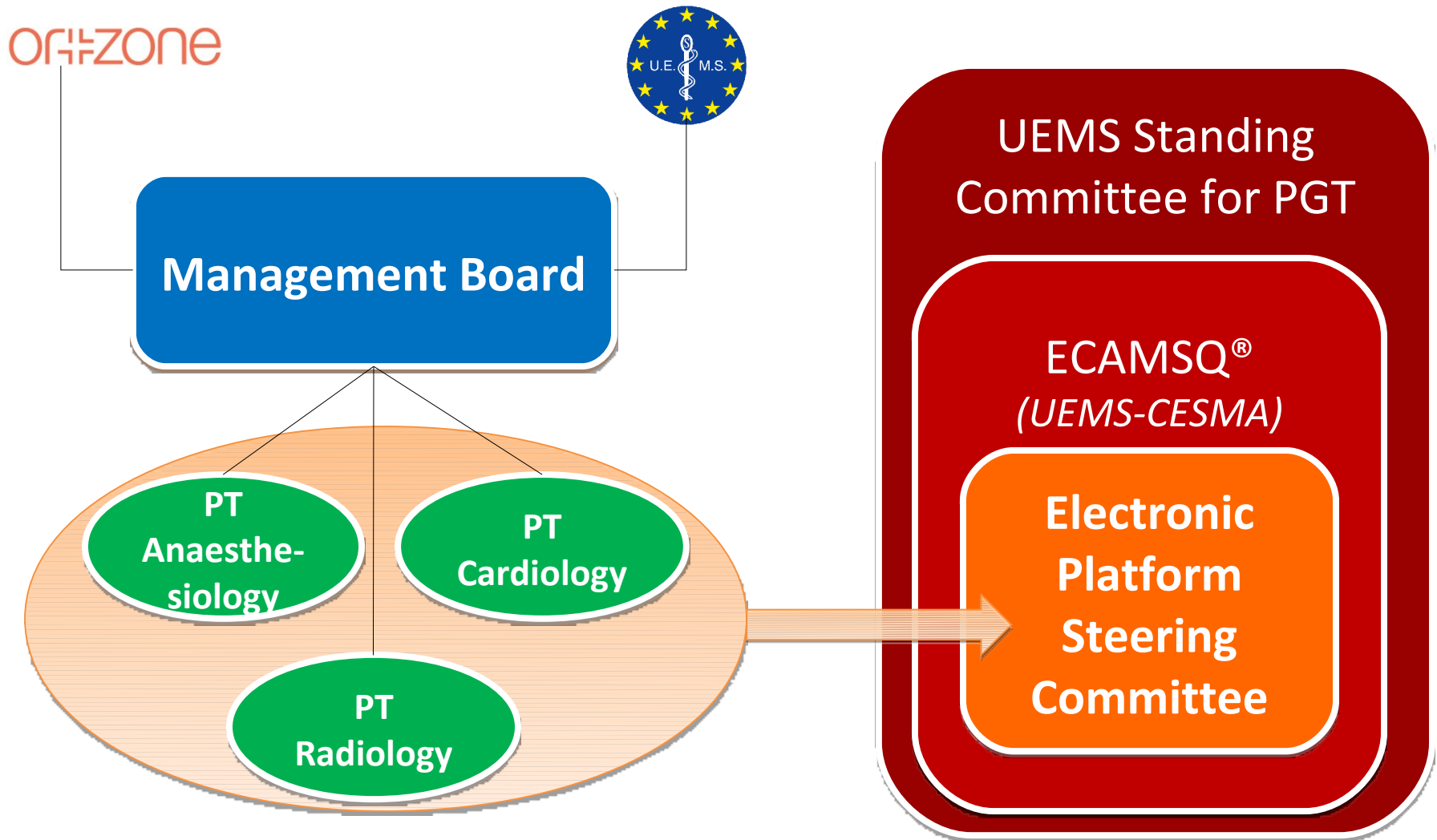
right atrium	14
right ventricle	60/6
pulmonary artery	60/24
pulmonary artery wedge mean	24
systemic vascular resistance	3,500 dynes.sec/cm5
cardiac index	1.8 L/min/m2

Which of the following is the most appropriate next step?

- Dopamine at a dose of >5 µg/kg/min
- Epinephrine (adrenaline)
- Fluid challenge
- Intravenous glyceryl trinitrate
- Norepinephrine (noradrenaline)

Mark this answer as uncertain – go back and review it later.

Proposed Governance Structure



First pan-European pilot test of knowledge assessment

Intensive Care
Medicine

4th February 2011

Ireland, Norway, Portugal
& the UK

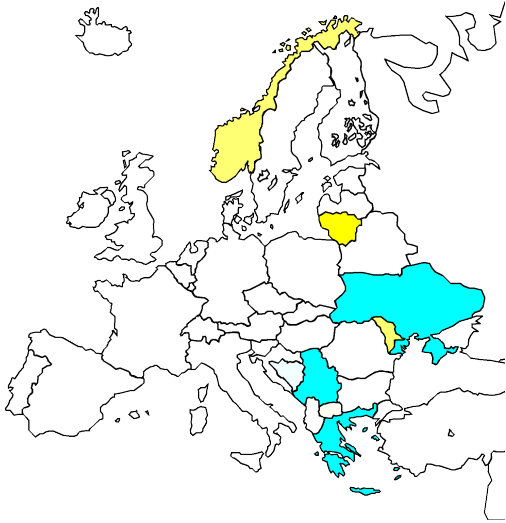


Next steps...

- ✓ January-June 2011: Pilot phase with next MCQ tests
 - 13th May 2011: UEMS Board of Anaesthesiology
150 trainees over 15 training centres in 10 countries
 - 12th June 2011: UEMS Section of Cardiology
- ✓ 2012: Implementation of the process
- ✓ 2017: Full deployment of ECAMSQ[®] and first “*diplomas*” delivered

How to assess Medical Specialists qualifications?

- **develop harmonised curricula in each specialty**
- **ensure that all member states adopt the curricula and translate them into their national system**
- **ensure that all Medical Specialists have the same main core competencies in their specialty across Europe**



HOW is the (Postgraduate) Specialist Training assessed in the different EU Member States

Final Examination

Certification

License to Practice

License to be reimbursed

Diploma of the University

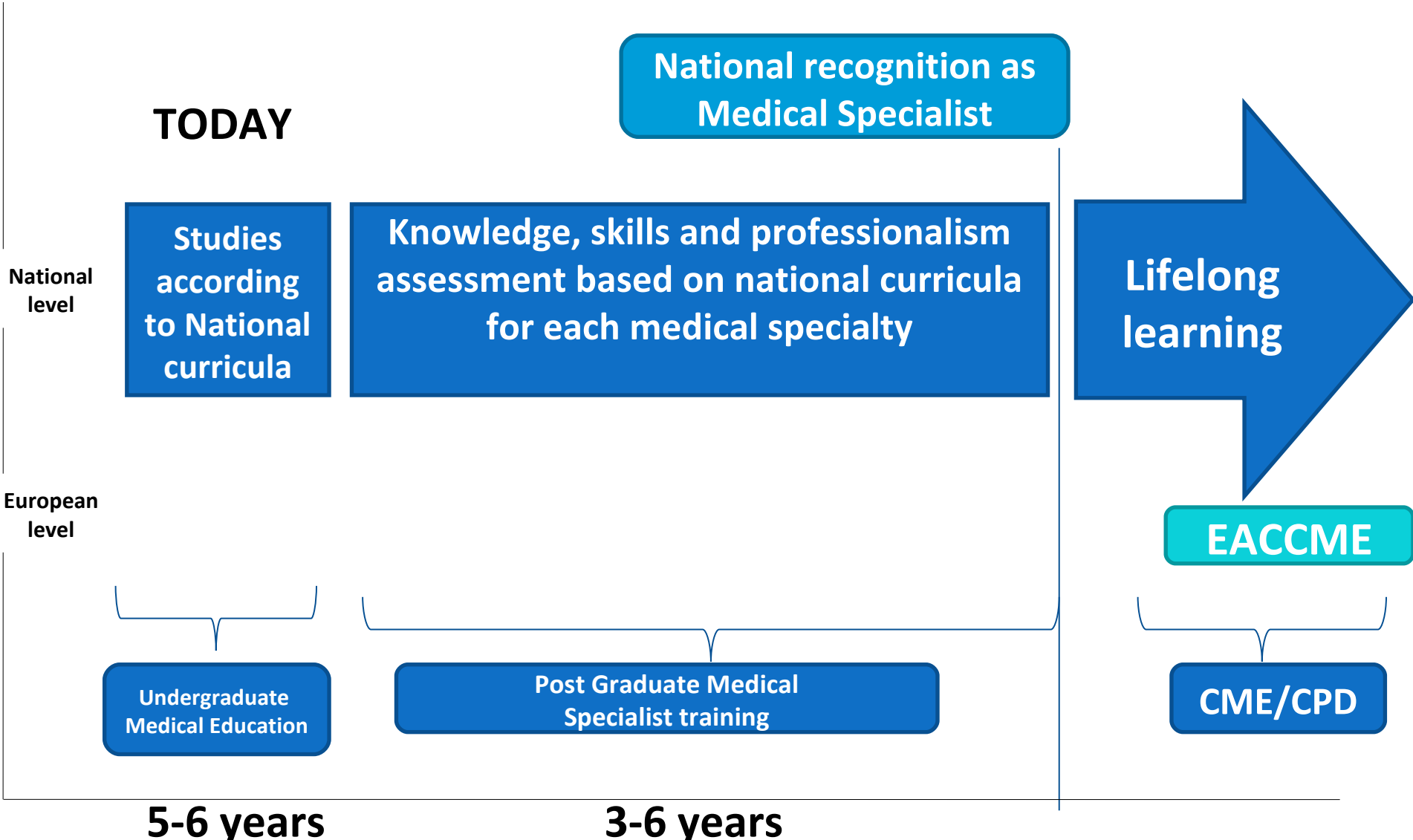
ECAMSQ[®] aims

- **to address the issue of medical specialist qualifications across Europe and ensure that medical specialists meet the highest standards of qualification (to assure best quality and safety of care for patients)**
- **to assess and certify medical specialists' competence on the basis of harmonised European standards developed by the UEMS**

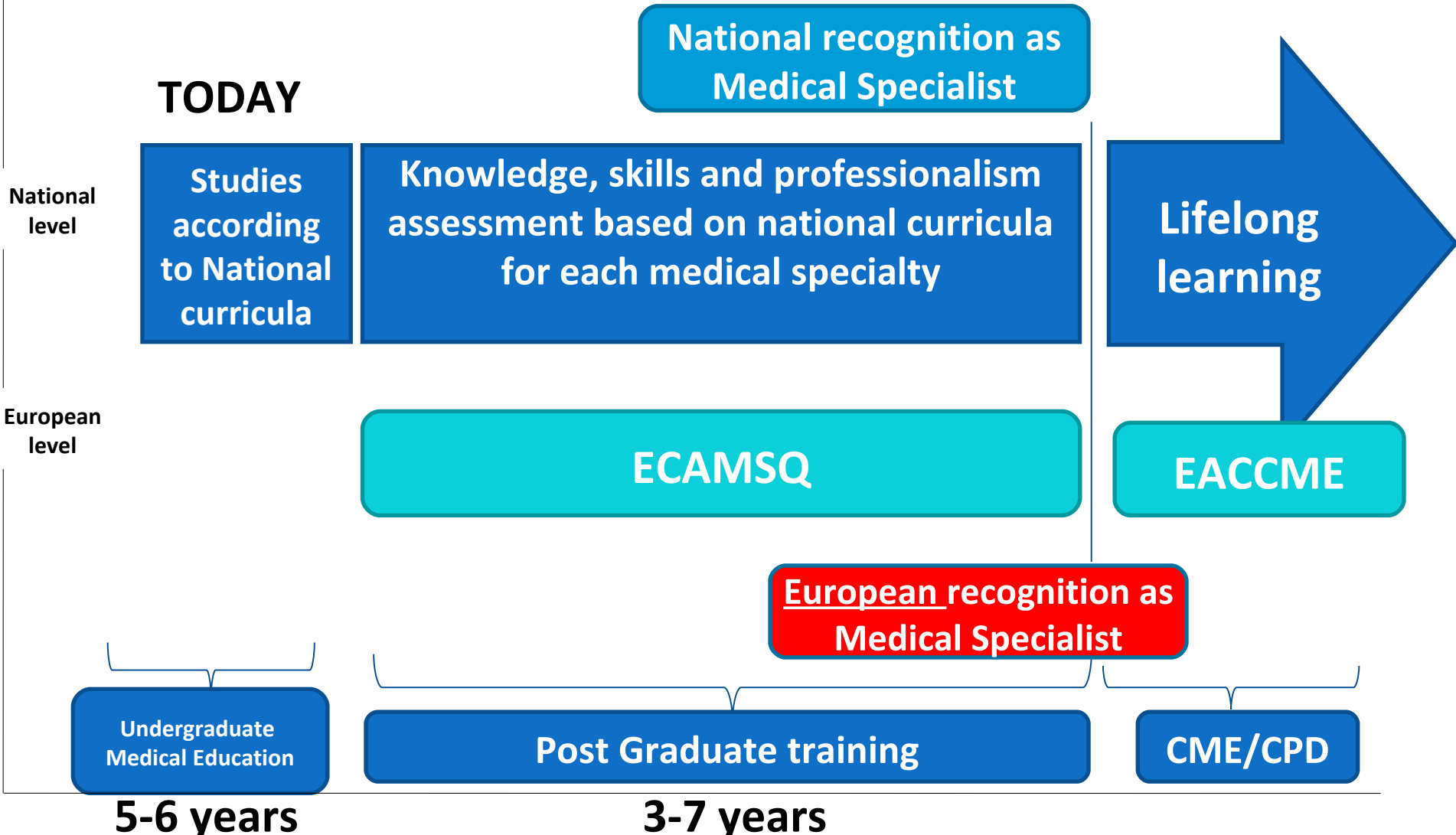
ECAMSQ® objectives

- **individual certification of medical specialists' competences**
- **harmonisation of Medical Specialists Qualifications across Europe**
- **harmonisation of existing European assessment of Medical Specialists Qualifications**

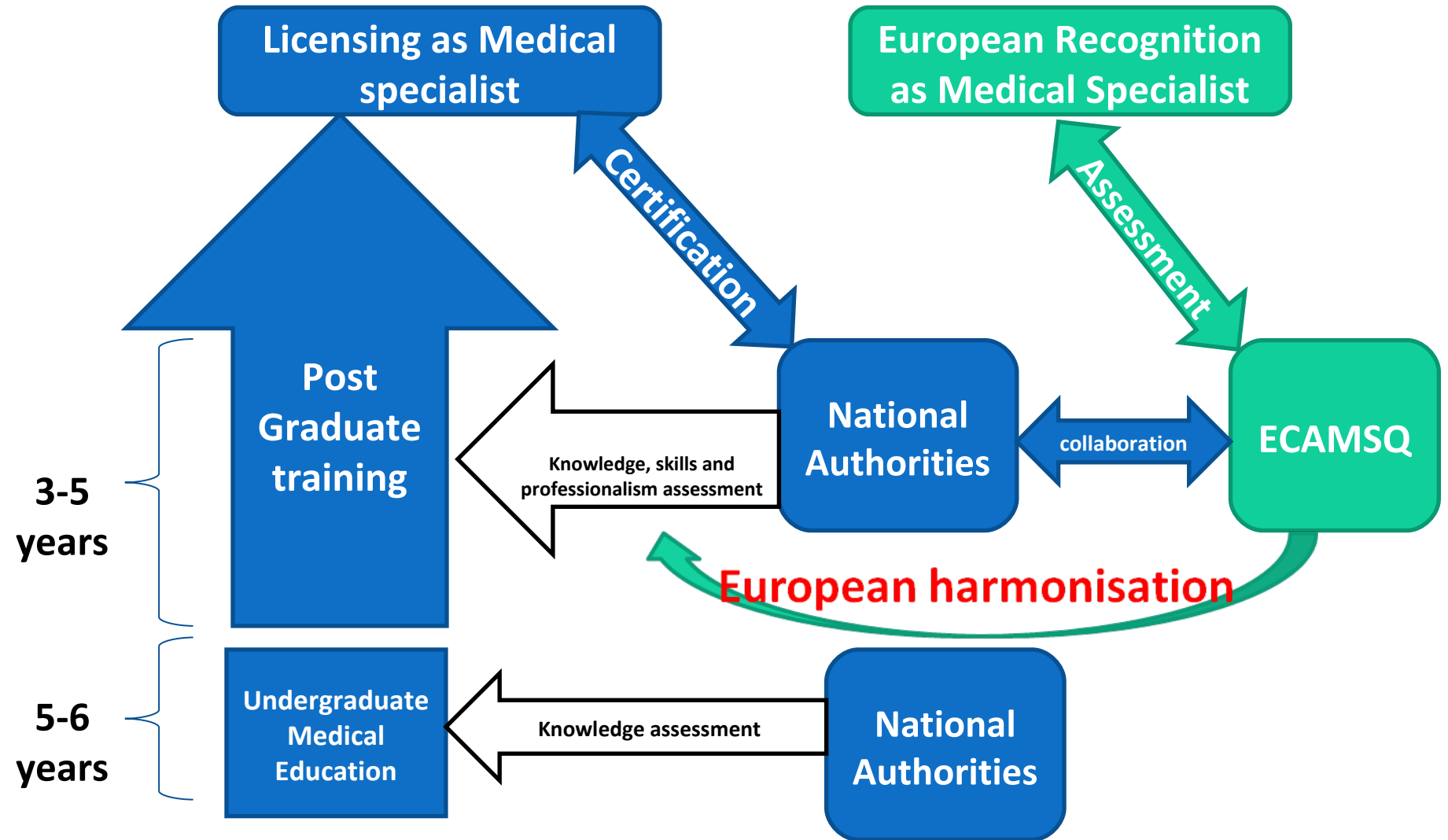
Challenge of the ECAMSQ (1)



Challenge of the ECAMSQ (1)



National and European recognition as medical specialist

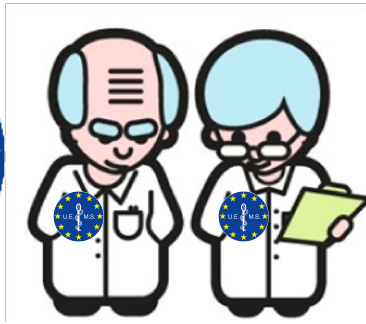


EUROPEAN CERTIFICATION

What Should be Certified in the Future?

- ➡ **European Educational/Training Programmes of (sub)Specialists in training (ends with a Certification)**
- ➡ **Certification of pre-existing specialists/subspecialists (European exam? Grandparent rule?)**
- ➡ **Certification of training centers/trainers (visitations?)**
- ➡ **Re-certification of individual specialists/subspecialist with UEMS-EACCME credits (every 5 years?)**

Quality assurance underway...



Assessment of competence:
knowledge, skills and professionalism
item 20

This path was made thanks to
the active participation of
National Authorities and the
UEMS Specialist Sections and
European Boards

Item 1

National Authority

Item 3

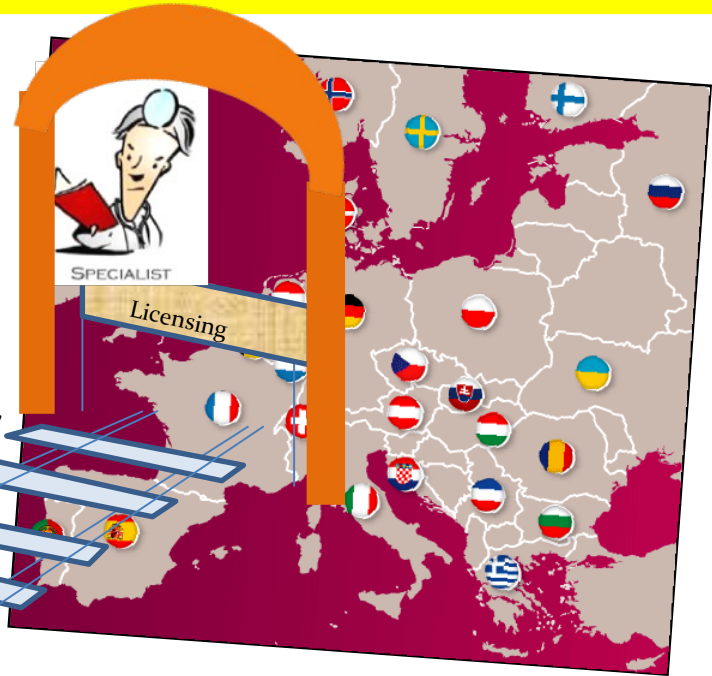
P

Item 15

G

Item 27

Licensing



Medical trainee

UEMS Specialist Sections and European Boards

European Accreditation: We need to work together !

