

European Examination in General Cardiology (EEGC)

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European Examination in General Cardiology

What it is designed to do

How it fits in with cardiology training

What it looks like

How trainees are advised to prepare

Running the exam

How it is developing

Q&A



What it is designed to do



Part of assessment strategy

Assessment of adequate core cardiology knowledge

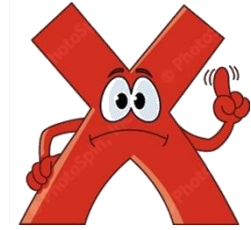
Part of an assessment strategy for specialist trainees in cardiology



Specialist training completion & certification at national level



What it is not



Not a measure of clinical competence

Not an exit exam



How it fits in with cardiology training



UNION EUROPÉENNE DES MÉDECINS SPÉCIALISTES EUROPEAN UNION OF MEDICAL SPECIALISTS



PRESIDENT: DR ROMUALD KRAJEWSKI SECRETARY-GENERAL: DR EDWIN BORMAN TREASURER: DR GIORGIO
BERCHICCI LIAISON OFFICER: DR ZLATKO FRAS

Training Requirements for the Specialty of Cardiology *European Standards of Postgraduate Medical Specialist Training (UEMS 2012/29 Cardiology)*

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Preamble

The UEMS is a non-governmental organisation representing national associations of medical specialists at the European Level. With a current membership of 34 national associations and operating through 39 Specialist Sections and European Boards, the UEMS is committed to promote the free movement of medical specialists across Europe while ensuring the highest level of training which will pave the way to the improvement of quality of care for the benefit of all European citizens. The UEMS areas of expertise notably encompass Continuing Medical Education, Postgraduate Training and Quality Assurance.

It is the UEMS' conviction that the quality of medical care and expertise is directly linked to the quality of training provided to the medical professionals. Therefore the UEMS has committed itself to contribute to the improvement of medical training at the European level through the development of European Standards in the different medical disciplines. No matter where doctors are trained, they should have at least the same core competencies.

In 1994, the UEMS adopted its Charter on Post Graduate Training aiming at providing the recommendations at the European level for good medical training. Made up of six chapters, this Charter set the basis for the European approach in the field of Post Graduate Training. With five chapters being common to all specialties, this Charter provided a sixth chapter, known as "Chapter 6", that each Specialist Section was to complete according to the specific needs of their discipline.

More than a decade after the introduction of this Charter, the UEMS Specialist Sections and European Boards have continued working on developing these European Standards in Medical training to reflect modern medical practice and current scientific findings. In doing so, the UEMS Specialist Sections and European Boards did not aim to supersede the National Authorities' competence in defining the content of postgraduate training in their own State but rather to complement these and ensure that high quality training is provided across Europe.

At the European level, the legal mechanism ensuring the free movement of doctors through the recognition of their qualifications was established back in the 1970s by the European Union. Sectorial Directives were adopted and one Directive addressed specifically the issue of medical Training at the European level. However, in 2005, the European Commission proposed to the European Parliament and Council to have a unique legal framework for the recognition of Professional Qualifications to facilitate and improve the mobility of all workers throughout Europe. This Directive





ESC Core Curriculum for the General Cardiologist (2013)

European Society of Cardiology

Committee for Education

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CURRENT OPINION

ESC Core Curriculum for the General Cardiologist (2013)

European Society of Cardiology

Committee for Education

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Content of core clinical curriculum

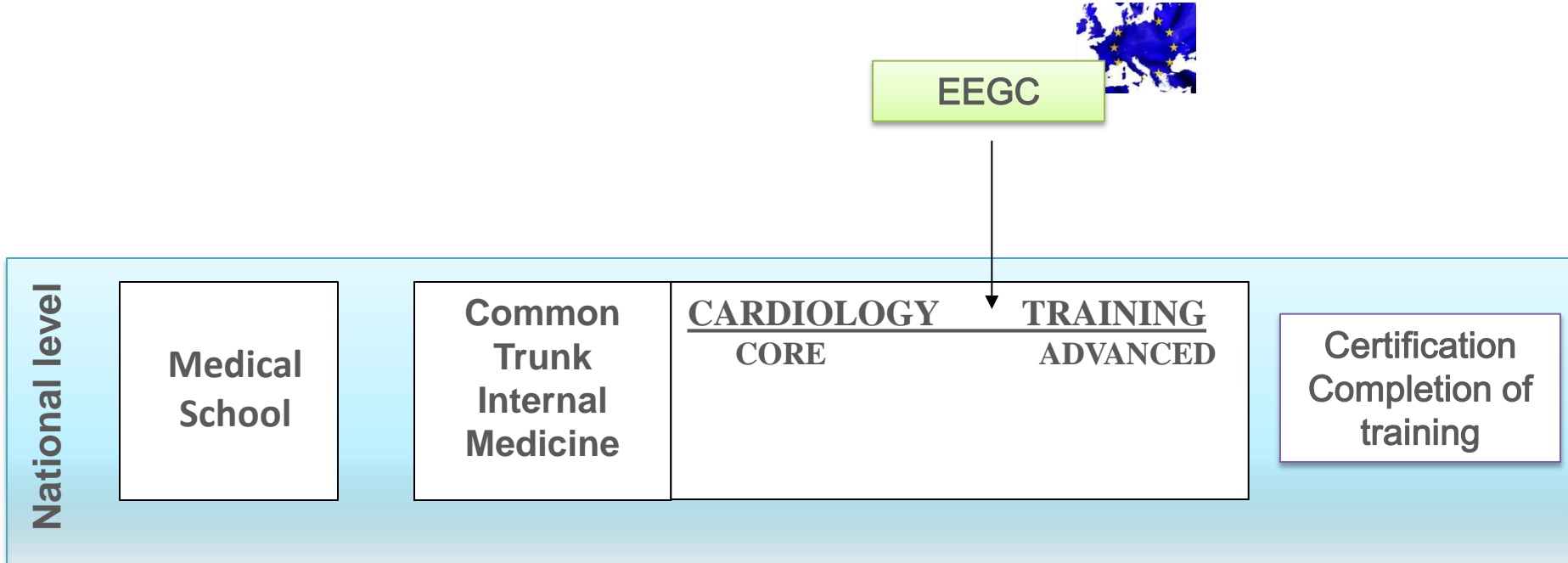
Topic 15 - Valvular Heart Disease

Knowledge

- Haemodynamics of VHD;
- Pathophysiology: effects of VHD on the heart and on the circulation;
- Natural history of VHD;
- Strengths and limitations of diagnostic techniques, in particular echocardiography, and the value of additional procedures such as fluoroscopy, X-ray CT, magnetic resonance imaging, and invasive haemodynamic assessment;
- Values and limitations of different risk scores applied to VHD;
- Indications, benefits, and risks of medical therapy, surgical and percutaneous interventions for VHD;
- Indications for and management of anticoagulant therapy;
- Role of concomitant coronary heart disease in VHD and its impact on surgical management;
- Follow-up and medical management of native VHD;
- Follow-up and management of repaired valves, bioprostheses, mechanical prosthetic valves, and percutaneously repaired and implanted valves.



Integrating with subsidiarity principle



Methods of Assessment

EEGC	knowledge based assessment
DOPS	directly observed procedural skills
Mini-CEX	mini clinical evaluation exercise
CBD	case based discussion
Multi-rater feedback	behaviour & attitudes



What it looks like?



Multiple Choice Question

a clinical stem

+

possibly an image

still image (approx 16%) or video loop (approx 8%)

followed by a single question

then a series of five choices (single correct)



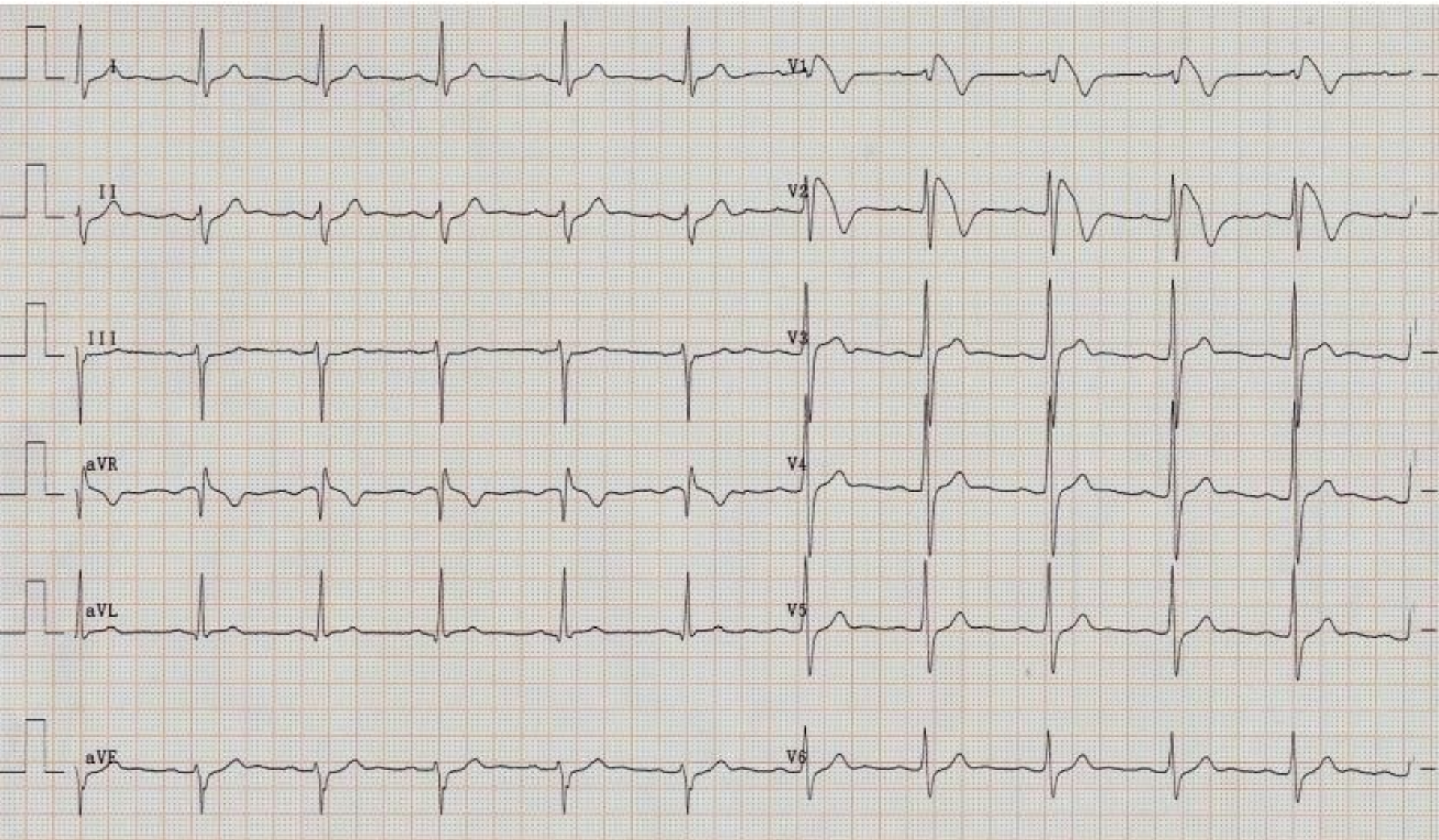
Clinical stem

A 62-year-old man presented to the emergency department with an episode of loss of consciousness whilst at a football match.

He had been previously fit and well apart from hypertension. He was on regular treatment with chlorthalidone 50mg once daily and amlodipine 5mg once daily.

On examination he was awake and alert, his blood pressure was 180/110 mmHg. His ECG is shown.





The question:

What is the most likely diagnosis?

Five options:

- A Anterior STEMI**
- B Aortic dissection**
- C Brugada syndrome**
- D Hypokaleamia**
- E Pulmonary embolism**

Correct answer is C



Delivery in testing centres

- 120 MCQs in 3 hours
- Individual computers



- Invigilated sitting at exam centre



How trainees are advised to prepare?



How to Prepare

Advice:

Cardiology training prepares trainees for a career in cardiology and hence an aptitude for lifelong learning is essential.

No limited list of appropriate sources of information.

Trainees are encouraged to read widely and use whatever means they prefer for keeping up-to-date.

Examples of good sources of knowledge include:

- ✓ Textbooks e.g. ESC textbook of Cardiovascular Medicine
- ✓ Guidelines e.g. ESC clinical practice guidelines
- ✓ Educational articles e.g. Education in Heart
- ✓ On-line reviews e.g. theheart.org
- ✓ On-line educational material e.g. Cardiosource, ESC webinars
- ✓ Academic journals e.g. NEJM, EHJ, Lancet, Heart



Running the EEGC



EEGC governance & development

Exam Board National Society + ESC + UEMS-CS

Question Writing Group



Question Selection Group



Standard Setting Group



Exam Performance Review Group



Question Writing Group



Meet twice a year

3-5 nominated writers per country

~ 25 MCQs submitted/writer/year

Peer review groups (4-6 reviewers / group)

Editing / accept / return to sender / reject

~ 10 accepted to the MCQ bank/writer



Question Selection Group



Meets once a year

1 member per country

Focus on a category of MCQs from the bank

Select 36 MCQs

Selection template

50% new 25% used 2 yrs 25% used 3 yrs

quarter of questions should have image(s)

still (16%) or video (8%)

avoid repetition of topic



EUROPEAN
SOCIETY OF
CARDIOLOGY®

Selection groups



Category 1 – Valvular and Myocardial Disease (approximately 20% of the questions)

15 Valvular disease | 16 Infective endocarditis | 10 Myocardial Disease | 17 Heart Failure

Category 2 - Ischaemic Heart Disease (approximately 20% of the questions)

4 Invasive cardiac imaging | 7 Cardiovascular Disease Protection i) risk factors iii) dyslipidaemia iv) diabetes | 8 Acute Coronary Syndromes | 9 Chronic IHD | 19 Rehabilitation and exercise physiology

Category 3 - Rhythm Disorders (approximately 20% of the questions)

2 Basic Investigations – ECG, ambulatory ECG, exercise testing | 20 Arrhythmias | 21 Atrial fibrillation | 22 Syncope | 23 Sudden Cardiac Death and Resuscitation

Category 4 – Imaging and Adult Congenital Heart Disease (approximately 20% of the questions)

13 Adult congenital heart disease | 14 Heart disease in pregnancy | 3 Non-invasive imaging

Category 5 - General (approximately 20% of the questions)

1 Clinical skills history and examination | 24 Diseases of the Aorta and Trauma | 25 Peripheral Vascular Disease | 11 Pericardial disease | 12 Cardiac tumours | 18 Pulmonary hypertension | 5 Clinical Genetics | 6 Clinical Pharmacology | 7 Cardiovascular Disease Protection ii) hypertension | 26 Venous thrombo-embolism | 27 The Cardiac Consult (Non-cardiac disease and the heart)



Selection Group Role



Review

- Answer key correct? Question valid?
- Overlap? Drug names?
- Question consistent and accurate?
- Any change in medical knowledge?
- Any change in guidelines?

180 MCQs



Objective → select 150 MCQs for SSG

150 MCQs



Standard Setting Group

Meets once a year

1-2 members per country → 8-10 strong Group

not all are Question Writing Group members

trainees included

cannot be a Question Selector

Each reviews and scores all 150 MCQs

what % of 'just-passing' candidates would get this right?



Standard Setting Group



Scores for each MCQ reviewed

- eliminate highest and lowest
- individuals re-score after discussion
- too easy and too hard rejected
- 120 questions and 30 'spares' for Exam Board
- each MCQ with a score of % of 'just-passing' candidates would get this right



Agreeing on the final exam

Are we happy with the questions?

No overlap? Any change in guidelines?

No repetition? Accords with template?

Answer key correct?

Question valid? Images clear?

Question consistent and accurate?

Any change in medical knowledge?

→ Final selection of 120 MCQs



Exam Board

- **Exam performance review**
- **‘examinology’**
 - **psychometric analysis and pass mark adjudication**
 - **independent scrutiny of high stakes exam by University of Cologne**



How it is developing



Pilot phase

First pilot with the UK in 2009

- 60 candidates
- 22 ST3, 31 ST4
- Mean score ST3 or below 61.4 (n=23)
- Mean score ST4 or above 65.5 (n=37)
- Validation of exam template

→ **mandatory annual exam since 2010**

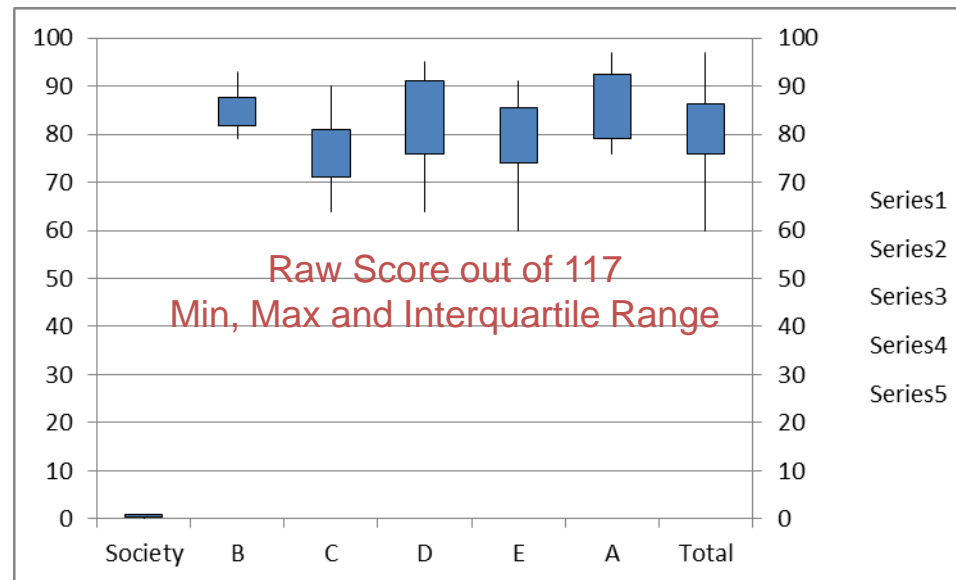
~100 candidates/year



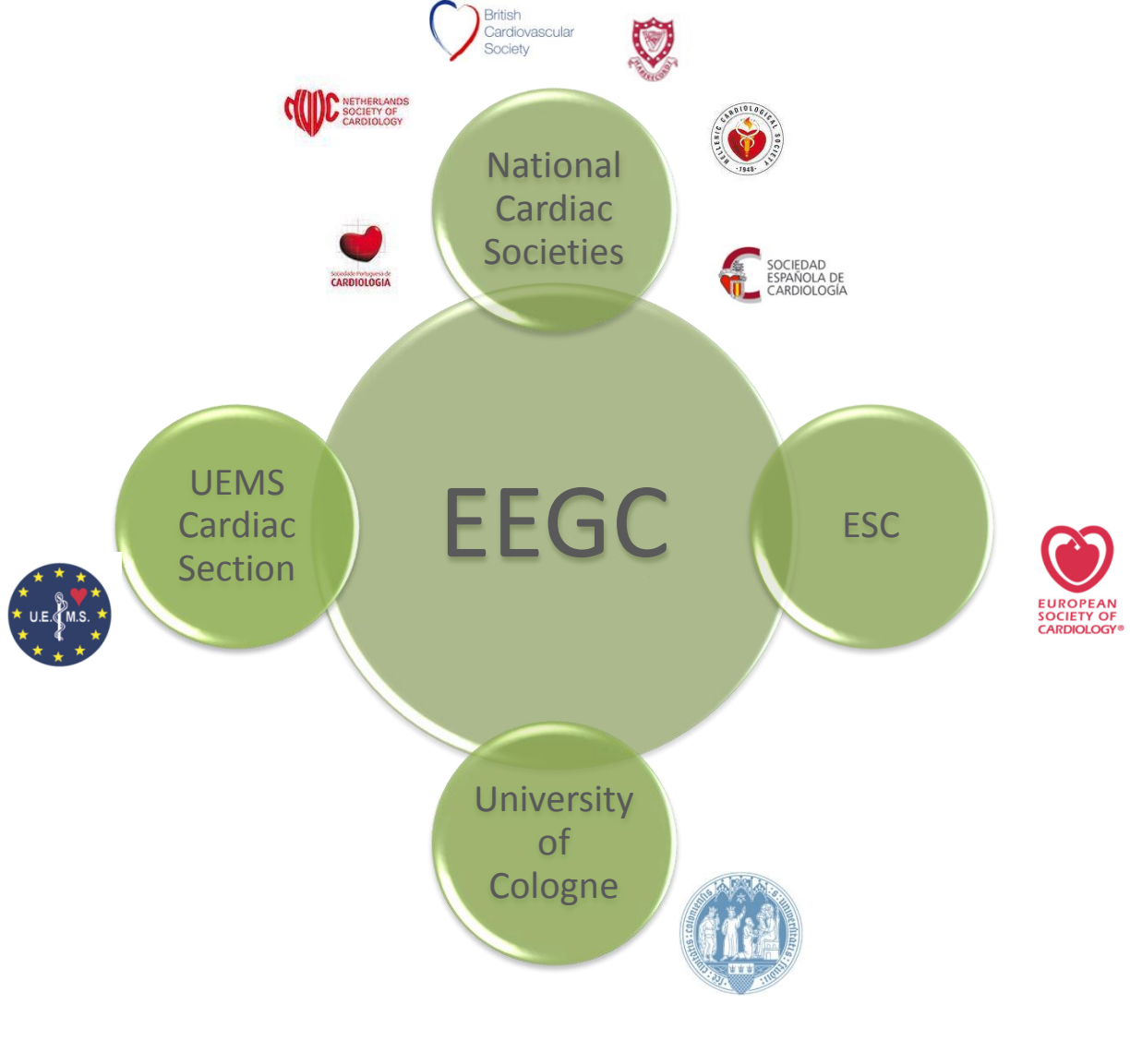
European Pilot in 2012

Spain, Portugal, UK, Netherlands and Ireland
80 candidates

Pearson Vue centres in 5 countries



Collaborative initiative



NS → ESC & UEMS-CS → NS

National Societies

- Agree operating procedures with ESC & UEMS-CS
- Recruit members to QWG, QSG, SSG, Exam Board
- Manage registration of national candidates
- Determine 'role' of exam in the national system
- Issue certificates to trainees

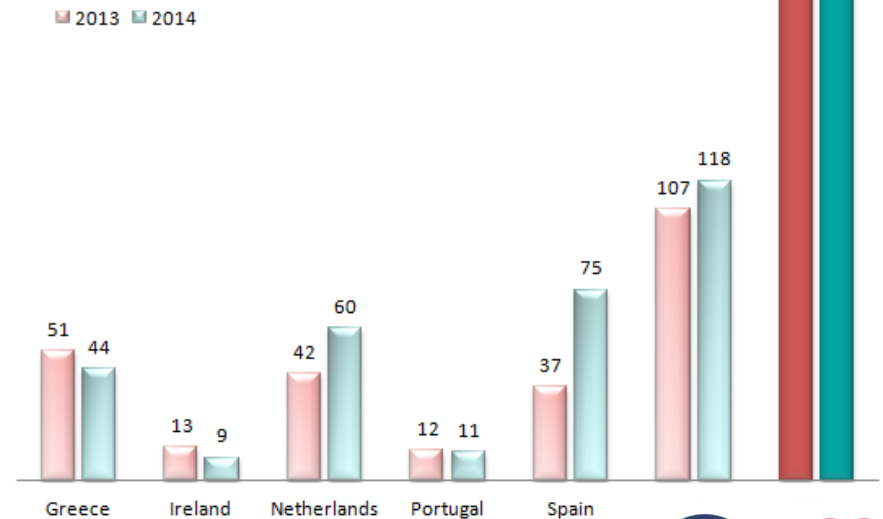


Current status

6 Countries involved

- Greece
- Ireland
- Netherlands
- Spain
- Portugal
- United Kingdom

Increasing number of candidates



Process overview

NCS



PV



Candidates



Committee / Exam board



European Examination General Cardiology

ASSESSMENT OF TRAINEES' GENERAL CARDIOLOGY KNOWLEDGE

Questions?

