

**CESMA autumn meeting** Brussels - Belgium

## **Combined secretariat for European Board Exams** – why ?

## from the EBOT examination

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Brussels, 12<sup>th</sup> December 2015



### introduction

- **■** interim and final exam 2015
- what have we achieved
- costs of a successful european board exam
- how can we reduce costs
- conclusions



### Introduction

• the European reality

Europe as a continent is a collection of countries with different backgrounds

The standards of medical education from undergraduate to resident training, postgraduate training and to professional competence are high but vary across different countries

The standards of speciality training are also very demanding but different among all European countries



### introduction

• the principles within EU

One of the major concerns of the UEMS since its creation in 1958 has always been to harmonize the different training programs for the different specialties in order both to facilitate the free movement of physicians and to ensure the highest possible health care for the European citizen.

Everything starts with the definition of clear and harmonized training programs and curricula so that candidates have a strong base to build their education upon.



### • why should there be a certification

• the pillars for patient safety

Developing and maintaining high standards in education and training is in the interest of patient safety and healthcare. This <u>is particularly</u> important in an environment of rapidly changing scientific knowledge, high patient expectations and increasingly sophisticated health care delivery systems.

Good quality patient care requires each registered Medical practitioner to continuously participate in learning activities and the need to prove this life long commitment from specialized doctors – (recertification).



#### • what is the purpose

• under EU regulations

Although there is automatic recognition arrangements enshrined within the European legislation to facilitate the free movement of European Nationals the truth is that this in not equivalent and is no guarantee that employers will accept the same administrative recognition !

### • why take the certification

• at present, more and more exceptions to the rule

### - What is the relevance of an European Board Certification

With the **exception of few specialities** (anaesthetics, urology,...), **in a few countries**, they are not part of a formal professional recognition of specialist doctors and they have **no legal status either nationally or at European level**. <u>Nevertheless they are consider an asset in specialist doctor's CV or</u> <u>portfolio and in certain specialities it is already recognised as the national</u> <u>final qualification</u> (at end of training).

In orthopaedics, EBOT has helped 68% of the fellows to get new appointments in Europe (2011 data)

### • why take the certification

• if we look across different European Boards

where does the EBOT Exam stands CESMA
 Council of European Specialities Medical Assessments

- 27 European Boards with examinations (under UEMS) Paediatric Surgery, Neurosurgery, Nuclear Medicine, Pathology, Plastic & Reconstructive surgery, Urology, Vascular Surgery, <u>Anaesthetics</u>, Pneumology, <u>General surgery</u> and Orthopaedics & Traumatology ...

- Criteria for application, format, price, frequency ....

- Most boards allow last year residents to take part I

- 7 European Countries have adopted the Anaesthetic Board Examination as their final exam at end residency (compulsory)



#### **•** assessment at the end of training

• is there a global format for assessment at the end of training?

what we have at present is a group of countries in Europe with similar residency training programs with no comparable standards

the only way to converge on the quality of what we all do is to assess the end of training (outcome of residency program)

could double checking be a solution ?



### • are we double checking ?

### • let's look at our data from the EBOT **PAST DATA**

Exam Y	ear Venue	Nº Candidate	es Pass	<b>Fail</b>	%
2001	Rhodes - Greece	11	8	3	73%
2001	Stockholm - Sweden	16	10	6	63%
2003	Amsterdam – Netherland		9	3	75%
2004	Berlin - Germany	15	10	5	67%
2005	Madrid - Spain	10	5	5	50%
2006	Torino – Italy	18	12	6	67%
2007	Vienna - Austria	12	7	5	58%
2008	Geneva – Switzerland		6	7	46%
2009	Brussels – Belgium	31	15	16	48%
2010	**Lisbon – Portugal	35	25	10	72.5%
<b>2011</b>	**Paris – France	60	39	21	66.5%
<b>2012</b>	**Dublin – Ireland	78	58	20	74,3%
2013	**Barcelona - Spain	90	66	24	74%
<b>2014</b>	** Vienna – Austria	86	64	22	75%
2015	**Rotterdam - Holland	105	70	35	67%

\*\*In 2010 the rules changed and the written paper was set separately + trainees



#### **•** assessment at the end of training

• is there a global format for assessment at the end of training?

by analysing these results we may go back and screen the different stages of the training process in each country with the same objective in mind – <u>improve the quality of post</u> <u>graduate medical training !</u>

from EBOT – countries in Europe that no candidates have ever passed the exam – one went back and <u>restructured the</u> <u>Orthopaedic Training Scheme and final assessment</u>, others sat back and put pressure on lowering the standards of the exam



#### **•** at the second decade of the exam

## ▲ what can we do to improve these standards ?

- A. Exam preparation
- **B.** Final assessment



- ▲ we are addressing two different issues optimizing results:
  A.Exam preparation
  B.Final assessment
- A. Exam preparation
- -Interim Exam 2011
- -Examiners Courses prior to every final exam 2000
- -Review Courses (under review by EFORT) for candidates
- European Educational Platform (EEP) (EFORT) 2015

European countries have approved a syllabus + European curriculum + relevance of a final assessment



# EFORT -JOINT EHONO

### planned for the future

Due to the different European backgrounds we believe it would be to the benefit of all the National Associations of Were developed what we Under the leadership of Manuel Cassiano Neves – EFORT President 2013.14 consider the minimal requirements for training in orthopaedics across arope. Based on these premises we think that one of the roles of the would have an enormous task in front of us but we is to build up a European orthopaedic and traumatology of minitted to involve all national associations in the process of form, which would recognise the National Associations, Hine goal difference and the soal difference and the soal to develop the basic surriculum for orthopaedics an d traumatology ¥1 to progress with the examination process. Ight due to several political issues and cuts in n should be build up in a way in care systems in Ethope, it is fi d<sub>1</sub>be applied We are aware that there is still a wide hopaedic specialization is practiced in each ropeān country what mākes this task a real challenge. We should preserve the particularities of each association what requires a broad curriculum, allowing easy applicability.

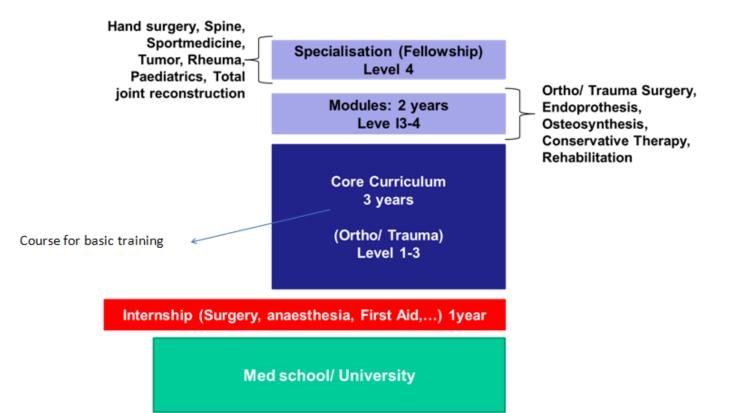


### **planned for the future**

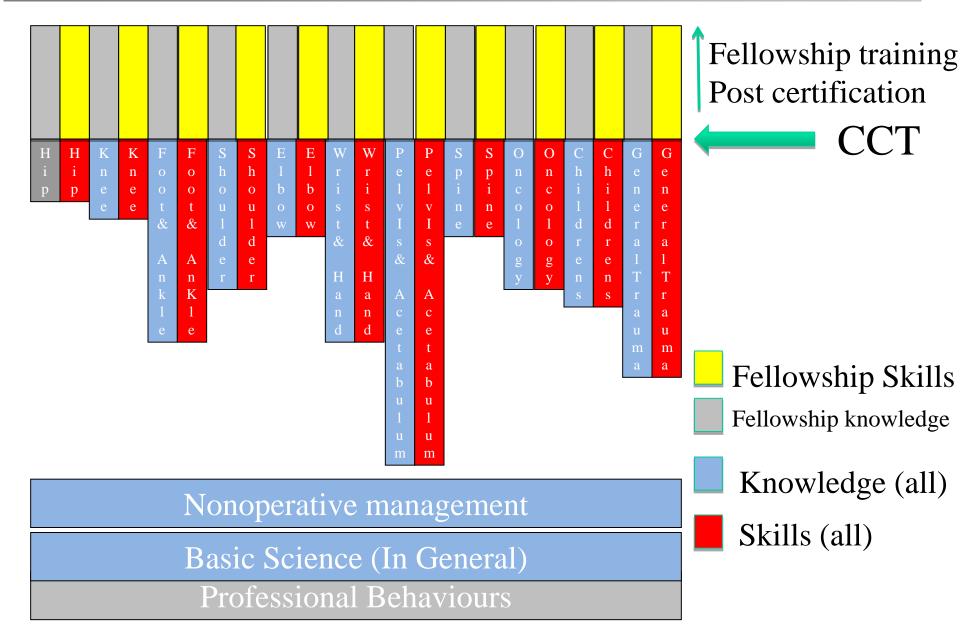
#### • European Educational Platform EEP - 2012 EFORT

3. Frame of educational structure in time and level of competence











### • Interim Exam

### Happens regularly since 2011 - MCQ

It is run always in the Spring (<u>14<sup>th</sup> of April 2015</u>) all around Europe on the same day at the same time

• 305 registered for Interim, 262 candidates have taken the exam in their departments (last year there were 149)

Run in English – decision taken not to do different translations

free of charge for the next 3 years (sponsored by the European Board of Orthopaedics and Traumatology from 2013)



### **©** interim exam 2011, 2012, 2013, 2014, 2015

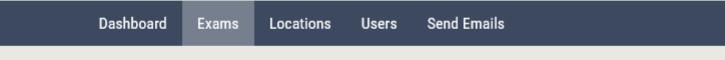
### • the results

▲ provide information to the resident, to the head of training and to the National body controlling orthopaedic residency

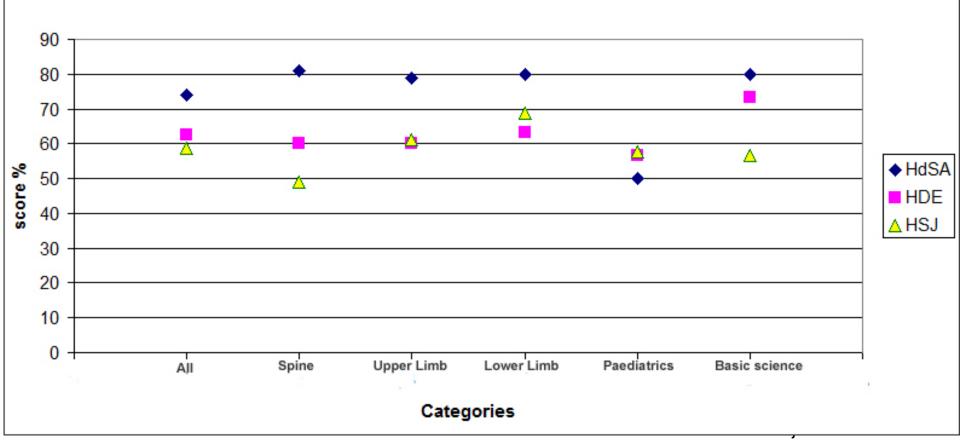
- what sort of more information do they need ???
- can it be used as part of the national annual appraisal ?
- let's look at some examples







EBOT Interim Exam 14 April 2015





European board of Orthopaedics and Traumatology Dashboard Exams Locations Send Emails Users EBOT Interim Exam 14 April 2015 Candidates per year of residency 262 Candidates 80 Candidates 70 O Years of training 1 Years of training 2 Years of training 60 3 Years of training 4 Years of training 5 Years of training 6 Years of training Scores (%) 7 Years of training 8 Years of training 30 20

10 Candidates



European board of Orthopaedics and Traumatology

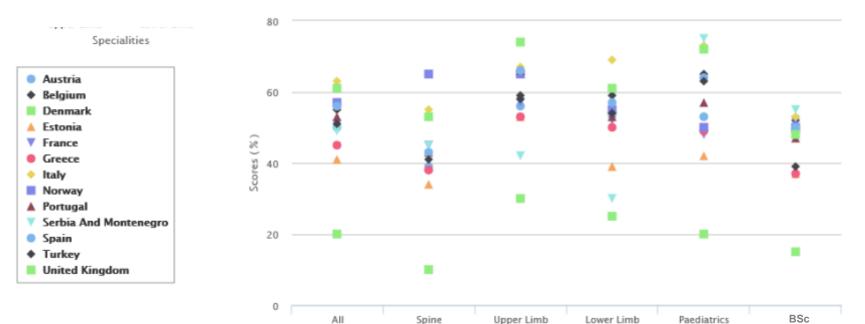
Locations

Dashboard Exams

Users Send Emails

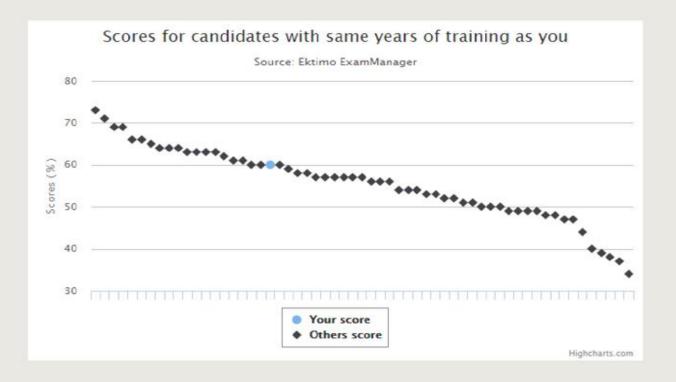
#### EBOT Interim Exam 14 April 2015

Admin scatter plot: Candidates scores in countries





	European board of Orthopaedics and Traumatology									
	Dashboard	Exams	Locations	Users	Send Emails					
EBOT Interim Exam 14 April 2015										
Raul										





Final EBOT Exam

Happens regularly since 2000 in the first weekend in October

It has 2 parts - Part I written(Spring) + Part II oral (October)

Last year in Rotterdam – Holland (next year will be in Lisbon)

Different locations is Europe with easy low cost access

Run in English – discussion in 5 different stations



### • Final Exam

▲ we are addressing two different issues optimizing results : A.Exam preparation B.Final assessment

• B. Final Assessment (EBOT Fellowship Examination) :

-separated written part I (*Pearson Vue* examining centres) -invited all European speciality societies to join the Writing Committee

-improved the set up of part II – examinations halls -optimize Writing Committee performance *(three to four years appointment)* + setting basis for a Validation Committee





### • Final Exam

▲ we are addressing two different issues optimizing results : A.Exam preparation B.Final assessment

### • EBOT Writing Committee :

-meets twice a year in Lisbon – Autumn meeting to review new questions and Spring to choose MCQ both exams

-together with example we developed very sophisticated program for MCQ

-we are always in need for new MCQ !!!!

## **Item Analysis**



010 - Pos	sterior dislocation of the shoulder		
	Approved Interim exam Easy Upper Limb Lars Neumann 2/5/2011 12:00:00 AM 2/23/2015 8:15:02 AM	Item analysis: Exam 2012 rpb: 0.30 good p-value: 0.72 Tgs: 21 Bgs: 13 Di index: 0.36 Questions: 100 Candidates: 85	<b>Question</b> <b>Quality</b> <i>Point bi-serial</i> <i>DI-Index</i>
A	A sulcus sign 05.88%		Question Difficulty
в	Fixed external rotation 14.12%		P-value
c 🗉	Absent glenohumeral rotation 07.06%		
D 🖻	Fixed internal rotation 71.76%		



# **Selecting Questions**



Dashboard	Questions	Exams	Users	Search by title or id	🙏 📃 Options 👻		
Spine: 21   Upper Limb: 20   Lower Limb: 20   Paediatrics: 20   Basic Science: 20   Total: 101		Selection details					

#### Add questions to "Final Exam 2015"

Use the checkbox to the left of each question to select it for the exam and then click on save at the top or bottom of the page to add it to the exam.

uthor Topic Sta		Stat	us	Туре		Difficulty		Quality		
All	•	All	- Ap	proved	• Final	exam	- All	:*	Good	
Save	Previous pa	ige Page 1 / 5	lext page						05 H	
					Category	Easy	Mod	Diff	Very diff	Not grad
3	3 Elderly fall at home - Phillip Sell			Spine	21	5	10	3	2	1
_				Upper Limb	20	5	10	3	2	0
				Lower Limb	20	5	11	4	0	0
				Paediatrics	20	5	10	4	1	0
5	5 Unilateral radicular pain		Basic Science	20	4	13	2	1	0	
	- Philip Se	11		Total	101	24	54	16	6	1
~				15						
									-	
9		sign is diagnostic for: imann		12.5						
	- Lars Neur			10				_		
-				ad. 7.5						
		adrilateral space in the shoulder		TY						
15 Quadril	Quadrilate			5						
				2.5						
				0	Spine	Upper Limb	Lower Limb	Paediatrics	Basic Science	

Not graded 📕 Very difficult 📗 Difficult 📕 Moderate

Easy

#### Features include:

- •Select questions by filtering and sorting.
- •Question details
- •Exclude from previous exams
- •Preview exam as candidate
- •Export questions

## **Exam Metrics**



Crea	ite new exam	¥										
	Select exam	SE	KR20	м	HSC	LSC	SD	CNT	M-1 SD	Ang	75% / 5	Q
۵	Exam 2011	4.36	0.84	51.13	77	30	11.01	109	61.14	12-1	54.75	100
۵	Interim exam 2011	2.42	0.97	<mark>46.08</mark>	74	9	14.25	121	59.34	-	55.50	50
_	Exam 2012	4.38	0.80	<mark>53.96</mark>	78	35	9.81	85	62.77		54.75	100
۵	Interim Exam 2012	4.36	0.78	54.22	72	32	9.34	102	62.56	2	51.75	100
≙	Exam 2013	4.36	0.81	<mark>54.5</mark> 4	76	34	9.90	101	63.45	3 <u>5</u> 3	54.00	100
۵	Interim Exam 2013	4.45	0.75	<mark>48.07</mark>	66	17	8.83	102	55.89	•	48.00	100
_	Exam 2014	4.33	0.81	54.78	78	23	10.03	107	63.80	*	55.50	100
۵	Interim Exam 2014	4.20	0.86	55.99	77	2	11.14	102	66.13	2	56.25	100

**Features include:** 

•Standard error

•Kuder Richardson 20

- Mean
- Standard deviation
- Cut scores





• Final Exam

▲ we are addressing two different issues optimizing results : A.Exam preparation B.Final assessment

• B.Final Assessment – Oral Part II Exam in English :

-it was run in Rotterdam and local organizer is Dennis Darte

• 173 candidates registered for the written part I (**146 succeeded** – 26% trainees) – every year numbers > rapidly!! (*last year we had 98*)

• 20% will fail +10 will not turn up + 10% are last year residents BUT we will have ressits – we had 105 candidates in 2015 !



• Final EBOT Exam

For the first time we had over 100 candidates for part II exam Part II oral (3 and 4<sup>th</sup> of October 2015)

- 105 candidates took the exam in Rotterdam – Holland

Location – at University Center (67% passing rate this year)

#### **Pool of 50 "Certified" EBOT Examiners for Exam Rotterdam**





Final Exam

## ▲ Final EBOT Examination – how will it be structured

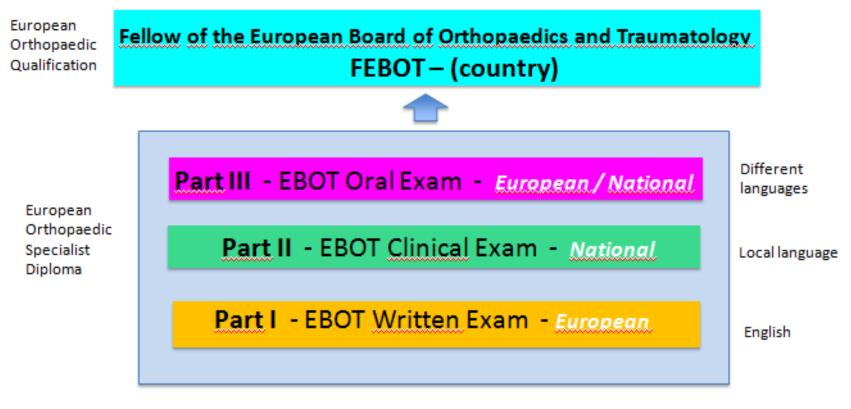
- <u>Written</u> **Part I** – <u>European wide</u>, run all around Europe different centres in each country

- <u>Clinical</u> **Part II** – <u>National</u>, run in each country, by their own board in their own language *with examiners appointed Nat Soc+EBOT* 

- <u>Oral</u> **Part III** – <u>European</u>, run at different centres in Europe, in english and other languages by multinational faculty appointed by the national societies



#### Assessment throughout European Orthopaedic Residency



Either alone or as part of the national resident's annual appraisal

Annual appraisal for European Orthopaedic Trainees (ALL)

Annual EBOT Interim Exam - European

English





- Final Exam
- ▲ we are addressing COSTS for optimizing results :

EBOT (expenses)	91.267,00
Writing Committee Meetings (2/year; up to 10 participants/meeting)	21 077,00
EBOT Exam (English)	55 190,00
IT support (application system/MCQ database/interim exam)	12 000,00
Misc.	3 000,00





- Final Exam
- ▲ we are addressing COSTS for optimizing results :

Income	58 500,00
Registration fees exam	55 000,00
Registration fees interim exam sponsored by UEMS	3 500,00
TOTAL EBOT Exam	39 040,00

• written part I –  $300 \in$  + oral part II –  $500 \in$  for EU citizens



#### • how can we reduce costs

• assess what we have in common

Accept what is different + centralize what in common

- Written exam with *Pearson Vue* CESMA negotiation
- Oral exam registration and preparation for the event
- Common Secretariat throughout the year
- Interim Exam CESMA negotiation
- Speciality manager / Examiners Courses / MCQ Courses

### conclusion

- European Board Exams are gaining broader base of support Europe wide *and throughout the world*
- more and more standards of these exams are being accepted
- tendency within EU is for European qualifications to take relevance over the national ones
- Common UEMS / CESMA structure will reduce costs, optimize outcomes implement good practices across different board exams

• we do need to work together on finding EU "sponsoring" for development of final assessment at the end of speciality training as a gold standard qualification across the EU



## Otherwise...

