Combined secretariat for European Board Exams – why?

from the EBOT examination

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**Chairman of EBOT Examining Committee

Brussels, 3rd December 2016
Combined secretariat for European Board Exams

- Introduction
- Interim and Final exam 2016
- 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.
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!
- **What is the relevance of an European Board Certification?**

With the exception of few specialities (anaesthesics, 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. Nevertheless they are consider an asset in specialist doctor’s CV or portfolio and in certain specialities it is already recognised as the national final qualification (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

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

- 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*

<table>
<thead>
<tr>
<th>Exam Year</th>
<th>Venue</th>
<th>Nº Candidates</th>
<th>Pass</th>
<th>Fail</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Rhodes - Greece</td>
<td>11</td>
<td>8</td>
<td>3</td>
<td>73%</td>
</tr>
<tr>
<td>2002</td>
<td>Stockholm - Sweden</td>
<td>16</td>
<td>10</td>
<td>6</td>
<td>63%</td>
</tr>
<tr>
<td>2003</td>
<td>Amsterdam – Netherlands</td>
<td>12</td>
<td>9</td>
<td>3</td>
<td>75%</td>
</tr>
<tr>
<td>2004</td>
<td>Berlin - Germany</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>67%</td>
</tr>
<tr>
<td>2005</td>
<td>Madrid - Spain</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>2006</td>
<td>Torino – Italy</td>
<td>18</td>
<td>12</td>
<td>6</td>
<td>67%</td>
</tr>
<tr>
<td>2007</td>
<td>Vienna - Austria</td>
<td>12</td>
<td>7</td>
<td>5</td>
<td>58%</td>
</tr>
<tr>
<td>2008</td>
<td>Geneva – Switzerland</td>
<td>13</td>
<td>6</td>
<td>7</td>
<td>46%</td>
</tr>
<tr>
<td>2009</td>
<td>Brussels – Belgium</td>
<td>31</td>
<td>15</td>
<td>16</td>
<td>48%</td>
</tr>
<tr>
<td>2010</td>
<td>**Lisbon – Portugal</td>
<td>35</td>
<td>25</td>
<td>10</td>
<td>72.5%</td>
</tr>
<tr>
<td>2011</td>
<td>**Paris – France</td>
<td>60</td>
<td>39</td>
<td>21</td>
<td>66.5%</td>
</tr>
<tr>
<td>2012</td>
<td>**Dublin – Ireland</td>
<td>78</td>
<td>58</td>
<td>20</td>
<td>74,3%</td>
</tr>
<tr>
<td>2013</td>
<td>**Barcelona - Spain</td>
<td>90</td>
<td>66</td>
<td>24</td>
<td>74%</td>
</tr>
<tr>
<td>2014</td>
<td>** Vienna – Austria</td>
<td>86</td>
<td>64</td>
<td>22</td>
<td>75%</td>
</tr>
<tr>
<td>2015</td>
<td>**Rotterdam - Holland</td>
<td>105</td>
<td>70</td>
<td>35</td>
<td>67%</td>
</tr>
</tbody>
</table>

**In 2010 the rules changed and the written paper was set separately + trainees**
- are we double checking?
- let’s look at our data from the EBOT *PAST DATA*

<table>
<thead>
<tr>
<th>Exam Year</th>
<th>Venue</th>
<th>Nº Candidates</th>
<th>Pass</th>
<th>Fail</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Lisbon - Portugal (english)</td>
<td>138</td>
<td>91</td>
<td>47</td>
<td>66%</td>
</tr>
<tr>
<td>2016</td>
<td><em>Madrid – Spain (spanish)</em></td>
<td>36</td>
<td>25</td>
<td>11</td>
<td>69%</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*in close cooperation with SECOT - Spanish Orthopaedic Society
*First EBOT Exam in another language – FEBOT-Spain
- From 2010 the EBOT exam was closed to the rest of the world and this is the data

<table>
<thead>
<tr>
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<th>Nº Candidates</th>
<th>Pass</th>
<th>Fail</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Lisbon - Portugal</td>
<td>37 (35)</td>
<td>25</td>
<td>10</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td>written part I</td>
<td>50</td>
<td>37</td>
<td>13</td>
<td>74% (72.5%)</td>
</tr>
</tbody>
</table>

**Oral part II**

| EU 12/14 (86%) | Non EU 13/21 (62%) |
- We are increasing in number of candidates

- Since 2010 we have been increasing 30 to 40% / Year
at the second decade of the exam

what can we do to improve these standards?

A. Exam preparation
B. Final assessment
at present

we are addressing two different issues optimizing results:

A. Exam preparation

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
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EFORT
Curriculum Guidelines
March 2015

EFORT
EUROPEAN EDUCATIONAL PLATFORM DRAFT CURRICULUM

The intention of this document is not to impose a European Curriculum but only to act as a guide for all Associations that want to implement a European Curriculum at the National Level.

Both UEMS and EFORT are aware that there is still a wide variation in Orthopaedics and Trauma Education in Europe and this document intends to help in harmonizing the different process of O&T Education in Europe. It is up to each National Association to adopt or adjust it to their National requirements.
• at present

**Interim Exam**

Happens regularly since 2011 – MCQ (on line)

It is run always in the Spring (14th of April 2016) 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*)

the results

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

let’s look at some examples
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European board of Orthopaedics and Traumatology

EBOT Interim Exam 14 April 2015

Focus on a country’s performance – let’s look at Portugal for instance!
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European board of Orthopaedics and Traumatology

Dashboard Exams Locations Users Send Emails

EBOT Interim Exam 14 April 2015

262 Candidates

Candidates per year of residency
European board of Orthopaedics and Traumatology

EBOT Interim Exam 14 April 2015

Admin scatter plot: Candidates scores in countries
Scores for candidates with same years of training as you

Source: Ektimo ExamManager

- Your score
- Others score

Highcharts.com
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
This year in Lisbon - Portugal

Different locations is Europe with easy low cost access

Run in English – discussion in 5 different stations
at present

**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-online)
  - invited all European speciality societies to join the Writing Committee
at present

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 examfolio we developed very sophisticated program for MCQ
-we are always in need for new MCQ !!!!
010 - Posterior dislocation of the shoulder

Status: Approved
Type: Interim exam
Difficulty: Easy
Category: Upper Limb
Created by: Lars Neumann
Created: 2/5/2011 12:00:00 AM
Last updated: 2/23/2015 8:15:02 AM

Stem
What is the most typical sign of a posterior dislocation of the shoulder joint?

Options:

A. Sulcus sign

B. Fixed external rotation

C. Absent glenohumeral rotation

D. Fixed internal rotation

Item analysis:
Exam 2012
r_Di: 0.30 good
p-value: 0.72
Tgs: 21
Bgs: 13
DI Index: 0.36
Questions: 100
Candidates: 85

Question Quality
Point biserial
DI-Index
Question Difficulty
P-value
Distractor efficiencies
All
Best performers
Worst performers
Selecting Questions

Features include:

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

**Features include:**
- Standard error
- Kuder Richardson 20
- Mean
- Standard deviation
- Cut scores

<table>
<thead>
<tr>
<th>Select exam</th>
<th>SE</th>
<th>KR20</th>
<th>M</th>
<th>HSC</th>
<th>LSC</th>
<th>SD</th>
<th>CNT</th>
<th>M-1 SD</th>
<th>Ang</th>
<th>75% / 5</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 2011</td>
<td>4.36</td>
<td>0.84</td>
<td>51.13</td>
<td>77</td>
<td>30</td>
<td>11.01</td>
<td>109</td>
<td>61.14</td>
<td>-</td>
<td>54.75</td>
<td>100</td>
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<tr>
<td>Interim exam 2011</td>
<td>2.42</td>
<td>0.97</td>
<td>46.08</td>
<td>74</td>
<td>9</td>
<td>14.25</td>
<td>121</td>
<td>59.34</td>
<td>-</td>
<td>55.50</td>
<td>50</td>
</tr>
<tr>
<td>Exam 2012</td>
<td>4.38</td>
<td>0.80</td>
<td>53.96</td>
<td>78</td>
<td>35</td>
<td>9.81</td>
<td>85</td>
<td>62.77</td>
<td>-</td>
<td>54.75</td>
<td>100</td>
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<tr>
<td>Interim Exam 2012</td>
<td>4.36</td>
<td>0.78</td>
<td>54.22</td>
<td>72</td>
<td>32</td>
<td>9.34</td>
<td>102</td>
<td>62.56</td>
<td>-</td>
<td>51.75</td>
<td>100</td>
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<tr>
<td>Exam 2013</td>
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<td>0.81</td>
<td>54.54</td>
<td>76</td>
<td>34</td>
<td>9.90</td>
<td>101</td>
<td>63.45</td>
<td>-</td>
<td>54.00</td>
<td>100</td>
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<tr>
<td>Interim Exam 2013</td>
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<td>0.75</td>
<td>48.07</td>
<td>66</td>
<td>17</td>
<td>8.83</td>
<td>102</td>
<td>55.89</td>
<td>-</td>
<td>48.00</td>
<td>100</td>
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<tr>
<td>Exam 2014</td>
<td>4.33</td>
<td>0.81</td>
<td>54.78</td>
<td>78</td>
<td>23</td>
<td>10.03</td>
<td>107</td>
<td>63.80</td>
<td>-</td>
<td>55.50</td>
<td>100</td>
</tr>
<tr>
<td>Interim Exam 2014</td>
<td>4.20</td>
<td>0.86</td>
<td>55.99</td>
<td>77</td>
<td>2</td>
<td>11.14</td>
<td>102</td>
<td>66.13</td>
<td>-</td>
<td>56.25</td>
<td>100</td>
</tr>
</tbody>
</table>
at present

**EBOT Writing Committee**

- Happens regularly since 2011
  - Meet twice a year always in Lisbon

- Spring meeting for preparation of new MCQ and Autumn meeting for selection and review MCQ

**Validation Committee** planned – chaired by Prof E.Barrena

- database of over 1.700 MCQs with detailed information on each one that we are reviewing as we get more information
For the first time we had over 100 applications for part II exam

Part II oral (3 and 4\textsuperscript{th} of October 2015)

- 98 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
For the first time we had over 150 candidates for part II exam.

Part II oral (1 and 2nd of October 2016)

- 245 candidates registered for written exam
- CONFIRMED oral - 138 for the English and 36 for the Spanish

Location – Lisbon (Marriott Hotel) + Madrid (Melia Castilla)

Pool of 75 “Certified” EBOT Examiners for Exam in Lisbon

Pool 40 “Certified” EBOT Spanish Examiners for Exam Madrid

*all costs of the Spanish EBOT Exam are covered by SECOT
Final Exam

**FINAL EBOT EXAMINATION** – how will it be structured:

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

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

- **Oral** Part III – European, run at different centres in Europe, in English and other languages by multinational faculty appointed by the national societies
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Assessment throughout European Orthopaedic Residency

**Fellow of the European Board of Orthopaedics and Traumatology**

**FEBOT – (country)**

**Part III - EBOT Oral Exam - European/National**

**Part II - EBOT Clinical Exam - National**

**Part I - EBOT Written Exam - European**

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

**Annual EBOT Interim Exam - European**

Annual appraisal for European Orthopaedic Trainees (ALL)

Different languages
Local language
English
how can we reduce costs

- assess what we have in common

Accept what is different + centralize what is in common

- Written exam with *Pearson Vue* – **CESMA negotiation**
- Oral exam registration and preparation for the event – **central**
- Common Secretariat – throughout the year – **central**
- Interim Exam and program develop – **CESMA negotiation**

**Speciality manager / Examiners Courses / MCQ Courses**

j.mineiro 16
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
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Otherwise…