The role of UEMS Infectious Diseases

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Plan

- Introduction
- UEMS purpose and structures
- UEMS ID Section/Board
- UEMS-ID/ESCMID subcommittee
- Curriculum
- Examination
- Way forward
- References

20th century infection

- 1900-1960s
  - fevers, rashes, meningitis
  - polio, diphtheria, TB
  - gastroenteritis, children

- 1960s-1980s
  - decline in above
  - new problems eg Lassa, HIV
  - new patients eg IV drug misusers
  - immunocompromised hosts
cancer, chemotherapy, ITU
  - nosocomial infections
Drivers for change

- Changing disease patterns
- Changing clinical work patterns – acute medicine units

- Antimicrobial stewardship
- Healthcare associated infections

- Laboratory centralisation
- Rapid diagnostic methods
- Point of care testing

- How many & what type of infection specialist is needed?

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Drivers for change

- Shortening postgraduate medical training
- Increasing roles of non medical specialists (nurses, laboratory technical)

- Convergence or divergence of ID and Clinical Microbiology training?

- International mobility of workforce
What is needed for good (Specialist) Training

Harmonisation

- Clear definition of specialties throughout Europe
- Harmonised training programme
- Log book/training portfolio
- Decent working conditions for the trainees (income and working times)

Curriculum delivery and assessment

- National/state registration authority - Defines framework for training and legal registration

- National training authority - Defines curriculum
  - Content (areas of knowledge)
  - Competencies
  - Assessment

- Regional/local delivery of training
  - Training units/rotations
  - Specialist societies
  - Universities
UEMS = European Union of Medical Specialties

- Harmonisation of
  - Curricula
  - Training delivery
  - Assessment
- New momentum to develop common European
  - Exit examination
  - Specialist registration
- ID for 15 years (ID Section and Board EBID)
- Clinical Microbiology established in 2011
Overview UEMS

- UEMS Sections & Boards
- Harmonisation of higher medical training in Europe
  - ECAMSQ, CESMA
- Infectious Diseases
  - Overview of national systems
  - ID Section
    - Permanent and *ad hoc* committees
  - UEMS core curriculum in infectious diseases
    - (Chapter 6)
  - Proposal for new curriculum
  - Proposal for European specialist examination

Sections and Boards

- Are a fundamental and specific structure
- Are the backbone of the UEMS
- Propose minimal training schemes for specialisation
- Facilitate the harmonisation of training
- About 2000 specialists active in the work in Europe
What are the Sections and Boards?

- **Sections**
  - Two delegates of the Specialty from each EU member state
  - Mandated by their National Medical Association

- **Boards**
  - Working Group of the Section
  - Delegates from the Section together with representatives of the Scientific Society

Tasks of Sections and Boards

- Determine Core Curriculum for training
- Propose a log-book
- Help in the harmonization of training and qualification
- Help in the harmonization of health care services with visitation
HOW IS A SPECIALTY RECOGNISED BY UEMS?

Requirements for Specialty Recognition (ie movement between countries)

- To be recognized in the home country
- The specialty must be recognized in the host country
- The specialty must be listed in the addendum of the Directive 2006/100/EC
- Both countries (host as well as home) must be mentioned in this list
- Alternate solution: individual decision based on portfolio
EU Professional Qualifications Directive

- Adopted October 2005
  - Implemented 2007

- Specialist titles recognized across EU
  - Free movement across EU countries

- To be revised in 2012
  - Consultation of professional organizations for that purpose
  - UEMS to take part and suggest actions to Commission

ECAMSQ

European Council for the Accreditation for Medical Specialist Qualifications
ECAMSQ: Objectives (1)

- To address the issue of QUALITY of medical specialist qualifications across Europe
- To assess and certify medical specialists’ competence on the basis of harmonised European standards developed by UEMS (?)
- Includes specialists in training and in activity

ECAMSQ: Objectives (2)

- Individual certification of medical specialists’ competencies
- Harmonisation of medical specialists’ qualifications across Europe
- Harmonisation of existing European assessment of medical specialists’ qualification.
How to assess Medical Specialist Qualifications?

- Develop harmonised curricula for each specialty
- Ensure that all medical specialists have the same core competencies in their specialty across Europe
- Ensure that all member states adopt the curricula and translate them into their national system

What competencies to assess?

- **Knowledge:**
  - Test the knowledge of the trainee mainly through MCQs (multiple choice questions) developed by UEMS members according to the highest standards of medical education
- **Skills:**
  - Assess the practice of medical specialists focusing on technical and non-technical skills through real life training and assessment
- **Professionalism:**
  - Assess the non-technical attitudes of trainees such as decision making, communication, leadership…
How should competencies be assessed?

- **Knowledge:**
  - MCQs on EACCME-S&B accredited
  - Textbook chapters
  - Guidelines
  - Articles
  - CME products

- **Skills:**
  - e-logbook
  - e-portfolio
  - DOPs (Directly observed procedures)

- **Professionalism:**
  - CPD (continuing professional development) activities
  - 360° appraisal

How ECAM SQ should work
CESMA

Council for European Specialist Assessment

- Initiated by the Section of Paediatric Surgery in Feb 2007
- Started with 11 Sections, and now 28 participate
- Proposed the “Glasgow declaration”
- Delegates from the Sections of UEMS and one delegate from PWG
- Harmonisation of the Assessment process in Europe
## European Examinations

- Allergology
- Anaesthesiology
- Cardiology
- Dermatology
- Ear, Nose and Throat
- Hand Surgery
- Internal Medicine
- Neurology
- Neurosurgery
- Nuclear Medicine
- Ophthalmology
- Oral & Maxillofacial Surgery

## European Examinations

- Orthopaedics and Traumatology
- Paediatric Surgery
- Pathology
- Pediatric Surgery
- Physical Medicine and Rehabilitation
- Plastic, Reconstructive and Aesthetic Surgery
- Radiology
- Surgery
- Urology
- Vascular Surgery
### Infectious Diseases

- Is mentioned in the Annex to the Directive 2006/100 as Communicable Diseases
- Recognized as a basic specialty in the 20 Member States
- The minimal length for training mentioned is 4 years

### Recognition of ID as Specialty in Europe

- Recognised by national governments as an independent specialty in a some e.g.
  - Italy, Croatia, Slovenia, Greece, Turkey, Switzerland, Hungary, Poland, Portugal, Netherlands, Denmark, Sweden, Norway, UK, Ireland, Iceland, France (2009), Spain (2011)

- Not recognised or only recognised as subspecialty in others e.g.
  - Belgium, Austria, Germany (except in 2/15 states), Luxembourg
UEMS ID survey 2006/7 (updated 2011)  
[Responses from 27 UEMS members or observers]  

- Infectious Diseases  
- Recognised in all countries  
  - 21/27 independent speciality  
  - 6/27 subspecialty of GIM  

- General Internal Medicine as ‘common trunk’  
- (guide – 2 years)  
  
- 25/27 include training in GIM prior to ID  
- 14/27 training leads to certification in GIM as well as ID  

UEMS – Section of Infectious Diseases  

- Established 1997 (within GIM)  
- Board established 1998  
- ‘Recommended’ training programme agreed 1999  
- Log book available 1999  
  - e-version available in some countries  
- Section website developed 2004  
  - http://www.uems-id.eu  
- Training programme (Chapter 6) reviewed and updated annually at Section meeting  
- Recognised in virtually all European countries (Spain recognised in 2011)  
- 2008 – completed an audit of structures and assessments used in training
UEMS-ID Country Members
(UEMS status)

• Full Membership:
  • Austria, Belgium, Croatia (ass. member), Cyprus, Czech republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey (ass.), UK

• Observership or not known:
  • Albania, Armenia, Andorra, Azerbaijan (ass. member), Belarus, Bosnia-Hercegovina, Bulgaria (member), Estonia (member), Liechtenstein, Macedonia, Malta (member), Moldova, Monaco, Montenegro, Russia, Serbia (ass. member), Ukraine

UEMS Training acknowledges:

• Training is the responsibility of National authorities
• Numbers of trainees’ is the responsibility of National authorities
• Selection and quality assurance of trainers and training centres is the responsibility of National authorities.
• UEMS provides guidance on duration of training
  • 2 years minimum ‘common trunk’ of general internal medicine
  • 4 years ‘specialty training’
UEMS ID survey 2006/7 (updated 2011)  
[Responses from 27 UEMS members or observers]

- Duration of speciality training  
  - (guidelines state 4 years)

- 24/27 - duration of higher medical training in ID >4 years

- Joint training with Clinical Microbiology  
  - Eg Turkey, UK

Common Training Curriculum in ID for Europe

- Outline curriculum for European training (Chapter 6) usually available from UEMS-ID website.
- Allows for flexibility in interpretation according to the needs of each country.
- Areas of most inter-country variation are the amounts of:  
  - internal medicine  
  - clinical microbiology  
  - tropical/travel/immigrant medicine
- Core curriculum does not include a framework for competency assessment.
UEMS Training Programme in ID
Based on Chapter 6 (http://www.uems-id.eu)

- Broad knowledge of community-acquired hospital, and imported infections.

- In-depth knowledge in highly specialised areas.

- Areas of overlap between training in infectious diseases and microbiology

- Usually includes a period in Clinical Microbiology (length very variable)

Summary

- Infectious Diseases in Europe is thriving with an active and committed membership of UEMS
- Skills of ID Physician are built around the clinical skills of General Physician
  - most ID training in Europe combined with GIM
- National curricula are mainly in accordance with UEMS curriculum
- The tree of infection is growing and providing new challenges for infection doctors
- Infection specialists: joint training in CM and ID?
Revision of the Directive on Mutual Recognition of Qualification 2012

Infectious Diseases

- Denomination of the Specialty
  - Drop “Communicable Diseases”
- Harmonisation of training across Europe
  - Develop European exam
- Introduction of “Particular Qualification”?  
  - Eg Tropical Diseases

Assembly of Members

Executive Committee

Permanent Subcommittees

Ad-hoc Committees

EBID

EBAID

President (M. Mondelli, I)

Secretary/Treasurer (A. Vince*, HR)

Vice-President=

EBID Chair (H. Sjursen, N)

EBID Vice-Chair

EBID Member-at-large

EBAID Chair (I. Nielsson-Ehle, S)

EBAID Vice-Chair

EBAID Member-at-large

Working Committee on European Curriculum & exit examination (Chairperson N. Beeching, UK)

*: also Liaison Officer with Medical Microbiology
Joint Subcommittee UEMS (ID) & ESCMID

- Established in 2010 as initiative of ID Section
- UEMS chairs, with a majority of members
- Membership includes:
  - Nick Beeching (UK), Chair (EBID)
  - Andrzej Horban (Poland) (UEMS)
  - Håkon Sjursen (Norway), President EBID
  - Kate Adams (UK), President TAE
  - Evelina Tacconelli (Italy) (Professional Affairs Officer, ESCMID)
  - Murat Akova (Turkey), ESCMID Education Officer

Functions of committee

- To address issues such as:
  - Expanded Curriculum
  - European Examination
  - log book/portfolio

- Draft planned to be circulated among section’s members and final document submitted to UEMS by 2012
Chapter 6 – ID Curriculum (brief)

1. HIV/AIDS:
   Experience in HIV/AIDS must form part of the training programme and may require rotation to a unit possessing a high component of suitable patients or to a dedicated HIV unit if it cannot be provided in the primary ID training centre.

2. Tuberculosis and viral hepatitis:
   Experience in the management of tuberculosis and viral hepatitis (including B and C) must be part of the training programme.

3. Compromised Patients:
   The training programme must include experience in the management of opportunistic infection(s) in immunocompromised patients such as neutropenic hosts, transplant patients, congenital immune deficiencies as well as those compromised by illness such as diabetes mellitus and infected prosthetic devices.

4. Travel medicine and migrant health:
   The training must include aspects of prevention of travel associated diseases as well as the regular clinical assessment, diagnosis and management of travel related infections and migrant health. If this training cannot be provided at the primary training centre, the experience must be obtained elsewhere.
New proposed curriculum of generic competencies for an Infectious Diseases Physician:

- Includes more levels of definition of what training is required in each main objective domain
- Defines for each item the expected
  - Knowledge
  - Skills/competencies
  - Professional behaviour
- Does NOT yet specify levels of competence to be achieved at different stages of training
- Suggests possible methods of assessment of each item
  - Workplace based assessments
  - Examinations

Objective 1: To obtain clinical competence at a specialist (consultant) level in the assessment, investigation, diagnosis and management of infection

1.1 History taking
1.2 Clinical Examination
1.3 Investigations and Specific Skills
1.5 Interaction with other Healthcare Teams
1.6 Management of Longer Term Conditions
1.7 Patient Safety
1.8 Communication
1.9 Teaching and Training
1.10 Personal Behaviour
1.11 Management and Healthcare Structure
Objective 3: To obtain competence at consultant level in the management of the HIV infected patient and infections in the non – HIV immunocompromised patient

3.1 Infection in the immunocompromised patient

<table>
<thead>
<tr>
<th>Ability to recognise infection in the immunocompromised patient</th>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td></td>
</tr>
<tr>
<td>Has a knowledge of the pathophysiology and clinical features of infection in the immunocompromised host</td>
<td>SCE, mini – CEX, Cbd</td>
</tr>
<tr>
<td>Able to understand the relevance of specific aspects of the history and specific physical signs (and their absence)</td>
<td>SCE, mini – CEX, Cbd</td>
</tr>
<tr>
<td>Able to understand the ability and limitations of laboratory investigations in immunocompromised patients</td>
<td>SCE, mini – CEX, Cbd</td>
</tr>
</tbody>
</table>

Skills

| Skills | |
|--------||
| Able to interpret test results and explain their relevance to patients | mini – CEX, PS |

Behaviours

| Behaviours | |
|------------||
| Able to consider interaction of psychological and social well being on physical symptoms | mini – CEX, Cbd, PS |
| Able to demonstrate empathy and appreciate patients anxieties | mini – CEX, MSF, Cbd, PS |
| Has an awareness of patient’s rights and responsibilities | mini – CEX, Cbd |

3.6 Multi-Disciplinary Team Working in the Management of Patients Requiring Palliative and Terminal Care

<table>
<thead>
<tr>
<th>Ability to work and liaise with a multi-disciplinary team in the management of patients requiring palliative and terminal care</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Assessment Methods</td>
</tr>
<tr>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td>Understands the spectrum of professional and complementary therapies available e.g. palliative medicine, nutritional support, pain relief and psychology</td>
<td>Cbd</td>
</tr>
</tbody>
</table>

Skills

| Skills | |
|--------||
| Demonstrates discernment in balancing a scientific and a caring approach to the problem and able to judge when active treatment should stop | MSF, Cbd |
| Able to work within a multi-disciplinary team | MSF |
| Able to give patients effective pain relief and psychological support | MSF, Cbd, mini - CEX |

Behaviours

| Behaviours | |
|------------||
| Demonstrates a commitment to continuity of care through physical illness to death | MSF, Cbd, mini - CEX |
Further objectives

• **Objective 2**: To obtain competence at consultant level in the management of Community Acquired Infections (CAI)

• **Objective 3**: To obtain competence at consultant level in the management of the HIV infected patient and infections in the non – HIV immunocompromised patient

• **Objective 4**: To acquire the skills necessary at consultant level to recognise, manage and control hospital acquired infection (HAI), including intensive care (ICU) related infections

• **Objective 5**: To achieve competence at consultant level in the diagnosis, investigation and management of imported infection and the provision of pre – travel health advice

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**Objective 5: To achieve competence at consultant level in the diagnosis, investigation and management of imported infection and the provision of pre – travel health advice**

5.1 Imported Infections
5.2 Health Advice for Travellers
5.3 Infection Related Problems of Immigrants
5.4 Tropical Medicine*

*This is an optional extra and not part of the core curriculum*
Objective 6: To obtain an understanding of the role of the Clinical Microbiologist and the importance of Microbiological techniques in Infectious Diseases and to understand the process and constraints around the Microbiological report

Objective 7: To become competent in all aspects of the management of antibiotic use

Objective 8: To obtain an understanding of research and audit methodology and the practical implementation of research and audit projects

For all points in objective 6 where Clinical Microbiology or Microbiological is stated this includes allied disciplines (Clinical Mycology, Parasitology, Virology)

What has been done so far

- Expanded curriculum
  - a new expanded curriculum with suitable assessments for competency was presented in Sep 2011 based on UK model
  - This is more advanced than other countries have yet achieved and the assessment methodologies were novel to most countries
  - It has been placed on TAE website for feedback
  - (UK trainee feedback on UK model recently obtained)

- E-log book/portfolio
  - There was great interest in the electronic log book
  - Electronic log book not yet adopted across Europe
  - UK, Italy have already implemented it
Specialist Examination

- Do we need one?
- What is European exam for?
  - Final pass/fail for accreditation
  - Part of full portfolio as in UK
  - Alternative extra exam for trainees who want to move
- What format?
- How to write questions based on many national guidelines?
- What language?
- Voluntary or compulsory?

Specialist Certificate Examination (UK)

- Currently 200 MCQ questions only (with some images)
- Best of 5 answer format based on clinical scenario
- Can be done anywhere with suitable test centre computers
- Much quality input required to simplify & standardise language & presentation (so it is expensive for trainees)
- Does not test bedside performance behaviour
Sample SCE question (UK)

**Question:** 7

A 53-year-old woman with no previous medical history or healthcare exposure was admitted in septic shock. Her husband said that she had been pruning roses the day before and had sustained scratches in the process.

On examination, she was febrile (39.5°C), her pulse was 132 beats per minute and her blood pressure was 80/40 mmHg. Her right arm showed extensive spreading cellulitis with blistering over the hand and distal forearm. She had marked pain on all movements of the fingers and wrist.

What is the most appropriate antimicrobial treatment?

A. benzylpenicillin and clindamycin  
B. benzylpenicillin and gentamicin  
C. ceftriaxone and vancomycin  
D. flucloxacillin and gentamicin  
E. vancomycin and meropenem

http://www.mrcpuk.org/SCE/Specialties/Pages/InfectiousDiseases.aspx

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**Problems with examination**

- Cost  
- Ownership of exam questions (and costs)  
- What format?  
  - UK style?  
  - Modified with extra set of “European” questions?  
  - New exam from IDSA?  
- Differing pathogens and antimicrobials and resistance patterns across Europe
**Recommendation**

- To ask European question writers to join UK SCE exam panel to:
  - Receive training in question writing
  - To join question setting groups
  - To understand process and feedback to subcommittee

- Further discussion on whether to move forward with adapted SCE for Europe

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**What next?**

- All documents and presentations to go on TAE section of ESCMID website (to be mirrored on ID Section)
- Wider publicity to TAE, ESCMID general membership and UEMS for:
  - Comments
  - Volunteers to get involved
- Revise plans/decisions before next ID Section meeting Freiburg Sep 2012
- Definitive consultation through UEMS and ESCMID about curriculum before next ESCMID
- Need for ESCMID training workshop in 2013/14
Summary: ID training in Europe

• ID training in Europe varies in the different countries
• Joint training in Clinical Microbiology/Infectious Diseases is not applied in the majority of European countries, mostly for historical reasons
• Opportunities for joint training are being explored
• Tropical Medicine remains available for a minority
• A European curriculum in infectious diseases and exit examination are being prepared by a joint UEMS-ID/ESCMID Working Committee following a specific need identified by UEMS along the lines indicated by ECAMSQ

References


ID Specialty Certificate Examination in UK
[http://www.mrcpuk.org/SCE/Specialties/Pages/InfectiousDiseases.aspx](http://www.mrcpuk.org/SCE/Specialties/Pages/InfectiousDiseases.aspx)
UK web resources for terminology

Specialty training curricula in infectious diseases and in tropical medicine
http://www.jrcptb.org.uk/specialties/ST3-SpR/Pages/Infectious-Diseases.aspx

The “Gold Guide” to postgraduate medical training in the UK

General Medical Council (UK) standards for assessment of competencies in training

Glossary of terms used including competency assessments

ESCMID & other web resources

Curricula for ID and Clinical Microbiology
http://www.escmid.org/profession_career/training_curricula/

Trainee Association of ESCMID (TAE)
http://www.escmid.org/profession_career/trainee_association_of_escmid/

UEMS Section of Medical Microbiology
http://www.uems-smm.org