

Meeting of UEMS Radiology Section in Brussels on the 8th of November 2008

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Introduction

The UEMS (Union Européenne des Médecins Spécialistes) is the European representative organisation of the various National Associations of medical specialists in the EU Member Countries. The objectives of the UEMS include the promotion of quality patient care through the harmonisation and improvement of quality of specialists' medical care in the countries of the European Union and the encouragement and facilitation of CME (Continuing Medical Education) for European specialists. The UEMS represents over one million specialists in all different specialties and is working through 37 Specialist Sections each with its own European Board. Each Specialist Section has the possibility to install an Educational Board within its Specialist Section.

The PWG (Permanent Working Group of European Junior Doctors) is the umbrella organisation of Junior Doctors' Associations from all over Europe (EU and EEA). At present the PWG represents the residents of 26 European countries. PWG's initial objectives include improving relations between its member organisations and narrowing the gap (in among other things quality of training and working conditions) between the residents in different countries as well as safeguarding the interests of residents in Europe.

The UEMS is the most important body dealing with Medical Specialist Training on a European level. It sets standards of PGT (Post Graduate Training), CME (Continuing Medical Education) and decides how many European Credit Points can be earned for having attended a certain PGT/CME event.

The Specialist Sections deal with specialty-specific topics. The Specialist Sections set up the European Training Syllabuses, i.e. the training standards for its specialty, and organize visitations of training centers.

In accordance with the statutes of the UEMS European Sections and Boards, each UEMS Specialist Section welcomes one PWG delegate to represent the residents of the specialty in question. The PWG delegate is a full member of the Specialist Section and the Educational Board if the Specialist Section has installed an Educational Board, and the PWG delegate has voting rights.

Subsections within the UEMS Radiology Section

According to UEMS rules of procedure, a section may create one or more subsections, under the responsibility of the main section, devoted to the study, promotion and defence of a branch of the

specialty or competence, which forms an integral part of its practice, and involves a recognised higher training program.

The UEMS and the ESR want to keep radiology as one unified specialty and want to prevent fragmentation, especially as subspecialisation might be used as a vehicle by insurance companies for limiting reimbursement to accredited subspecialists. This would require to put two or more subspecialised radiologists on call instead of only one, or alternatively leaving radiology groups unimbursed.

On the other hand, the creation of subsections is seen as a way to protect specific skills and competencies and let them stay exclusively within the field of radiology.

The UEMS Board has in the meantime approved the creation of the subsection of Neuroradiology, however the Interventional Radiology Division was refused. Reasons were seen in the possible interference with surgical disciplines. However, a reapplication with a revised strategy may be launched in the near future.

Hybrid imaging: towards closer collaboration between nuclear medicine and clinical radiology

Earlier, a white paper on multimodality imaging has been written by the European Society of Radiology (ESR) and the European Association of Nuclear Medicine (EANM). Diagnostic PET-CT, SPECT-CT, and PET-MR bring together anatomical and molecular information and require the competency and accreditation of individuals from both specialties.

Regarding training, radiology residents are interested in having adequate access to the new evolved hybrid techniques. Unfortunately, cooperation on an European level have grinded to a stop. This is not in favour of incorporating hybrid imaging into a homogeneous training schedule. The PWG therefore hopes that the cooperation will soon be revitalised.

European Exams

Some UEMS sections (ophthalmology and anaesthesiology) have set up specialist exams on an European level. Historically the UEMS radiology section is not in favour of such an European Diploma. A European Exam has no legal meaning nationally or at a European level and it should not grant any privileges. Within Radiology, it is unclear which organ would be able to carry out the tremendous amount of work associated with the organization of such an examination. At the same time it is unclear what the topics would be of such an examination and how national curriculums (as far as they exist) could be matched to cover those topics.

The PWG believes that knowledge first must be taught before it can be examined. In other words, the focus should primarily be on the process of postgraduate training rather than on final examination. The prerequisite for an examination is the introduction of a harmonised curriculum and appropriate training resources across all member states for each medical specialty. Residents should fulfill criteria for successful progress. These criteria should include the full range of abilities required for medical specialist practice and should be monitored by continuous assessment. The PWG does not support the idea that all skills and knowledge required by a medical specialist can

be tested to the full extent solely by any form of final exam. Therefore, the PWG opposes any attempts to make European Speciality Board Examinations directly or indirectly compulsory in addition to national speciality qualification.

A recent query carried out by the Residents Trainee Forum (RTF) among its delegates did signalize some support for the idea of European exams. Anyway, from the viewpoint of the PWG, this noninformed ad-hoc query reflects the opinion of the RTF representatives only and does not prove that the majority of European residents would be in favour of such an European exam.

European Training Assessment Visiting Program (ETAP)

Currently, assessment and accreditation of radiology training centers on a national level only exist in only exists in some countries for example in the Netherlands and the UK. The ETAP program tries to expand the assessment in an European context. The long term goal is to set up assessment schemes in all individual member countries on a national level, i.e. to help member countries to organise their own national assessments.

Since the beginning of the ETAP, more than 20 radiology training centers throughout Europe have been assessed by assigned UEMS assessors.

No detailed information was available on the progress of the program during the meeting.

The PWG supports the idea of national training assessment and structured postgraduate education for the continuous improvement of training quality.

Undergraduate Radiology Training at Medical Schools

The UEMS Section of Radiology is aware of the importance of undergraduate training of medical students during their education at medical school. On the one hand, medical students should gain insight into the different imaging modalities available, their advantages and disadvantages for later being able to more precisely order adequate imaging. On the other hand, it is important to identify suitable students and motivate them for a career in Radiology as residents nowadays are becoming increasingly scarce in many countries.

A questionnaire has been sent out by the UEMS to assess the status of radiological undergraduate examination in the different member countries. Results are expected next year.

Management in Radiology (MIR)

MIR provides a forum for education and exchange of ideas and state of the art concepts on management within Europe aimed at enhancing the contribution of Radiology to medicine. MIR addresses not only core managerial issues, but also supportive methods and techniques, especially information and communication technology.

The current Head of the Management Subcommittee of the POC (Professional Organisation Committee) is Dr. Nicola Strickland from London/UK.

The proposed topics for the Junior MIR workshop, scheduled for April 2009, are as follows:

- New responsibilities
- Managing a team
- Playing the "medical politics game"
- Balancing your professional life (Clinical work, Administration, Research, Private practice)
- Career goals

Inputs and suggestions are very welcome and can be addressed to Nicola.Strickland@imperial.nhs.uk

EU Directive on electromagnetic fields

In 2004, the EU Directive 004/40/EC on the minimum health and safety requirements with regard to the exposure of workers to the risks arising from physical agents (electromagnetic fields) was passed.

This Directive puts limits on the exposure of operating staff to magnetic and electromagnetic fields from 0 to 300 GHz. As such it applies to static magnetic fields (which may induce electrical currents in patients, technicians or MR service personnel moving within the field) as well as to gradient and RF fields.

Due to the low limits set, this directive makes many MRI procedures illegal. This mainly applies to interventional MRI procedures where the interventionalist is in direct proximity with operating gradient fields and RF. The further development of interventional MRI will be made impossible and a "brain drain" to the US might occur where limits are set much higher.

But the directive even hampers routine MRI practice, for example anesthesia personnel will no longer be allowed near the patient during operation of gradients and RF, thus making many examinations for compromised patients dangerous or impossible. Moreover, due to static field limitations, the directive even prohibits access of technicians and service personnel to non-operating machines unless a certain motion speed is not exceeded - which is of course impracticable in daily routine.

Luckily a joint effort of patient groups, medical specialists and radiologists, unified in the "Alliance for MRI" for the first time in the history of the European Union made it possible to stop the

legislation at a time point where it had already become part of the national laws in some of the member countries.

Anyway, the legislation is not withdrawn but only postponed until April 30, 2012. As it is on the one hand unlikely that the numerical limits will be revised and on the other hand unlikely that certain exceptions for MRI are made (RF is also an issue in industry, so the EU might be reluctant to create any kind of exception) the end is still open. Lobbying needs to continue. In particular, new measurements, study results and their consequences need to be explained to the relevant European bodies.

For more information or to express your support of the Alliance for MRI, please visit <http://www.alliance-for-mri.org>

European Health Service Directive

The Health Services Directive aim is to optimise legal certainty regarding cross border healthcare under Community Law and to support the cooperation between the health systems of the Member States.

This directive will have a direct influence on our future work as specialist doctors.

Similar to the directive on electromagnetic fields, the Health Services Directive directive will become national law in the EU member states. At present, this directive is still only a proposal which means that there still is a possibility to influence its contents through appropriate lobbying. However, the formal hearings on the directive are starting these days, so action must be taken now.

The most relevant issue with regard to radiologists (but also to clinicians) is teleradiology. The way how teleradiology will be used and the extent to which teleradiology may become commonplace over conventional reporting will be directly controlled by this directive.

In this context it is interesting to be aware of the "R-Bay" Project. This is an EU-funded market validation project under the eTEN program. The project has ten partners from seven European countries and a budget of approximately 2 million Euros. The project started August 2007 and runs for 18 months.

"The R-Bay project aims at establishing an online eMarketplace within the field of radiology, (...) i.e. to create a virtual and secure exchange set-up for the provision and consumption of radiology services based on market terms. The architecture of the R-Bay services consists of a portal, which hosts the eMarketplace function as a commodity brokering and exchange of radiology services. On the eMarketplace, providers will make their services available at a specified price and with standardised specifications, and the customers will buy the services via a trusted and secure network." Language barriers are thought to be overcome by a *"Structured Reporting Tool with Automated multilingual translation"* (cited from <http://www.r-bay.org>).

Obviously, resemblance of the name to the well-known internet portal "e-Bay" is not coincidental. It appears that radiologic readings are considered a "commodity" which can be auctioned away to the lowest bidding radiologist on the web. Other projects are taking this to the extreme: "Get the

best price - enjoy easy access to radiologists", "Bid it out, save a bundle", "Post your interpretation request and let the Telerays radiology auction go to work" (<http://www.telerays.com>)

It must be made clear to the public that a radiologist's job entails much more than just making a report. Instead, radiologists are responsible for the entire chain of diagnostic imaging processes in patient care.

In these terms, the tasks of a modern clinical radiologist include:

- **Coordination:** Each of the different clinical specialists may have a thorough overview of the imaging modalities pertinent to his field, but may not be aware of questions arising to other specialities. Thus double exams or exams technically contradicting each other may be ordered by different specialities.

A time- and cost-effective one-stop-shop approach may be coordinated by a person who knows all available modalities (including their indications, possible implications and contraindications) and who can anticipate and coordinate different clinical courses which always are hospital-dependent.

- **Triaging:** Medicine nowadays is highly imaging-dependent, at the same time technical and economical resources are limited. Conflicts arise on a daily basis, and significant harm may result to patients if wrong decisions are made and exams ordered by different departments are not correctly sorted by their urgency.

Here, clear medical and legal responsibilities must be taken by a person capable of overlooking and supervising not only the entire imaging department but who has also insight into different clinical disciplines.

- **Perception and Interpretation:** Perceiving a pathological finding may be traditionally considered the most important step in diagnosis, however perception is in fact only the prerequisite for interpretation which is the more sophisticated part. As many findings such as pulmonary nodules are nonspecific, interpretation must be done on the basis of history, clinical presentation and nonradiological exams such as lab values. All these information needs to flow together at the radiologists workplace, and the radiologist once more must have a basic overview over all fields of medicine.

Much of the information needed for interpretation is informal and cannot be put into words. For example, a subconsciously perceived nicotine smell may shift nodule interpretation towards lung cancer, a low socioeconomic status may in opposite indicate tuberculosis.

Therefore, for the clinical radiologist, seeing the patients is as important as seeing the images.

- **Communication:** The interpretational picture generated by assembling all the different informational puzzle pieces (one of which is imaging) must be effectively communicated across disciplines.

Clinicians are more likely to act on the nuances intended in a report generated by a radiologist whom they regularly meet compared with a report generated by a teleradiology service. Specific wording of reports may be necessary depending upon the speciality involved. Nonverbal communication in many situations often is as important as formal verbal

communications when it comes to make important decisions (as illustrated by the fact that scientific conferences, political commissions, job interviews etc. are at large still held physically).

In conclusion, it turns out that teleradiology is not a cheap way to get radiological reports. Reports tend to be more defensive, especially if compounded by a potential lack of background clinical knowledge of the case, and may include more requests for additional imaging. Therefore, misused teleradiology is even likely to result in an increase of costs.

Good practice of teleradiology is a clinical service organised between radiologists in order to assure proper initial and local examination. An onsite radiologist certainly cannot be substituted by a technician, even if experienced, or by a remote radiologist who does not know about local circumstances and does not understand any particular local disease and cultural factors.

The goal of the UEMS Section of Radiology is to outline the good clinical use of teleradiology and lobby relevant political bodies for its proper use, who might not be aware about the true role of a Radiologist in today's clinical landscape.

Towards the proposed legal framework, the existing draft of the directive only vaguely (if at all) addresses many important issues. These issues include:

- Where should the reporting radiologist be licensed, in the country providing or the country requesting teleradiology services?
- How can it be assured that a failure to renew licensure or a withdrawal of licensure will be communicated to the country requesting teleradiology services? (at the moment there is no such thing as a European register)
- How can it be made sure that the person sitting in front of the workstation is indeed the doctor supposed to make the report? ("electronic fingerprint" - issue technically complex)
- Do patients need to give informed consent about sending away their images to a remote site?
- What are the electronic substitutes for direct patient encounter and for direct informal communication with the referring clinician?
- How can electronic records first be standardized (prerequisite) and second be made accessible remotely without endangering patient confidentiality?
- As the failure to review previous examinations has been shown to be a significant cause of errors in both perception and cognition, how can previous radiologic exams be made available to the teleradiologist?
- Error in radiology is common. Quality control in radiology mainly relies on informal collegial feedbacks during clinical conferences and on informal corridor encounters. What is the substitute for this in teleradiology age?

The directive will as a matter of fact have a major impact on postgraduate training. Teleradiology should not be to the detriment of education.

Depending upon the use of teleradiology, routine cases might be reported elsewhere, only the complicated cases remain. Or, complicated cases may be sent away to experts, acting as a disincentive to general radiologists providing a service in the locality and resulting in deskilling of the local radiological service.

Therefore, training should be integrated into teleradiology services under the final responsibility of a fully qualified local radiologist to obtain the necessary experience.

In summary, provision of teleradiology must be primarily developed in the best interest of patient care and education and not as a vain cost cutting measure which may jeopardise patient safety and standards.

The opportunity to act on this issue is **now**. National and European Radiology societies are already organizing their lobbying, but it would be extremely important if this would be accompanied by similar inputs from clinical disciplines interested in a functioning onsite radiology department.

For this, a suggestion for a **letter to the relevant national and European bodies** is enclosed (written by Dr. Richard FitzGerald, UK delegate to the UEMS).

If you see a chance to get your national organization to **forward this letter** to the appropriate authorities (listed in the letter) this would multiply our impact.

If there are additional questions, please don't hesitate to contact Richard.Fitzgerald@rwh-tr.nhs.uk

Thank you for your support!

Acknowledgements

I thank Dr. A van Gils, MD, PhD, radiologist and Dutch delegate to the UEMS Radiology Section and Dr. MEAPM Adriaensen, MD, MSc, radiologist, former PWG representative to the UEMS Radiology Section, and former Dutch delegate to the PWG for their cooperation on this report.

Requests

Comments and requests for documents can be send to mail@oliverertl.de