Heads of Radiographic Education Forum, Association of Radiography Educators & College of Radiographers

Achieving Excellence in Radiography Education and Research
Postgrad models of delivery and ‘remote’ learning

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Current landscape

• Provision of healthcare education evolving
• Greater demands placed on the workforce (DH, 2012)
• Culture of innovation and improvement
• Use of technology integral within Radiography
• Challenges associated with the provision of post graduate learning
• Traditional models of learning may not be suitable for future workforce
• Future of University identity changing (University Alliance, 2012)
Evolving nature of healthcare learning & funding

- Co-creation of learning for the individual
- Meeting the needs of the individual and the organisation integral to service delivery
- Provision of e-learning platforms
- Emergence of private education institutes
- Potential for Massive Open Online Courses (MOOCs)
- Partnership approach to delivering post graduate (PG) education
- Nursing, Midwifery & AHP Education Training (NMET) / Multi-Professional Education and Training (MPET) funding changes
Government Drivers

- NHS Outcomes Framework publication (DH, 2012)
- Clear identification of preceptorship, mentorship and lifelong learning in the form of Continued Professional and Personal Development
- Radiography as a profession will need to model future workforce education and training around the adoption of new technology, research and innovation, and further promote itself within the realms of academic and clinical practice (CoR & RCoR, 2012)
- Local Education Training Boards and Academic Health Science Networks will also have integral roles in the translation, development and provision of new curricula, whilst ensuring involvement and appropriate scrutiny from the relevant regulatory professional bodies (DH, 2011)
Strategic influence / individual accountability

- Emergence of the Centre for Workforce Intelligence (CfWI, 2011)
- Identification of ‘at risk’ specialists (MAC)
  (College of Radiographers and Royal College of Radiologists, 2012)
- The mapping of knowledge, skills and training will need to be further integrated:

- There is also the need for clinical practitioners to be cognisant of their responsibilities and accountabilities, particularly with regard to lifelong learning, to facilitate an adaptive and progressive platform for competent practice
Individual / organisational centred approach to PG learning

- 2nd generation SPECT/CT systems
- Increased capabilities
- Potential for greater use within patient pathway
- Greater scope for decision making

Skills
Competent practice
Training
Knowledge
Impact of technology

• Ownership of new technology & impact on Radiography workforce (Larsson et al, 2008)
• Professional ‘ripple’ reported with the introduction of new technology
• New roles = new education needs
• Development of new communities as a result of emerging new technology
Innovation + Improvement

INVENTION
The originating idea for a new service or product, or a new way of providing a service

ADOPTION
Putting the new idea, product or service into practice, including prototyping, piloting, testing and evaluating its safety and effectiveness

DIFFUSION
The systematic uptake of the idea, service or product into widespread use across the whole service.

(DH, 2011a)
Professional ‘ripple’ and reorder

Skill level

Evolving technology

Patient Involvement / MDT

Ownership of technology

Autonomous Practice / automated processes Decision making processes

The times they are a-changin’.............

• The traditional model of education delivery, which has previously mainly involved face-to-face attendance, will need to undergo a transformational change

• The emergence of a culture which places innovation and sustainability at the core of the modern NHS is beginning to redefine how practitioners access learning and education

• Finite resources in place to provide financial support to undertake any form of post graduate training

• Healthcare professionals themselves may be required to invest more of their own resources, in terms of time or funding, in order to access certain types of training
How could I learn in the future?

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Mobile (m) learning

• Learning environment may fit around the learner (DH, 2011b)

• Requirement for learning on various platforms

• Requirement for learner to understand the principles of asynchronous learning
  – On-line discussion forums / Wikis
  – Virtual assessments
  – Distance based support
Work based learning

Brachytherapy principles and clinical applications

This 20 Credit Masters Level module is aimed at health care professionals working within the field of oncology, having an interest in the role of brachytherapy in the management of cancer patients. This short course is aimed at professionals who are either involved in service redesign or seeking to develop a greater evidence base to enable understanding of brachytherapy principles and patient provision.

The module is delivered over a four day block period by an experienced team, supported by appropriate external oncology professionals. The module syllabus covers a range of aspects related to modern brachytherapy practice and includes the following core elements:

- Clinical applications of brachytherapy, site specific, including gynaecological, prostate, endoluminal and miscellaneous
- General principles of brachytherapy including history of brachytherapy, sources and afterloaders
- Radiobiology in brachytherapy
- Radiation protection issues in brachytherapy
- Psychological issues in brachytherapy
- National guidelines and standards for brachytherapy in UK
- Service management and development in brachytherapy
- Physics planning, optimisation and use of DVRs

Academic accreditation by University of the West of England, Bristol

Course Dates
Monday 21 to Thursday 24 March 2011

Venue
Bristol Haematology and Oncology Centre, Bristol

Contact details
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Collaboration

Hybrid Imaging Knowledge Exchange (HIKE) event

This is an invite to all clinical nuclear medicine practitioners and clinical scientists either working in a hybrid SPECT/CT environment, or about to embark on a technological upgrade in the near future.

This free event aims to discuss various aspects of hybrid SPECT/CT practice and provide a forum for knowledge exchange across the region. Areas including the following will be discussed at the event, introduced by speakers from around the region:

- Appropriate use of CT in SPECT/CT
- Attenuation correction
- Patient dosimetry considerations
- Optimising acquisition and processing techniques
- What can be learnt from PET/CT
- Putting a business case together for a new system / additional resources

The event also aims to identify future hybrid workforce training and CPD opportunities across the southwest and central regions of England and South Wales.

The HIKE event is organised by the University of the West of England with support from the University Hospitals Bristol NHS Foundation Trust, Cardiff and Vale NHS Trust and the Aneurin Bevan Health Board and sponsored by a UWE Research Business and Innovation (RBI) grant.

If you would like to suggest a particular area for discussion, please access the Southwest Nuclear Medicine website http://www.southwestnuclearmedicine.org.uk

Event date
Tuesday 7 December 2010

Venue
Conference Centre, Frensham Campus, University of the West of England, Bristol

Further details
Further details of how to apply for a free place and a provisional timetable will be available from the Southwest Nuclear Medicine website http://www.southwestnuclearmedicine.org.uk

Assistive Technologies for Service Improvement in Health and Social Care

University of the West of England, Exhibition and Conference Centre
Thursday 16 February 2012
Case Study: PG Nuclear Medicine
Changing paradigms of education for the Nuclear Medicine Workforce

- Workforce Pressures
- Financial Pressures

Development of new teaching & assessment pedagogies
PG delivery

• Use of virtual learning platforms (BlackBoard)
• Provision of discussion forums and ‘partnership’ approach adopted by students
• Learning material developed using a range of software:
  – Adobe Presenter
  – Podcasts / vodcasts
  – Java based e-OSCE environments
  – Virtual image manipulation and processing platform
• Potential development of virtual worlds (Second Life)
Cloud based activity + Work based activity
Nuclear Medicine Courses at UWE Bristol
Continuing Professional Development

Reporting Skills and Service Enhancement in Nuclear Medicine

This distance learning course is designed for Nuclear Medicine Practitioners who have a desire to develop their image interpretation skills or, in line with current clinical advancements, have the opportunity to engage with aspects of service development.

The course promotes investigational and enquiry-based strategies and encourages students to consider their own practice in relation to developing the field of Nuclear Medicine. The use of interactive workbooks and educational ‘streamcasts’ is supplemented by discussion boards aimed at providing students with a forum to question and develop their ideas.

This course is equivalent to 20 credits at Masters level and usually takes nine months to complete. Course content is flexible and can be tailored to meet the needs of your department.

Course content
The syllabus covers the ethical and legislative aspects of reporting and provides guidance on topics such as information governance, data protection and the technical reporting of core clinical examinations. This is further supported by testament accounts of Nuclear Medicine Practitioners who have been instrumental in the development of reporting services and which are fully aware of the current issues associated with service redesign and workforce development.

Enrolment details
The course has a rolling start date, allowing students to enrol when convenient to their department.

Contact details
For further information please contact
Gary Dawson
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Hybrid Imaging in Nuclear Medicine

This 20 credit Masters level course is delivered via distance learning, with input from a number of experienced clinical Nuclear Medicine Practitioners, Radiologists and academic staff from UWE Bristol.

Students will be supported via an online learning environment and an enquiry-based learning approach. The module is aimed at Nuclear Medicine Practitioners working within a hybrid imagine environment or in a department about to undergo hardware changes in the near future. This course may also be suitable for diagnostic radiographers and radiography radiographers who are developing their clinical roles.

Course content
The syllabus covers:
- An understanding of SPECT/CT technology and current utilisation
- Principles of SPECT/CT imaging, techniques and the patient experience
- Patient preparation and dosimetry considerations for SPECT/CT hybrid investigations
- Interprofessional working within hybrid imaging and workforce development
- Appreciation of hybrid imaging parameters and fundamental processing considerations within SPECT/CT
- Fundamental overview of PET/CT
- Clinical value of attenuation correction
- Image registration considerations
- Professional guidelines and radiation protection
- Identification of potential imaging artefacts and problem solving

Enrolment details
Available from February 2013. Please contact us for further details.

Contact details
For further information please contact
Gary Dawson
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Getting the balance right

- Doorstep delivery
- Blended learning
- e-learning / mobile learning
‘Aldrose’
Closing remarks

• The radical changes that are underway for training of the healthcare workforce, have major implications for both the providers of education and the employers of the healthcare workforce

• Training institutions will have greater accountability for the education of the future quality of the healthcare workforce

• There will be a requirement for more innovative approaches to be adopted

• There are opportunities to improve training and education of the workforce to achieve improved quality of care for patients

• What about the proposed 3+1 model of learning?
References