Advanced Practice for Patient Benefit: Advanced Practice Conference

Advanced practice in radiography

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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:

  - HEIs
  - NHS
  - AHSNs

- 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 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)
Evolving technology

Patient Involvement / MDT

Autonomous Practice / automated processes
Decision making processes

Skill level

Professional ‘ripple’ and reorder

The Need for Enhancement & Development
DH (2007) Modernising AHP Careers

1. Initial entry-level jobs
2. Support workers
3. Senior assistants/technicians
4. Assistant practitioners
5. Practitioners
6. Senior practitioners
7. Advanced practitioners
8. Consultant practitioners
9. More senior staff
Definition of Advanced Practice within Radiography

“an individual who has significantly developed their role and who consequently has additional clinical expertise in a defined area of practice, accompanied by deep underpinning, evidence based knowledge related to that expertise. They make appropriate clinical decisions related to their enhanced level of practice, directly impacting on the patient care pathway.”

Society & College of Radiographers (2010)
Ultrasound

GI Advanced Practitioner

Breast Imaging

Radiography

Image reporting

Nuclear Medicine

Clinical assessment of patients / triage

Radiotherapy Practice

Prescribing
Maximum waiting time = 31 days

- Urgent Referral
- Diagnosis
- Staging
- Radiotherapy Planning
- Radiotherapy Treatment

- Immobilisation
- Accuracy
- Positioning

2 Weeks
Radiographers reporting

- Evolution of “Red dot” to commenting:
  - Team working in Clinical Imaging (RCR / SCoR, 2012)
- Now commenting is an “expected graduate skills” (HCPC, 2012)
- Radiographers can request radiological examinations (IR(ME)R training)
- With appropriate training, radiographers can accurately report as well as Radiologists (Brealey, 2006, SCoR 2013)
- Litigation & lack of financial reward seen as barriers
- Essential for appropriate protocols to be in place
Beyond commenting.....

Red dot commenting preliminary clinical evaluation systems

SCoR, 2013
Factors influencing role development

- Strengths:
  - Developing the workforce (DoH, 2009: High Quality Care for all)
  - Developing clinical practice & enhancing patient care
    - Meeting target waiting times (18 weeks / 31 days)
  - Working with others (MDT) / skill mix
  - Radiological skill shortages
    - (South West Radiology Review 09/10, 10/11, 11/12)
    - WRT (2008/9) Documents
  - Developing aspects of undergraduate programmes
    - 2010 Reporting becoming a core clinical competence
  - Four Tier Structure (DoH, 2005: The NHS Plan)
  - Technological changes within the workplace
  - Practical / Technological / “hands on” approach
Factors influencing role development

• Weaknesses
  – Limited workforce
  – Historically weak research base
  – Limited leadership within the profession to date
  – Barriers to change (professional)
  – Resources – CPD
  – Legal issues / clinical negligence (Buttress & Marangon, 2008)
Factors influencing role development

• Opportunities:
  – Technology
  – Growing demand for radiological procedures
  – Greater leadership
  – Development of greater research strategies
  – Greater Empowerment (DoH, 2008 *Framing the contribution of the AHP*)
  – Developing new working paradigms – PET/CT
  – Prescribing
  – Patient assessment

• Threats:
  – Resistance to change from RCR / Medical profession
  – Existing roles being removed from traditional practice
  – Modernising career pathways (Band 4 practitioners becoming more developed)
  – Funding issues
28 key points of an Advanced Practitioner in Radiography


- Engage
- Audit
- Mentorship & teach
- Develop, implement and review pathways of care

- Lead the delivery of complex imaging using advanced technologies
- Interpret results of imaging
- Assess patients and make reasoned decisions
- Demonstrate accountability
“Rock Star” Radiographer effect

• Certain degree of naivety amongst newly qualified radiographers to “run before they can walk”
• Fast-tracking may not always be the most appropriate option
• Some traditional aspects of radiography not attractive as they once were!
"Re-mapping roles and educational pathways":

1) Providing clear career pathways and opportunities to access the education required to develop clinical roles;

2) Focusing on the skills required to work within and as part of a team to deliver the best care.
Figure 1: Historical and projected diagnostic radiographer workforce supply
Workforce development

Advancing techniques

Equipment optimisation

Day in the Life Project: http://www.dayinthelife.org.uk/
The Ongoing Evolution of the Practitioner

• Further development of skills and attributes
• New technology / techniques
• New working environments / paradigms
• Practitioner / Reflector / Educator / Researcher
Evaluating the fundamental qualities of a nuclear medicine radiographer for the provision of an optimal clinical service

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Abstract
The developing nature of nuclear medicine practice highlights the need for an evaluation of the fundamental qualities of a Radiographer working within this discipline. Existing guidelines appear to be in place for clinical technologists working within nuclear medicine. However, limited guidance has been provided for Radiographers practicing within this discipline. This article aims to discuss the fundamental qualities that are considered essential for optimal service delivery, following consultation with various stakeholders. Areas such as technical expertise and knowledge, appropriate use of imaging equipment and current models of safe working practice will be discussed. Patient care and ethical considerations will also be evaluated, along with some core recommendations for future advanced practice.

Introduction
Nuclear Medicine practice continues to evolve with the advent of new technology such as SPECT/CT, advancing techniques and role development. Apart from the four-tier career structure 1 there does not appear to be a clearly defined professional development pathway for Radiographers specifically working within Nuclear Medicine practice. The Institute for Physics and Engineering in Medicine (IPEM) provides some guidance for Technologists and it is hoped that the Modernising Scientific Careers consultation document 2 will provide further career development. Given the potential cross fertilisation of skills, knowledge and understanding in this developing field of clinical imaging; clear educational and training frameworks for Radiographers are clearly required.

The European Association of Nuclear Medicine (EANM) provides guidance for Nuclear Medicine Technologists at
Mentoring in nuclear medicine and hybrid practice: Developing a future framework

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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
Conclusion

• Role of advanced practice is changing within radiography

• However, the rate and level of involvement is ultimately governed by:
  – Government initiatives (local and national)
  – Radiologists and levels of support
  – Workload capacity
  – Innovation and improvement

• Skill mix is a core development area for the profession and essential to future patient services
References

References

• College of Radiographers & Royal College of Radiologists (2012) Team working in clinical imaging, [online] available from http://www.rcr.ac.uk/docs/radiology/pdf/BFCR(12)9_Team.pdf accessed on 10/10/2012