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

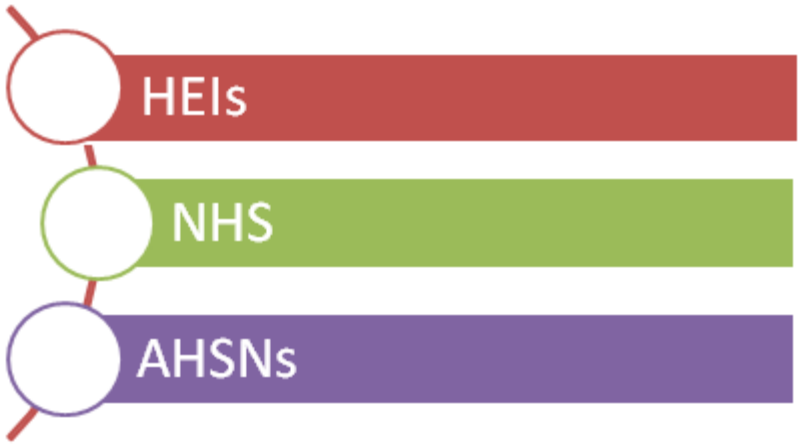
- Co-creation of learning for the individual
- Meeting the needs of the individual and the organisation integral to service delivery
- Provision of e-learning platforms
- Emergence of private education institutes
- Potential for Massive Open Online Courses (MOOCs)
- Partnership approach to delivering 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)

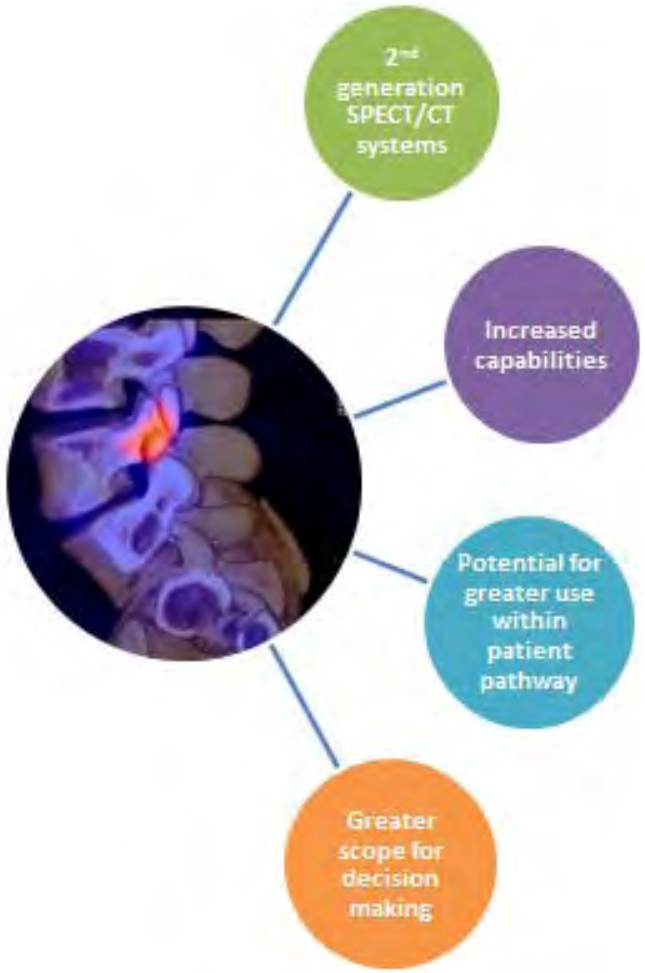
Strategic influence / individual accountability

- 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:



- 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



Impact of technology

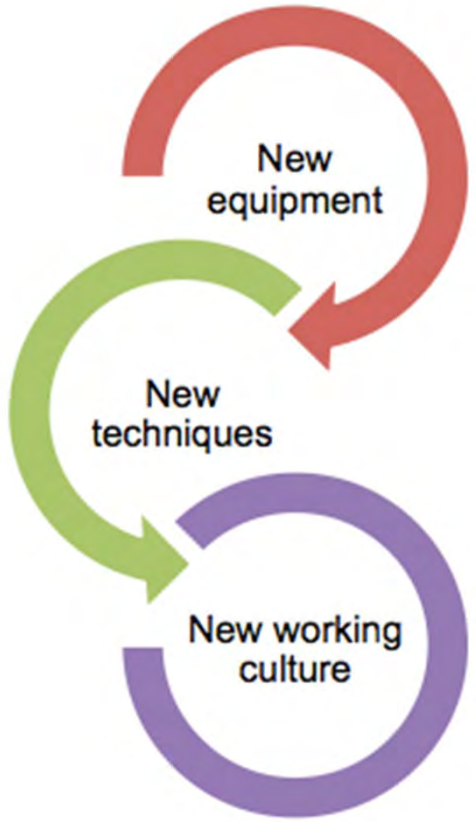
- Ownership of new technology & impact on Radiography workforce (Larsson et al, 2008)
- Professional '*ripple*' reported with the introduction of new technology
- New roles = new education needs
- Development of new communities as a result of emerging new technology

Innovation + Improvement

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

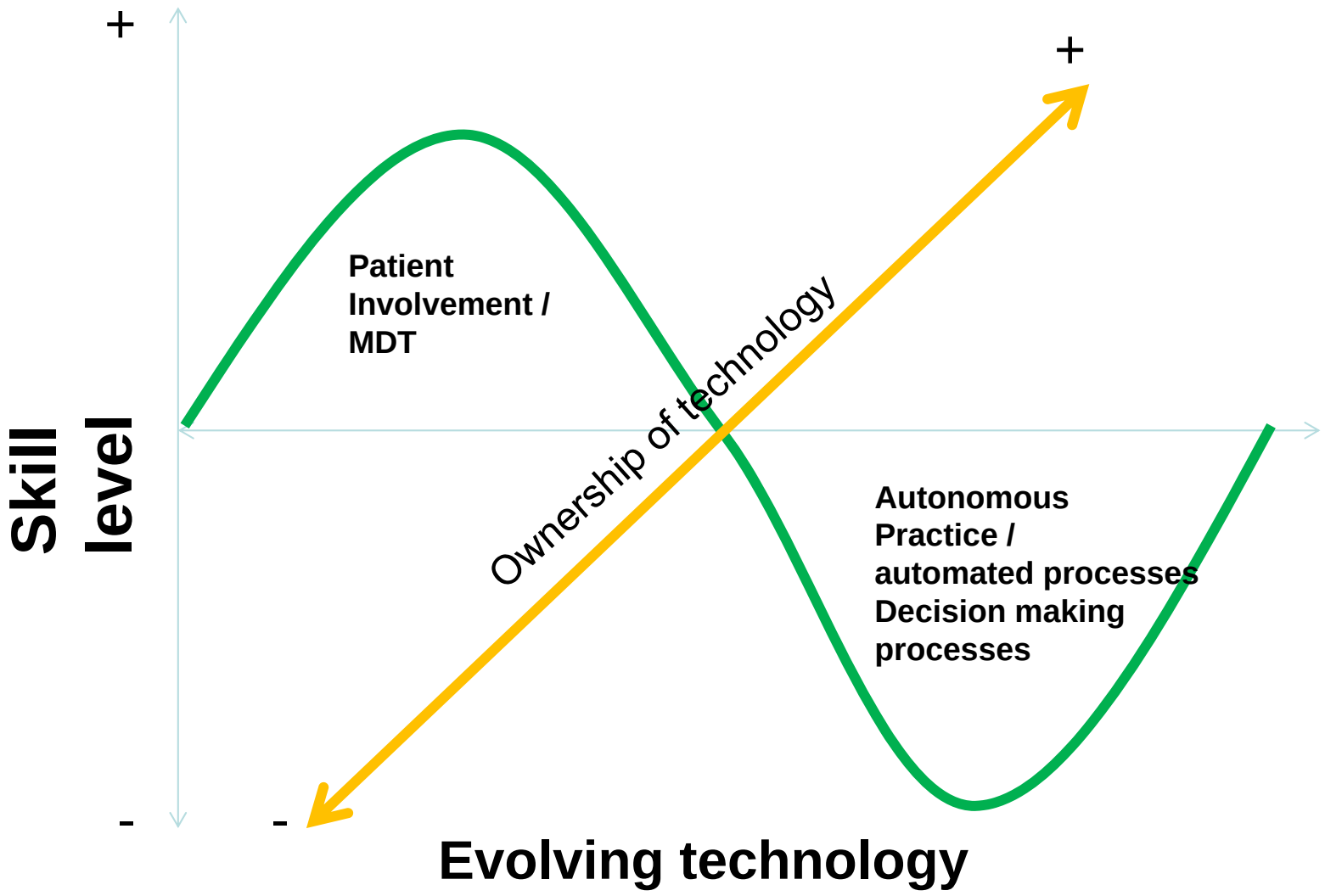
ADOPTION
Putting the new idea, product or service into practice, including prototyping, piloting, testing and evaluating its safety and effectiveness

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



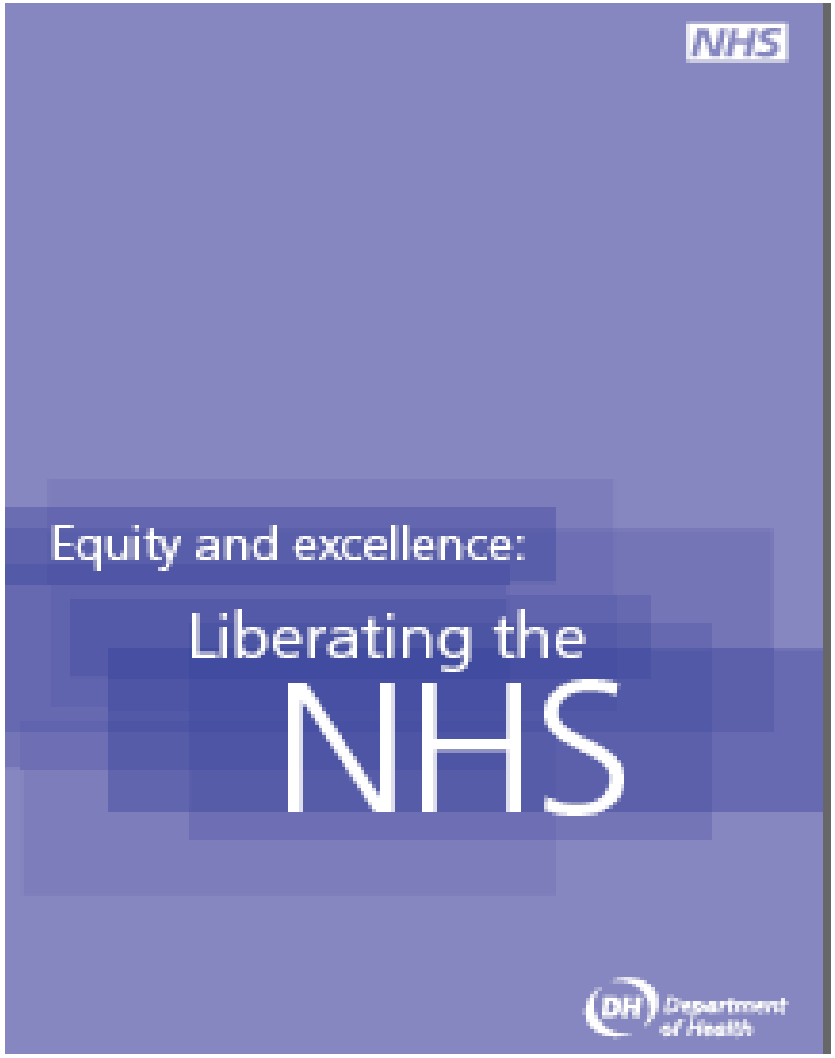
(DH, 2011a)

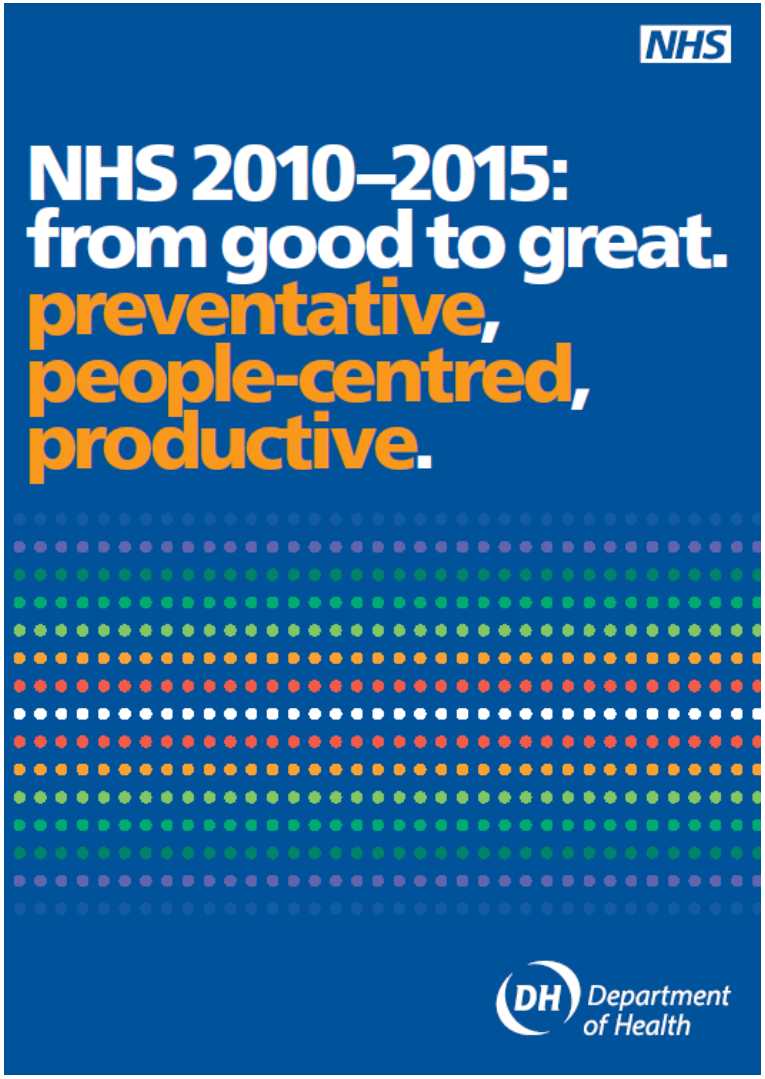
Professional '*ripple*' and reorder



Timmons S., Tanner J., (2004)

The Need for Enhancement & Development



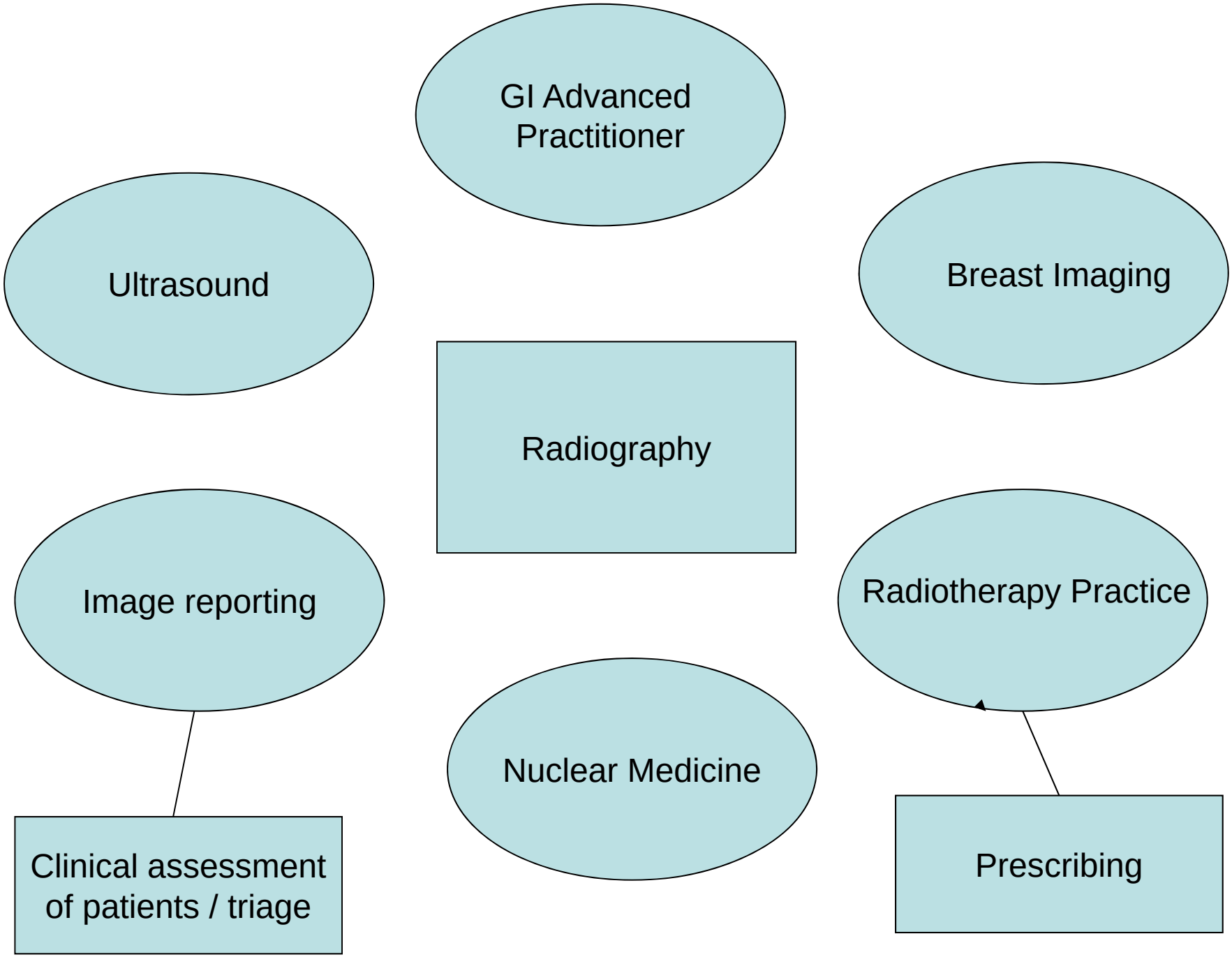


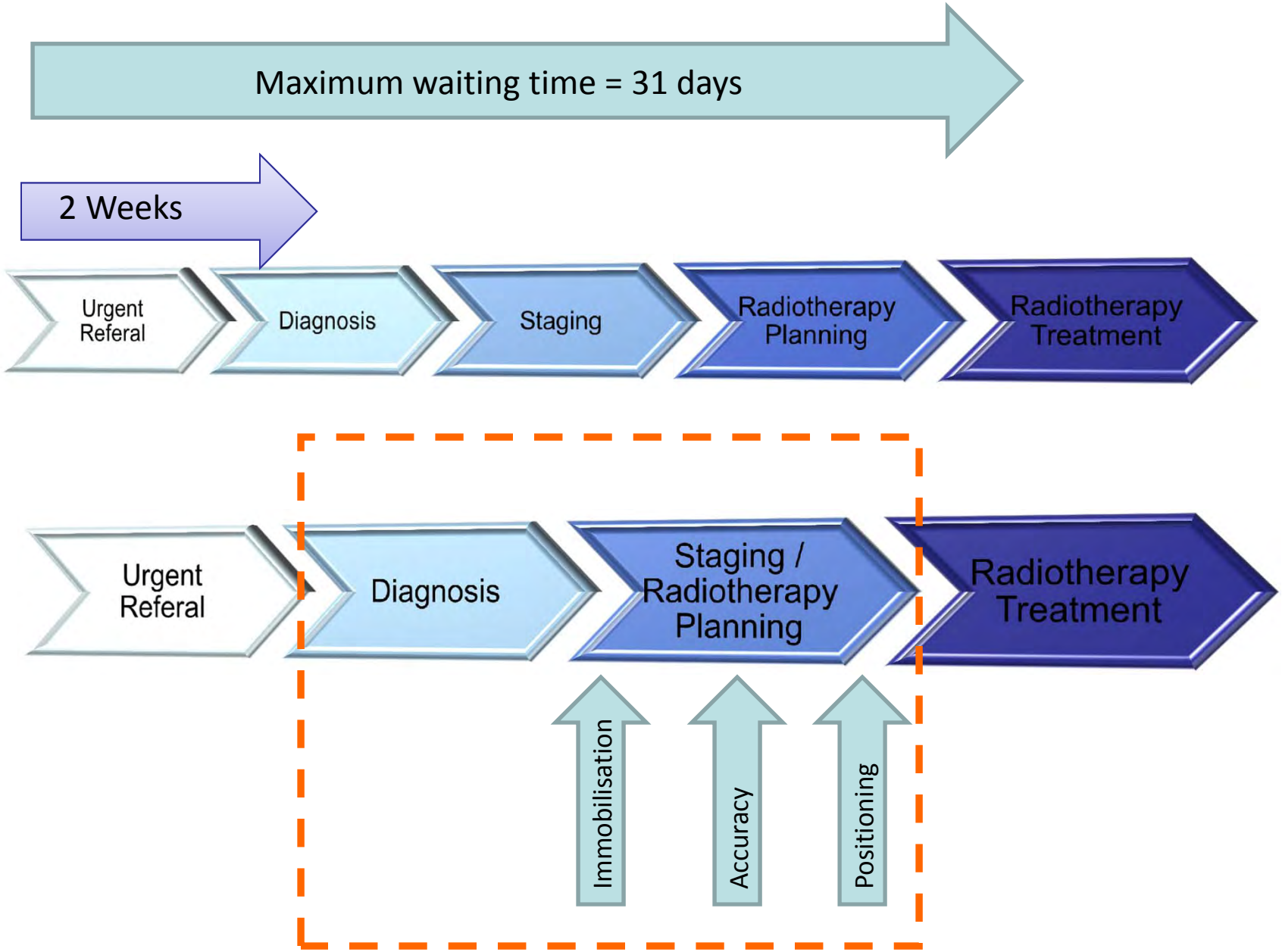
DH (2007) Modernising AHP Careers

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)


GI Advanced Practitioner
Ultrasound
Breast Imaging
Radiography
Image reporting
Radiotherapy Practice
Nuclear Medicine
Clinical assessment of patients / triage
Prescribing


Maximum waiting time = 31 days
2 Weeks
Urgent Referal
Diagnosis
Staging
Radiotherapy Planning
Radiotherapy Treatment
Urgent Referal
Diagnosis
Staging / Radiotherapy Planning
Radiotherapy Treatment
Immobilisation
Accuracy
Positioning

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
    - SCoR Skill Mix Publication (2003)
  - 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

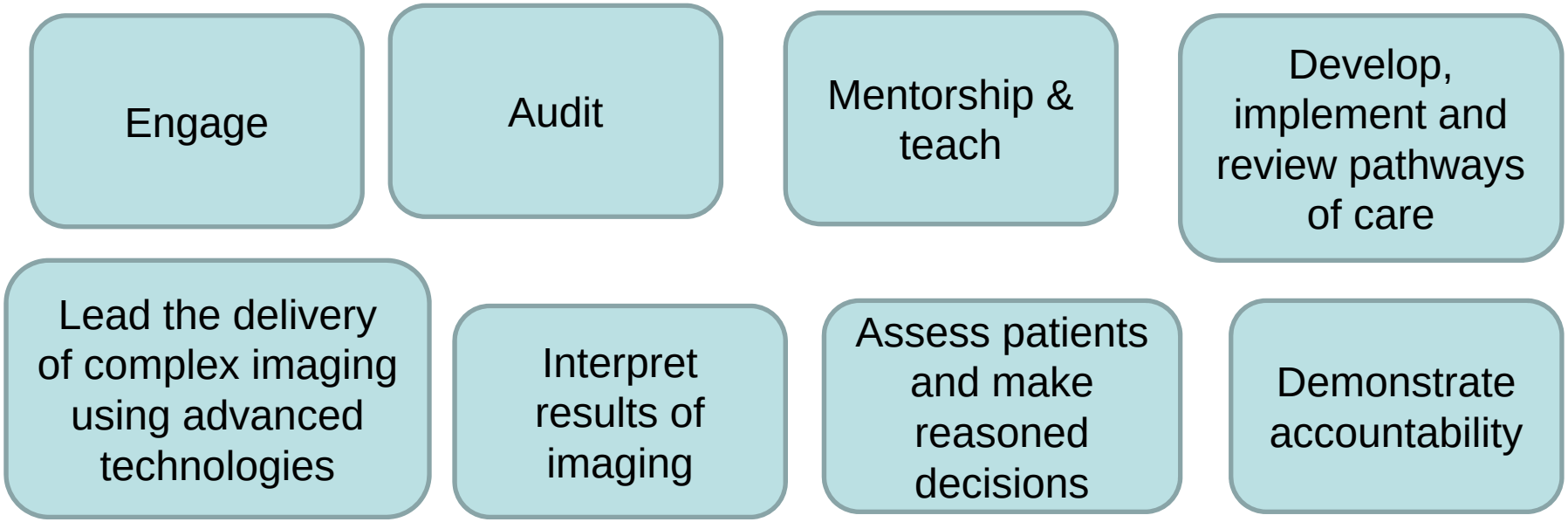
- Weaknesses
  - Limited workforce
  - Historically weak research base
  - Limited leadership within the profession to date
  - Barriers to change (professional)
  - Resources – CPD
  - Legal issues / clinical negligence (Buttress & Marangon, 2008)

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 issuess

28 key points of an Advanced Practitioner in Radiography

http://www.sor.org/learning/document-library/education-and-career-framework-radiography-workforce/10-advanced-practitioners



“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!

South West Radiology Review (09/10) document:

"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.

*www.**southwest**.nhs.uk/.../Enc%20H_NHS%20**South**%20**West**%20Investment%20Framework%202009-10.pdf*

WRT - Migration Advisory Committee Shortage Report Health Professions Council (HPC) Registered Diagnostic Radiographers (2009)

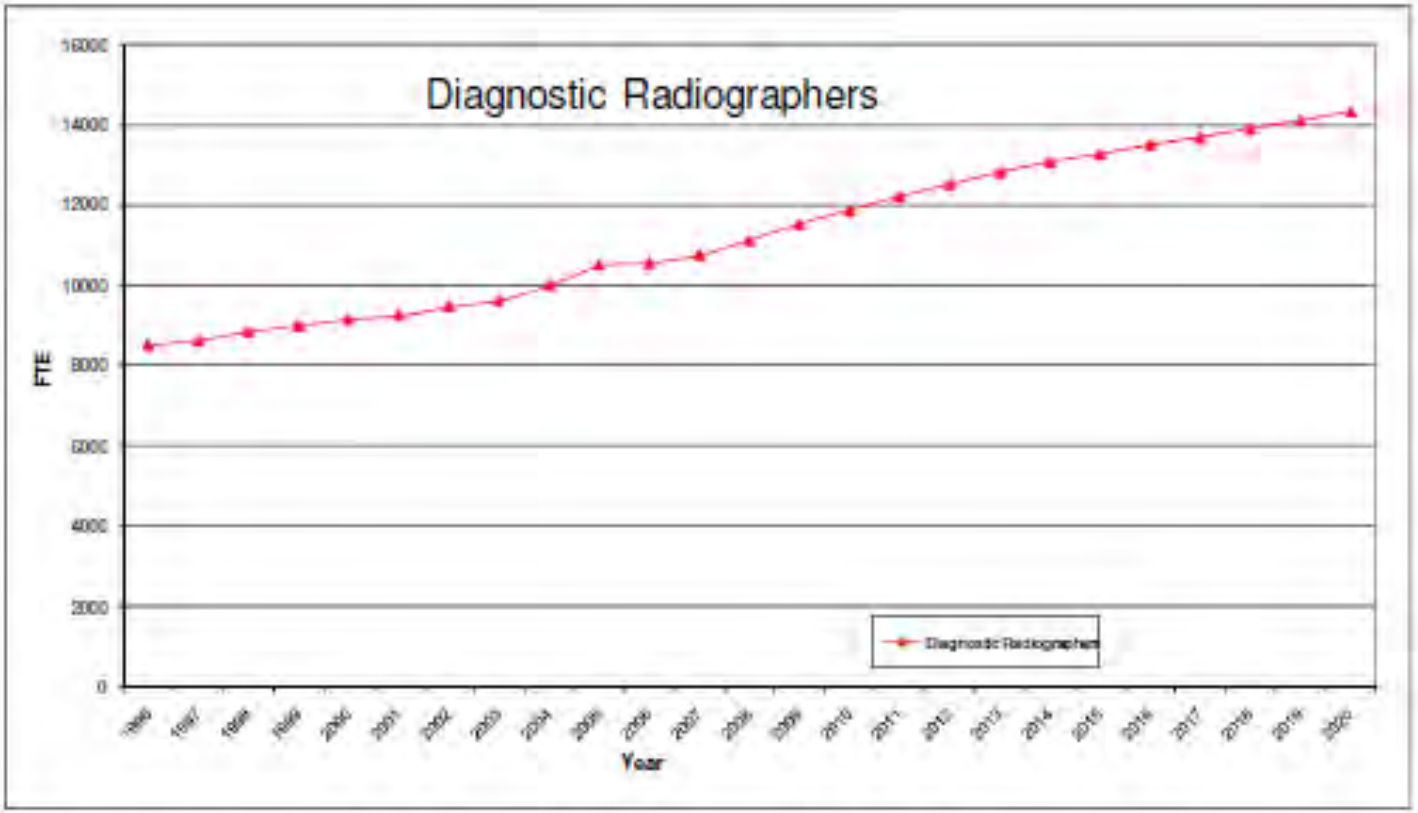
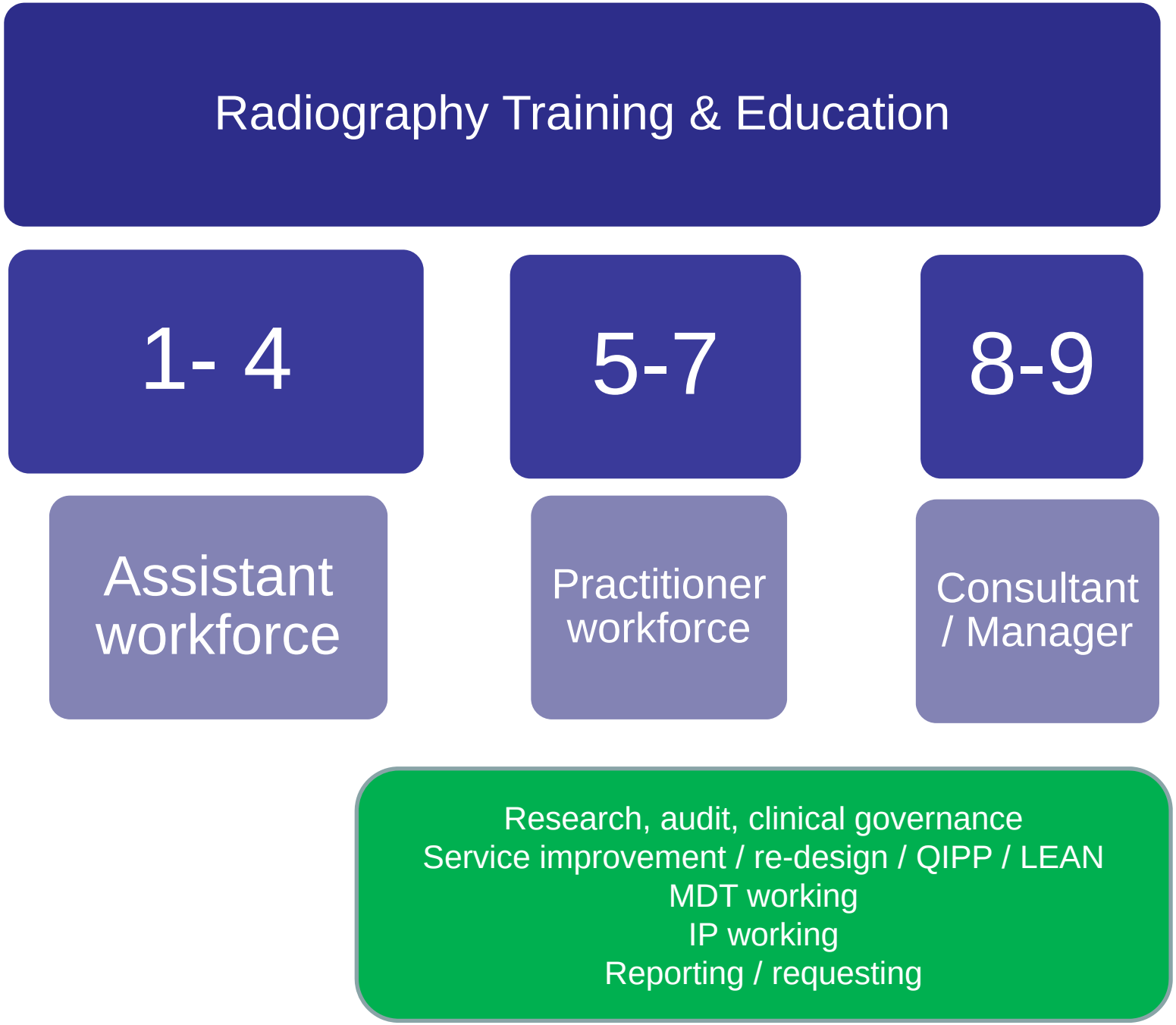
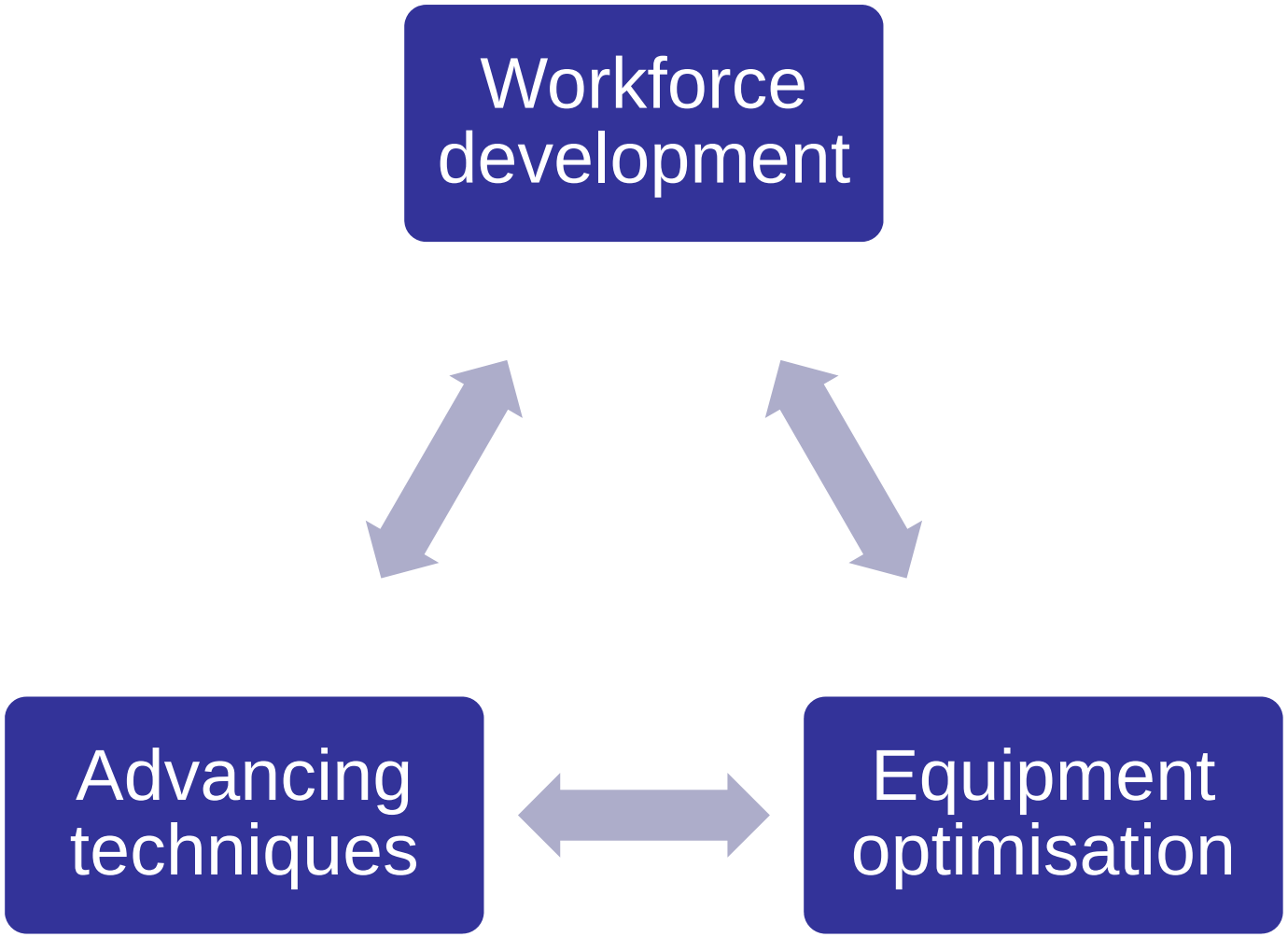


Figure 1: Historical and projected diagnostic radiographer workforce supply


Radiography Training & Education
1- 4
5-7
8-9
Assistant workforce
Practitioner workforce
Consultant / Manager
Research, audit, clinical governance
Service improvement / re-design / QIPP / LEAN
MDT working
IP working
Reporting / requesting



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

Radiography (2010) 16, 238–243

available at www.sciencedirect.com

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journal homepage: www.elsevier.com/locate/radi

REVIEW ARTICLE

Evaluating the fundamental qualities of a nuclear medicine radiographer for the provision of an optimal clinical service

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KEYWORDS
Education;
Career development;
Clinical practice;
Nuclear medicine

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 fertilization 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

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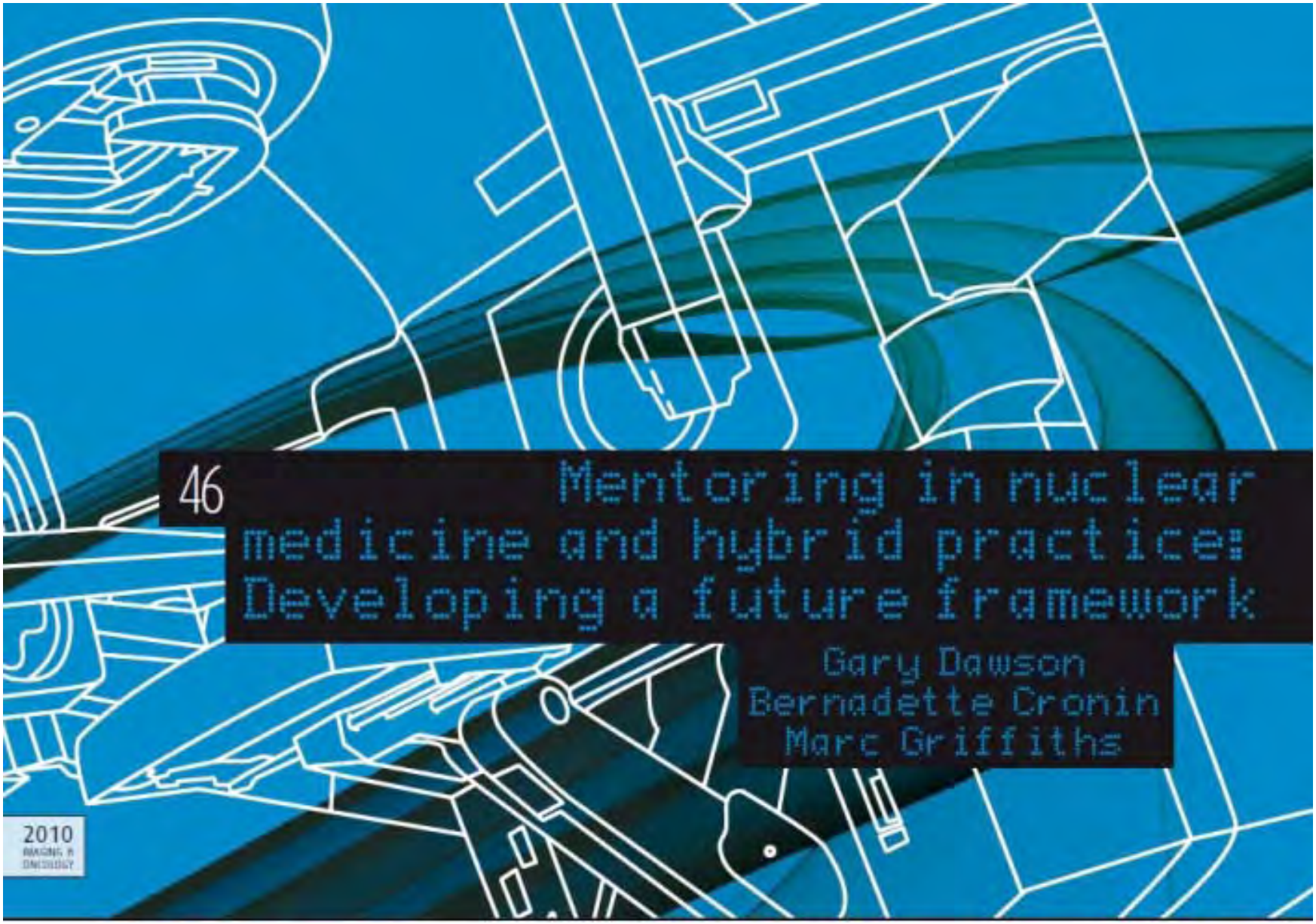
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Mentoring in nuclear medicine and hybrid practice: Developing a future framework
Gary Dawson
Bernadette Cronin
Marc Griffiths
2010

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

- Dawson G., Cronin B., Griffiths M., (2010) Mentoring in nuclear medicine and hybrid practice: Developing a future framework, *Imaging & Oncology*, pp 46 - 5
- Griffiths M., King S., Stewart R., Dawson G., (2010) Evaluating the Fundamental Qualities of a Nuclear Medicine Radiographer for the Provision of an Optimal Clinical Service, *Radiography*, Vol 16, 3, pp 238-243
- Brealey S. et al (2005) Accuracy of radiographer plain radiograph reporting in clinical practice: a meta-analysis, *Clinical Radiology*, Volume 60, pp 232–241
- Department of Health (2003) *Radiography Skill Mix: A report on the four-tier service delivery model*, London, Department of Health
- Department of Health (2008) *Modernising AHP Careers: A Competence-Based Career Framework*, London, Department of Health
- Department of Health (2008) High Quality Care for all: NHS Next Stage Review Final Report, London, Department of Health
- Royal College of Radiologists & Society and College of Radiographers (2012) *Team Working within clinical imaging*, London, SCoR
- SCoR (2010) Education and Professional Development Strategy: New Directions , London, SCoR

References

- Centre For Workforce Intelligence (2011) Allied Health Professions: Workforce Risks and Opportunities, [online] Available from http://www.cfwi.org.uk/intelligence/projects/allied-health-professionals-workforce-risks-and-opportunities [Accessed: 30/09/2012]
- 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
- Department of Health, NHS Improvement & Efficiency Directorate, Innovation and Service Improvement (2011) Innovation*, Health and Wealth, Accelerating adoption and diffusion in the NHS*, London, Department of Health
- Department of Health (2011a)Liberating the NHS: Developing the healthcare workforce, [online] http://www.londonmedicine.ac.uk/current-issues/equity-and-excellence-liberating-the-nhs Accessed on 26/10/2012
- Department of Health (2011b) *A framework for technology enhanced learning*, [online], available from http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130924 Accessed on 24/11/2012
- *Department of Health (2012) NHS Outcomes Framework 2011/12, [online] http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131700 Accessed 26/10/2012*
- Timmons S., Tanner J., (2004) A disputed occupational boundary: Operating theatre nurses and operating department practitioners, *Sociology of Health and Illness*, Volume 27, 5, pp 645-666
- University Alliance (2012) University_vision project, [online] http://universityvision.org.uk/ Accessed on 21/11/2012
- SCoR (2013) *'Preliminary Clinical Evaluation and Clinical Reporting by Radiographers: Policy and Practice Guidance*' , London, SCoR