



# THE **medical** ROOM

WORKING IN PARTNERSHIP WITH A SPECIALIST TRAINING PROVIDER - WHAT IS THE ROLE OF FURTHER EDUCATION?

NFEC National Conference, Leicester

November 2013

# Introducing The Medical Room



- UK based company, Incorporated 2007
- Preferred suppliers to the NHS in the recruitment & training of Biomedical Engineers & Associates
- Launched a subsidiary in Australia in 2013
- Mike Green (Director) & team bring over 55 years of technical engineering recruitment experience of which 19 years specialising in the medical sector

# Presentation



- Describe the history of Professional Registration for Biomedical Engineers in the UK
- Current issues of Recruitment and Training in the NHS
- The importance of accreditation in Training
- The role of a Further Education provider working in partnership with a private training organisation

# Biomedical Engineering in the UK



- What is a Biomed Engineer?
  - Medical Engineer, Clinical Engineer, EBME Engineer, Clinical Technologist,
- Where do they work?
  - Medical Engineering, Clinical Engineering, EBME Department, MEMS Department, MEMO Department, Medical Devices Group

# Biomedical Engineering in the UK



- Definitions:
  - Biomedical Engineer = Clinical Scientist (IPEM) = Healthcare Scientist
  - Biomedical Technician = Medical Engineer (NHS) = Clinical Technologist (IPEM) = Healthcare Practitioner
- Interested parties:
  - Department of Health
  - Health and Care Professions Council
  - Institute of Physics and Engineering in Medicine (IPEM)
    - Voluntary Register of Clinical Technologists (VRCT)
  - Further Education Providers

# History to Registration

## Moving Forward



- August 2000 – Voluntary Register for Clinical Technologists established (VRCT)
- February 2001 – NHS publishes a paper, Strategy for the Professions in Healthcare Science
- October 2004 – Health Professions Council agrees the Clinical Technologist Profession should be regulated
- December 2004 – NHS implements Agenda for Change



# Agenda for Change – Restructuring Staff Grades



- Process commenced in 1999
- Objective
  - Review pay structures implemented originally across Civil Service in 1916
  - Remove complex pay structures that have operated for staff grades in isolation
  - Re-align terms and conditions to be relative to all other workers
  - Deliver equal pay for work of equal value

# Agenda for Change



- Parties involved
  - The NHS from England, Northern Ireland, Scotland and Wales
  - NHS Employers - which represents NHS employers
  - Twenty trade unions and representative bodies.
- 5 years to reach an agreement and put into implementation
- Resulted in 9 Staff Grades across the NHS



# Knowledge Skills Framework – Mapping skills to grade

- Outlines a specific staff discipline and identifies the competencies that are mapped to the post's dimensions/levels.
- Draws on the National Occupational Standard for each discipline of staff
  - Describes in detail the function/capability/responsibility for each grade
- How to technically support a medical device
  - e.g. Infusion pump, defibrillator, anaesthetic machine

# Modernising Scientific Careers

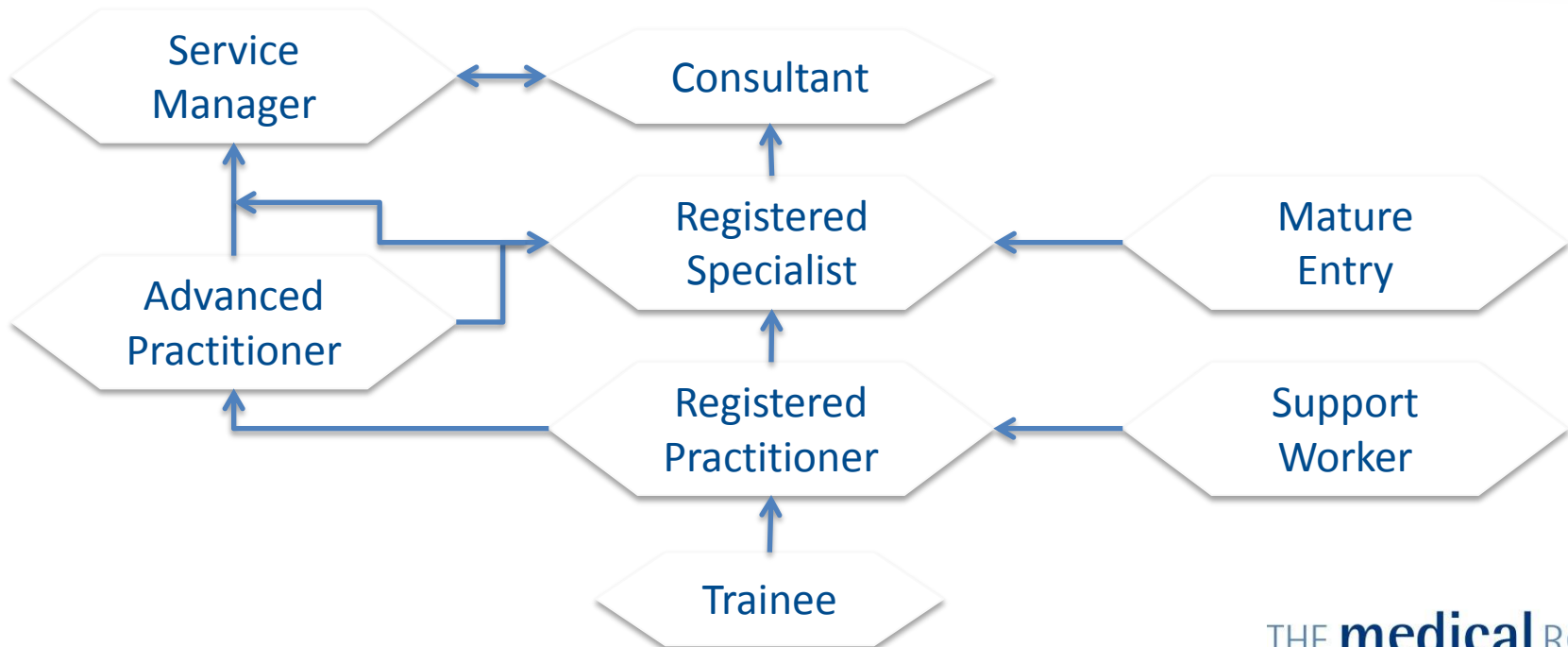
June 2008 – The Department of Health implements an academic review of Career Training for the Healthcare Science Community. The key elements to the review were:

- Introduction of a new simplified healthcare science career pathway at all stages of the career framework
- New training and education programmes, incorporating both academic and workplace-based training.
- Identification of regulatory implications for changing education and training

# Career Pathway - 2001



## Career Pathway for a Healthcare Science Worker

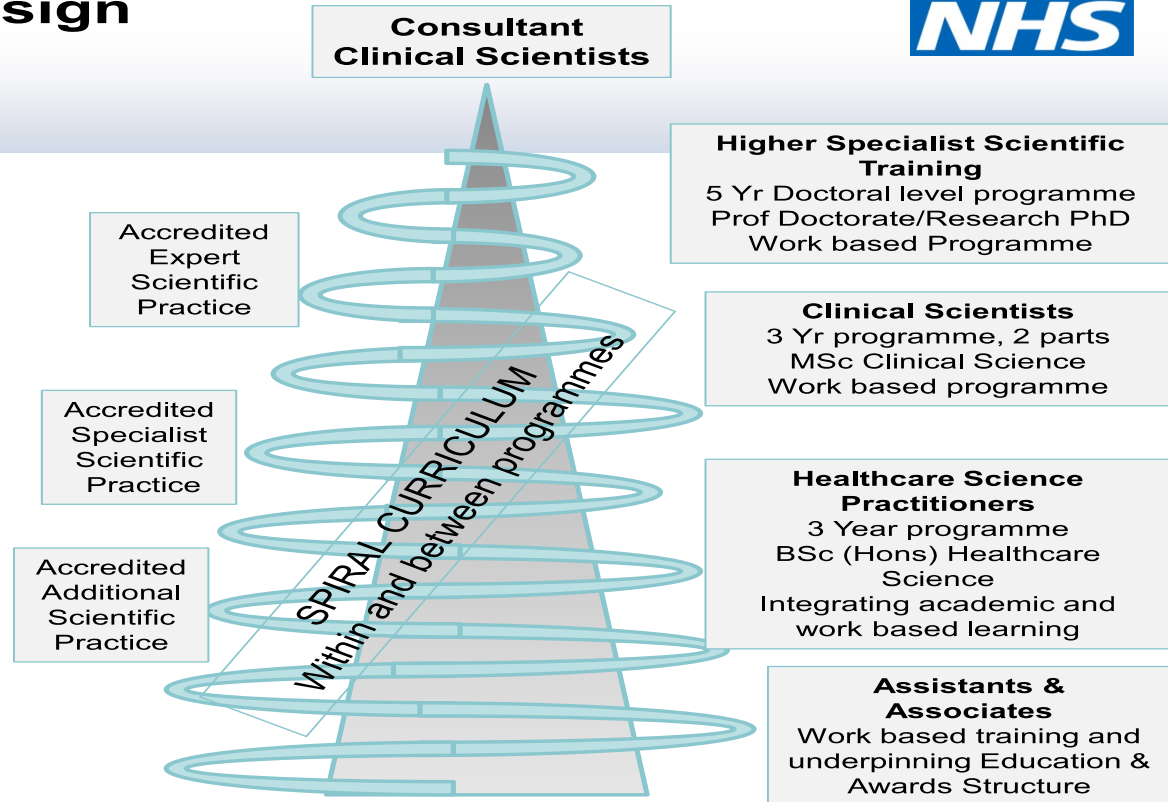


# Modernising Scientific Careers -

# 2012

## MSC Programme Design

- Work based programme and underpinning academic award developed with employers, professionals and patient /lay input
- Learning Guides that clearly define:
  - Work Based Learning Outcomes
  - Clinical Experiential Learning
  - Competences
  - Applied Knowledge & Understanding
- Generic Curriculum including:
  - Professional Practice (linked to *GSP*) and values and behaviours
  - Scientific Basis of Healthcare Science (incl. Genetics, Bioinformatics, Public Health, Epidemiology)
  - Research (CACP), Innovation (ICF), Leadership
- Theme and specialist curriculum
- Overarching Assessment Strategy
- Development of a bespoke on-line assessment tool
- Accreditation of Academic (MSC) and work based environments (NSHCS) – NHS kite-mark (and other kite-marks, e.g. COGENT, Society of Biology)
- New curricula as need arises and review process

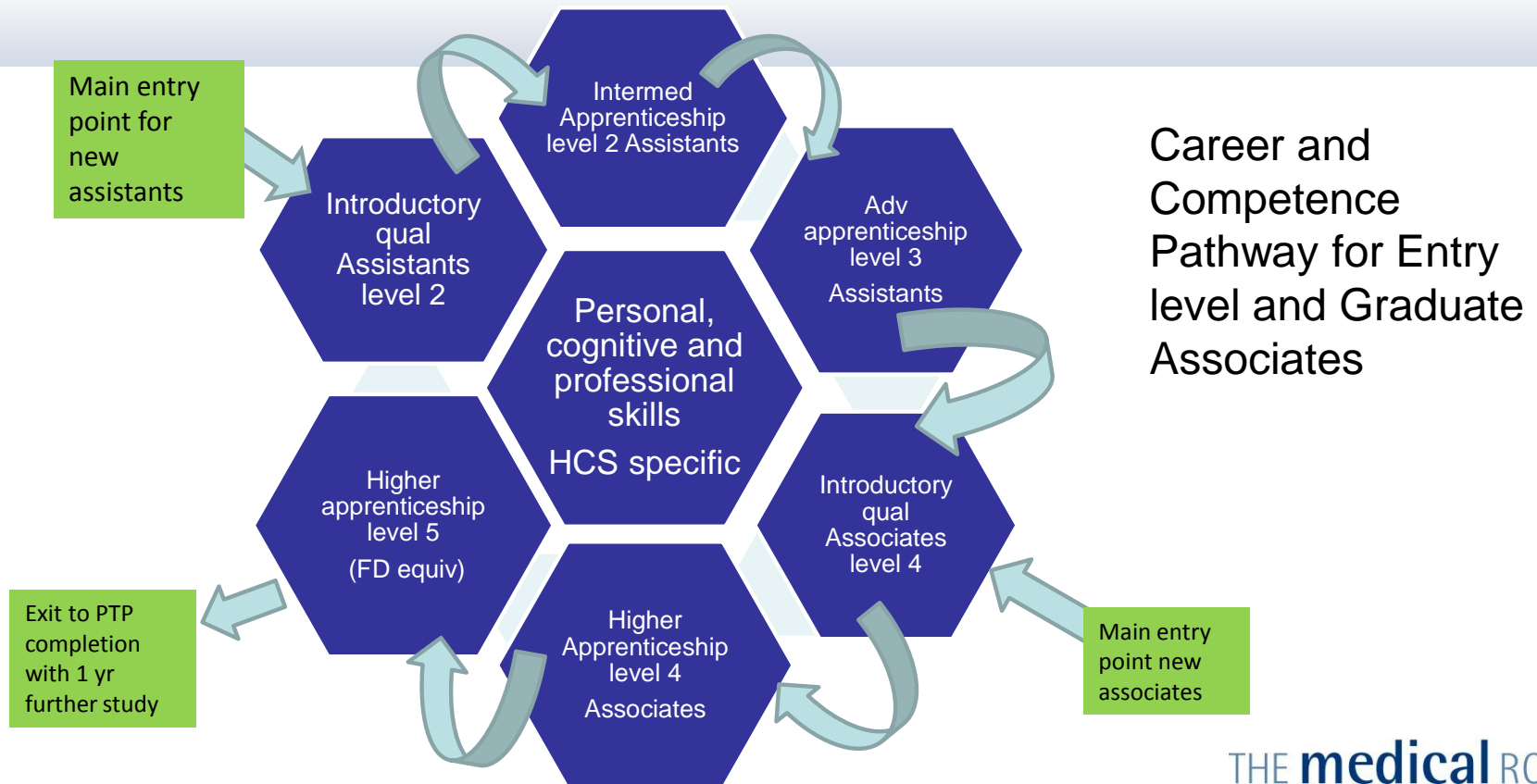


- Partnerships with HE sector
- Independent Institute of Education (IOE) review of curricula

Science in healthcare DRIVING A MODERN NHS

THE medical ROOM

# Healthcare Science Apprenticeships



# Healthcare Science Apprenticeships

## Career Framework 2-4

The proposed framework provides a common structure for:

- A defined national 'Rolemap' for each of Assistant and Associate roles
- The structure and design of new roles in new contexts
- Curriculum for development in roles, progression and transferability
- Qualifications and Awards
- Equivalence, accreditation of prior learning

The framework and development builds upon and utilises all previous work and existing/under development programmes, awards and qualifications

# Challenges facing NHS



- Ageing workforce
- Lack of succession planning
- Difficulties in staff recruitment
- Shrinking talent pool
- Training budget pressures
- Increasing efficiencies
- Increased operational and strategic risk



# Enter The Medical Room



- **Industry Specific Biomedical Training Course**
  - Practice-based, vocational training
  - Developed in partnership with strategically located major teaching hospitals
  - Modular – complete whole course or fill skill gap
  - Competency based, tailored to UK NOS and structure for Professional Registration
  - Accredited to National Educational Standards
  - Vendor neutral and affordable

# The Medical Room Training

- A structured, competency based training programme
  - Theory, Physiology and Practical based learning
  - Minimum standards must be demonstrated
- Educationally accredited, mapped to a National standard
- Programme Accreditation by the Professional Institute
- Full integration with the future parameters for Registered status for Biomed Associates and Engineers

# Course Content



- Course material developed in Partnership with NHS across the UK
- Accredited to National Educational Standard
- Modern Apprenticeship structure culminating in Diploma
- Pathway to higher level qualifications

Unit 1	Technical Principles of Clinical Engineering
Unit 2	Patient Monitoring & Infusion Equipment
Unit 3	Operating Theatre & Surgical Equipment
Unit 4	Technical Principles of Anaesthetic Equipment
Unit 5	Technical Principles of Ventilation Equipment
Unit 6	Technical Principles of Dental Equipment
Unit 7	Information Technology in the Clinical Environment
Unit 8	Management of a Clinical Technology Service

# Educational Contribution

## Current Involvement

- Review of course content
  - Mapping to QCF
  - Quality assessment of course delivery

## Future Involvement

- Develop strategy in order to become an RTO
- Develop strategies for higher level qualification
  - Map qualification to Professional Registration
  - Training accreditation by our Professional Body

# Conclusions



- Biomed Engineers and Technicians require regulated status for protection of their title and professional recognition of their work in the healthcare sector
- There is a combined determination across employers, further education providers, professional and regulatory bodies to succeed in achieving Registered status for Biomed Engineers
- A framework now exists to attain Registered status that embraces non Degree education and requires demonstrable practical competency opening up a pathway for Associates and allows for their continuing career development

Thank you for listening!



For more information please visit

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