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NHS
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# Healthcare Science Trailblazer Apprenticeship

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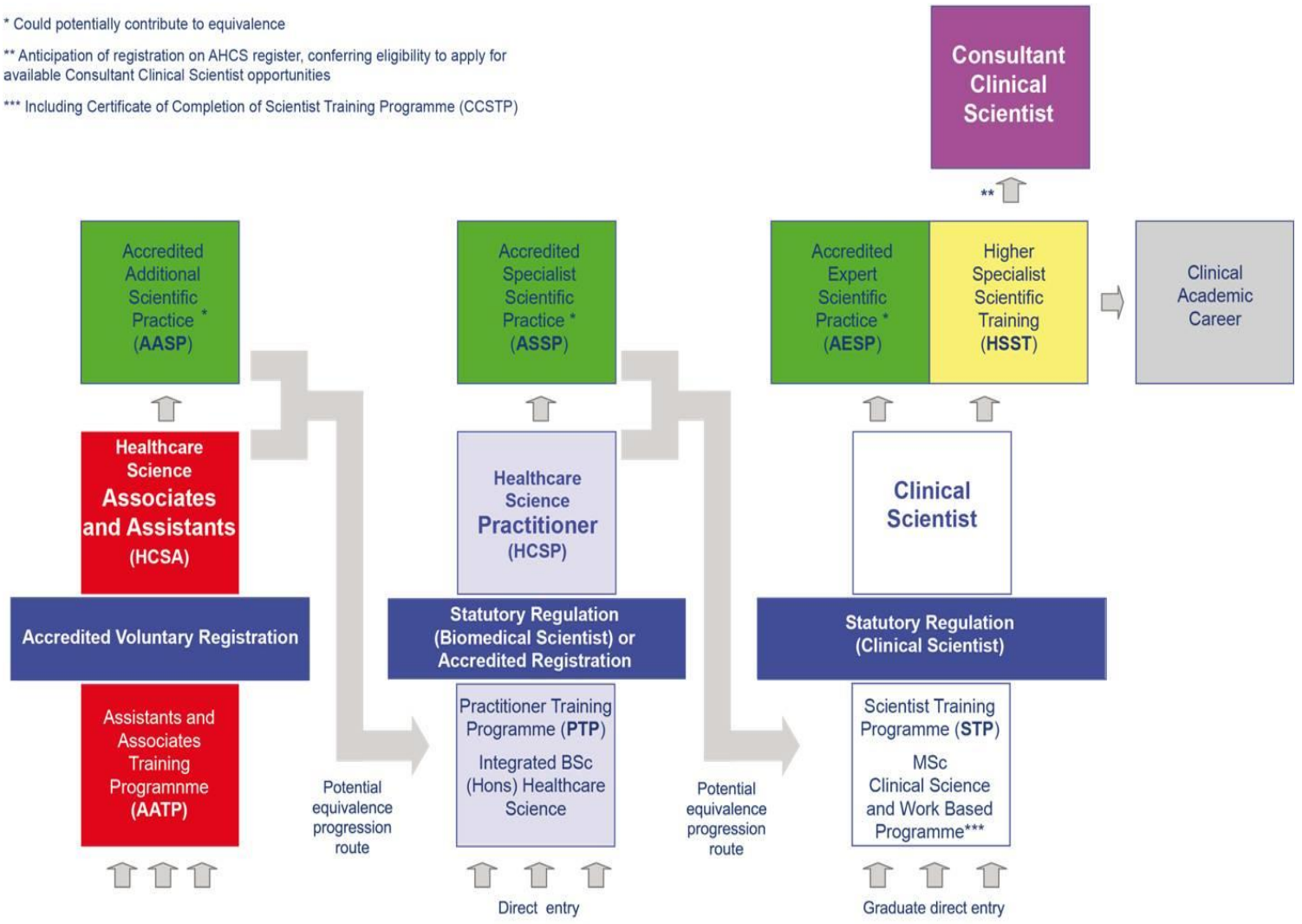
HCS Team June 2016

# Setting the Context of the HCS Apprenticeship Programme



# Healthcare Science (HCS) Trailblazer Group

- a broad network of healthcare scientists across specialisms, providers (including independent providers), HEIs and other stakeholders was established during 2013 by Shirley Fletcher
- focus groups and a virtual network worked to identify and define the roles/responsibilities for the Level 2–4 (Assistant/Associate) workforce
- The CSO, Professor Sue Hill is the Chair of the Healthcare Science Trailblazer Group which submitted expressions of interest to BIS for the development of three sets of standards for HCS
    - Healthcare Science Assistant (HCSA) (Level 2)
    - Healthcare Science Assistant (HCSA) (Level 3)
    - Healthcare Science Associate (Level 4)

# Principles of developing HCS Apprenticeships

- the Level 2 Standard is based on *Good Scientific Practice* and reflects the skills, knowledge and behaviours expected by anyone in the healthcare science workforce, but “pitched” at the appropriate level and it therefore generic across the HCS Assistant (Level 2) workforce
- in keeping with rest of HCS Career Pathway an underpinning qualification in HCS is required
- the Level 2 Diploma provides the specificity reflecting the particular and focussed knowledge, skills and competencies required in a given area of HCS
- a Level 2 HCS curriculum has been developed across the HCS specialisms by senior scientists and forms the backbone of the qualification which is currently being supported for delivery by Pearson (although there could be other providers in the future).

# Level 2 APPRENTICESHIP STANDARD FOR HEALTH CARE **SCIENCE** ASSISTANT (HCSA)

## Occupational profile

- safe patient care across all care pathways
- perform a range of low risk, routine technical and scientific procedures usually within one broad area of HCS
- following specific protocols and in accordance with health, safety, governance and ethical requirements. HCSAs work using standard operating procedures, initially under direct supervision but increasingly with experience, under indirect supervision.

## Responsibilities and duties of the role

- be aware of the requirements of *Good Scientific Practice* (GSP)
- work effectively within a multi-professional team (MPT)
- work within the limits of their competence
- seek help and support whenever this is required
- adhere to employers' policies and protocols to ensure safe and consistent practice within the working environments of HCS

# Diagrammatic representation of work-based Level 2 Healthcare Science Assistant Programme

**BTEC Level 2 Diploma in Healthcare Science (minimum number of credits for award to be determined (TBD) but includes 14 credits from BTEC Level 2 Certificate)**

Underpinning Assessment Strategy

**Knowledge Syllabus**

**Select modules appropriate to job role which can be from any of the three themes to support cross divisional working**

1. Life Sciences: Pathology Investigations of Disease and Disorder
2. Physiological Sciences: Clinical Investigation of Human Functions and Systems
3. Physical Sciences: Physics and engineering in patient imaging, measurement, and equipment management

**Work-based Syllabus**

**Select modules appropriate to job role**

1. Administration, Records and Data
2. Preparing the HCS Environment
3. Supporting the Safe Working Environment
4. Recording and Reporting Clinical Data
5. Patient Contact, Support and Engagement
6. Assessing Patient Status
7. Obtaining Samples, Specimens and Tissues
8. Investigating Samples and Specimens
9. Patient Investigation in HCS
10. Imaging Investigations and Diagnostics Radiation
11. Maintaining and Preparing Equipment for Clinical Use
12. Quality Control in Healthcare Science
13. Personal Management and Development

Underpinning Personal, Cognitive and Professional Skills Syllabus (8 domains: 5 credits)

**Induction and BTEC Level 2 Certificate in Introduction to Healthcare Science (14 credits): 5 Modules**

Healthcare Science (HCS) Services; Employee Rights, Responsibilities and Personal Development in HCS; Working in Partnership in HCS; Investigating, Treating and Managing Human Disease and Disorder; Working Safely in the HCS Environment

| | |
|---|---|
| | **Generic Modules:** Common to all divisions of Healthcare Science (HCS); the learning outcomes for these map to units within the qualifications and are assessed within the context of these. |
| | **Division/Theme-Specific Modules:** Life Sciences; Physical Science and Biomedical Engineering; Physiological Sciences; Clinical Bioinformatics |
| | **Specialist Modules:** Specific to a HCS specialism |

# Healthcare Science Endpoint Assessment (Level 2)

- developed by the Assessment team at the NSHCS (about 3 hours)
- assessed by External Assessors managed by a Registered Assessment Organisation only after Diploma completed
- Pearson will initially provide this, but other Assessor Organisations may come forward in due course
- External Quality Assurance will be provided by the Academy for HCS, with advice and support from the National School of HCS
    - Professional Discussion based on a local work-based Portfolio
    - Vocational Competence Observation (VCO) – 3 work based tasks will be assessed/graded based on a list of specialism relevant workplace tasks that form part of routine practice as a HCSA in a given specialism
    - Professional Practice Test (PPT) – the apprentice will review 8 brief workplace-based scenarios (selected from a bank of scenarios developed by the AO) and describe the actions (in order) they would take in response to the scenario

# Apprenticeship Standard for HCS Associate (Level 4)

## Occupational profile

- supports the work of HCS Practitioners and Clinical Scientists in all areas of HCS
- perform a wide range of routine technical and scientific procedures, with
- minimal supervision

## Responsibilities and duties of the role

- be aware of and practice in accordance with *GSP* and work within the limits of their competence
- adhere to employers' policies/protocols to ensure safe, person-centred and consistent practice in HCS working environments.
- activities undertaken include
  - performing routine investigations
  - telephoning authorised results according to protocols
  - calibrating/maintaining devices

# EPA and Level 4 Diploma In Healthcare Science

- both under development so details not yet available
- EPA almost certainly will follow arrangements for Level 2 EPA but assessed at higher level – plan to submit to BIS in July
- high level curriculum framework for Level 4 has been developed in a number of specialisms but is being further developed by Pearson with named healthcare scientists
- Intention is that Level 4 Diploma will be compatible with the the early part of a PTP or a foundation degree so that HEIs/learners should be able to APL significant elements of the of Level 4 Diploma
- Level 4 HCS Standard will be fully ready for launch in September 2017.

# Modernising Scientific Careers: Healthcare Science Assistant and Associate Training Programme (AATP): Diagrammatic representation of work-based Level 4 Healthcare Science Associate Programme

**BTEC Level 4 Diploma in Healthcare Science (60 credits) including 15 credits from BTEC Level 4 Certificate)**

Underpinning Assessment Strategy

## Knowledge Syllabus

**3 Themes (Number of credits 20)***

**Mandatory 10 credits**

- **Scientific Basis of Healthcare Science (1)**

**Optional Modules**

- **Scientific Basis of Healthcare Science (2 – 5)**

**Further Optional Modules**

1. Life Sciences: Pathology Investigations of Disease and Disorder
2. Physiological Sciences: Clinical Investigation of Human Functions and Systems
3. Physical Sciences: Physics and Engineering in Patient Imaging, Measurement, and Equipment Management

****Select modules appropriate to job role which can be from any of the three themes to support cross divisional working***

## Work-based Syllabus

**13 Functional Areas (Number of credits 20 TBC)***

1. Administration, Records and Data
2. Preparing the HCS Environment
3. Supporting the Safe Working Environment
4. Recording and Reporting Clinical Data
5. Patient Contact, Support and Engagement
6. Assessing Patient Status
7. Obtaining Samples, Specimens and Tissues
8. Investigating Samples and Specimens
9. Patient Investigation in HCS
10. Imaging Investigations and Diagnostics Radiation
11. Maintaining and Preparing Equipment for Clinical Use
12. Quality Control in Healthcare Science
13. Personal Management and Development

****Select modules appropriate to job role***

Underpinning Personal, Cognitive and Professional Skills Syllabus (8 domains: 5 credits)

**Induction and BTEC Level 4 Certificate in Introduction to Healthcare Science (14 credits): 5 Modules:** Applying the Scientific Method in Healthcare Science Research; Working within the Legal, Ethical and Regulatory Context of Healthcare Science; Working in Partnership with Service Users, Colleagues and other Professionals; Investigating, Diagnosing, Treating and Managing Human Disease and Disorders; Safety, Security and Wellbeing in the Healthcare Science Environment

**Generic Modules:** Common to all divisions of Healthcare Science (HCS); the learning outcomes for these map to units within the qualifications and are assessed within the context of these.

**Division/Theme-Specific Modules:** Life Sciences; Imaging, Physical Science and Biomedical Engineering; Physiological Sciences; Clinical Bioinformatics

**Specialist Modules:** Specific to a HCS specialism or sub specialism

# HCS Apprenticeship Programme: summary of progress to date

Ministers have so far accepted:

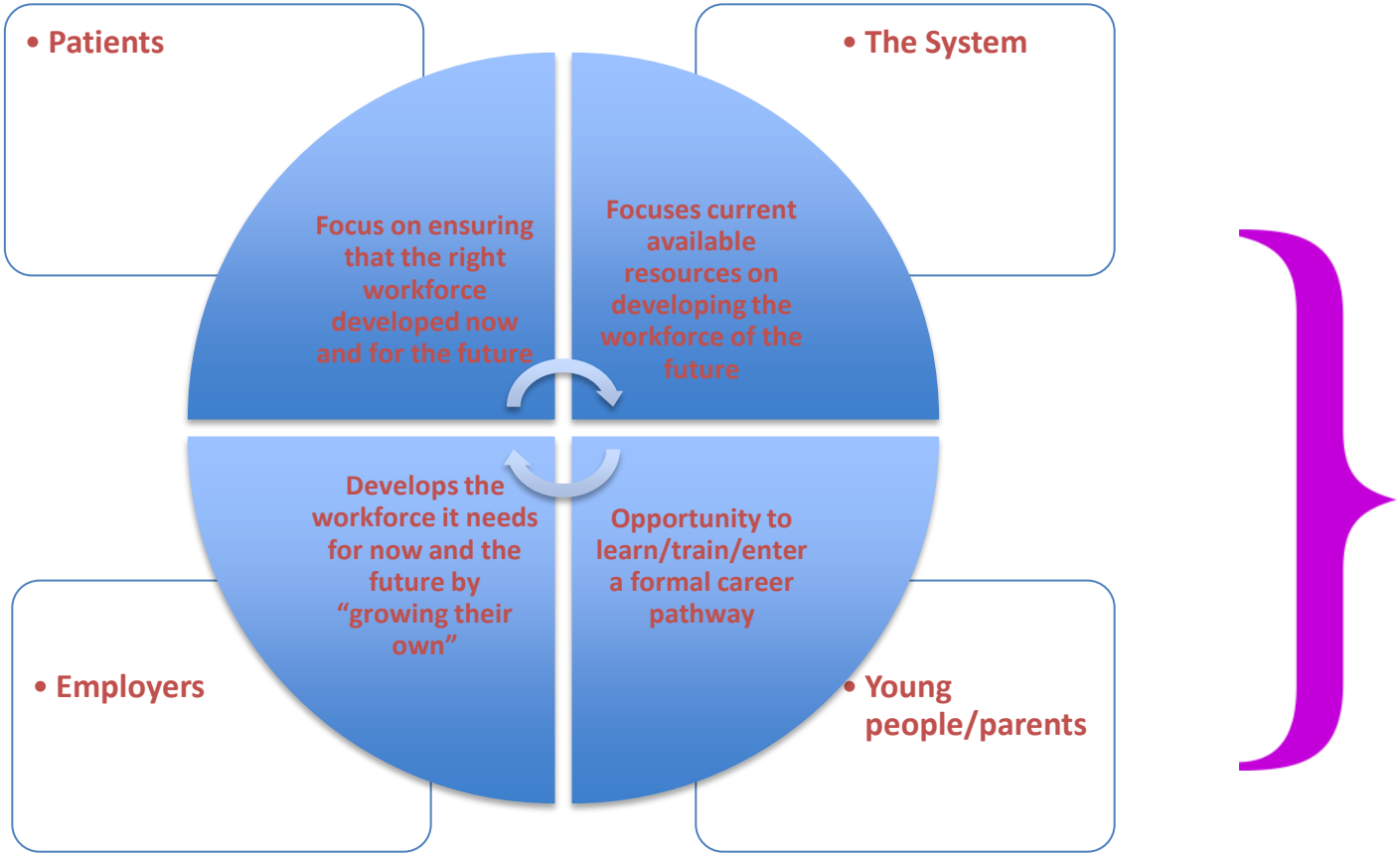
- Level 2 – HCS Assistant
  - Level 2 HCS Standard for HCS Assistant [HCSA]
  - End-point Assessment (EPA) for Level 2
  - the Standard is therefore ready for delivery
  - it will be launched in September 2016 when the Level 2 Diploma qualification becomes available
- Level 4 – HCS Associate
  - Level 4 HCS Standard for HCS Associate
  - EPA at Level 4 will be submitted July 2016
  - High level framework for Level 4 Diploma curriculum is being further developed
  - Curriculum and qualification for Level 4 Diploma available for Sept 2017

# Summary of Progress to Date (slide 2)

Levels 5 and 6

- Expression of Interest (EOIs) submitted at
  - Level 5 - HCS Senior Associate [Foundation degree]
  - Level 6 - HCS Practitioner (HCSP) or Biomedical Scientist (BMS) [BSc (Hons) through PTP or BMS degree]
- awaiting Ministerial decision on EOI
- in parallel, have been consulting on Level 6 draft Standard for HCSP/BMS
- based on GSP
- very wide circulation to stakeholders since May
- comments etc will be received until June 30th
- can be found on NSHCS and AHCS websites
- submission to BIS in July

# HCS Apprenticeships offer great opportunities for:



# Questions and Discussion?