

Level 6 HCS Higher Apprenticeship Standard

DEGREE APPRENTICESHIP STANDARD FOR HEALTH CARE SCIENCE PRACTITIONERS (HCSPs) and BIOMEDICAL SCIENTISTS¹ (Level 6)

Occupational profile: Healthcare Science (HCS) Practitioners (HCSPs) work both independently and as part of a team within one of the HCS healthcare science Divisions² or across a range of related specialisms in a variety of healthcare settings. They use expertise in applied scientific techniques to deliver patient sensitive and quality assured tests, investigations, medical devices and procedures (in some cases, including specialist therapeutic interventions) on samples, patients and equipment. While HCSP activities are usually outlined in departmental protocols, HCSPs are required to use judgement and deal with ambiguity. HCSPs (who are usually either registered with the Academy for HCS (AHCS) or regulated by the Health and Care Professions Council (HCPC) as biomedical scientists) have a significantly greater responsibility, independence and accountability than those in the Associate workforce, including the supervision and training of those in the trainee practitioner and HCS support workforce.

Comment [JE1]: Changes DC agreed with SH by telephone

Responsibilities and duties of the role: HCSPs will have the knowledge, skills, competences, attitudes and behaviours to perform complex clinical technical procedures within the scope of practice of their HCS specialism to a high degree of safety, accuracy and precision, recording and interpreting the clinical technical output as required. They must take responsibility and be accountable for their own practice in the detailed diagnostic, technical and clinical outcomes of tests, procedures and analyses, as well as leading and supporting teams involved in these. They must be organised and prioritise work through good time management and achieve demanding tasks/objectives against deadlines. HCSPs must be able to support the development of and write delegated technical Standard Operating Procedures (SOPs) and have excellent oral/written and interpersonal communication skills. Although not exhaustive, activities undertaken by HCSPs include: gaining consent and co-operation for the undertaking of patient investigations (sometimes invasive); contributing to the assessment of clinical needs as a member of a multi-disciplinary team and prescribing technical solutions to meet those needs; authorising to protocols/reporting results of some clinical scientific tests; responding to inquiries including those about test results, providing information about methodologies and test requirements; communicating complex clinical technical test information to other healthcare professionals and in some specialisms to patients; managing the routine work in specialised services; performing both urgent and routine work to achieve turn around times; maintaining, modifying or designing complex specialist equipment, confirming its technical/scientific fitness for purpose for clinical care; ensuring the efficient/effective use of expensive tests/high value equipment, including medical device decontamination; implementing scheduled test procedures on all methodologies, to include calibration and quality control testing; identifying faults in equipment and analyser functions; assisting in the development and maintenance of standards and protocols as required; supporting bereaved families and providing as required training and advice to junior staff and clinical colleagues.

Professional Recognition: Completion of the apprenticeship leads to either registration with an appropriate PSA accredited register or HCPC regulation for biomedical scientists.

Comment [JE2]: IPEM proposed change

Qualifications: Apprentices without level 2 English and Maths must achieve this level prior to taking the end-point assessment. Employers set the selection criteria but applicants must have the entry requirements for an accredited HCS BSc (Hons) programme/IBMS accredited BMS degree, which are the academic qualifications underpinning the apprenticeship.⁴

Level: 6	Duration: typically 36 months	Review Date: after 3 years
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BEHAVIOURS and VALUES: You will be compassionate; honest; conscientious and adhere to the Standards of *Good Scientific Practice (GSP)*, which are the standards of behaviour/practice/personal conduct that underpin the delivery of those in HCS. For biomedical scientists, HCPC Standards of Conduct, Performance and Ethics must be met.

¹ For purposes of this apprenticeship, the term HCSP also includes those in the Biomedical Scientist (BMS) workforce.

² The HCS Divisions are: Life Sciences, Physiological Sciences, Physical Sciences and Clinical Bioinformatics. The clinical scientific environment within which a HCSP works will determine the context of the specific work/role they will undertake. For the list of HCS specialisms go to: <http://www.ahcs.ac.uk/about-us/about-healthcare-science/>

³ For those in the Life Sciences registration is the statutory Health and Care Professions Council (HCPC) register [for which a Certificate of Competence from the Institute of Biomedical (IBMS) is required for some academic programmes]. The Academy of HCS's (AHCS) Professional Standards Authority (PSA) accredited register is the register formally recognised and supported by Health Education England (HEE) for those in the HCS workforce who are not on the HCPC statutory register. All HCSPs (including BMSs) are eligible for registration on the AHCS register. In addition those in the Physical Sciences can also join the PSA accredited Register of Clinical Technologists (RCT) held by the Institute of Physics and Engineering in Medicine (IPEM). There are also other potentially suitable professional registers, e.g. the Science Council ([Registered Scientist](#)).

⁴ or equivalent progression routes

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SKILLS: Working to the standards of GSP/HPCPC in your area of practice you will:		In your scientific, technical & clinical practice you will understand & apply knowledge of
Person-centred Care and Professional Practice	<ul style="list-style-type: none"> prevent discriminatory practice against patients/carers/colleagues ensure that the highest standards of person-centred care are practiced so that each person is treated dignity and respect develop effective partnerships with patients, treating patients/carers/families with kindness and compassion identify ways of promoting good mental health/well being use appropriate language to give complex technical information to the public/patients/colleagues, including giving/receiving feedback 	<ul style="list-style-type: none"> how the NHS Constitution/GSP/HPCPC Standards are used to support person-centred care equality and diversity legislation, policies and local ways of working probity, honesty and integrity in all aspects of your professional practice the work of your department & its impact on patient care through problem solving in the team how to involve patients and the public in HCS and in making choices about their care factors impacting on mental health and how to promote mental health and well being how to use and teach others to use appropriate language/feedback to convey information to patients/families with complex needs, including giving oral/written explanations
Personal and Professional Development (PPD)	<ul style="list-style-type: none"> critically reflect on your technical/non-technical practice, keeping knowledge and skills updated & responding to appraisal/feedback work within your scope of practice as an autonomous practitioner promote the professional development/training of junior colleagues 	<ul style="list-style-type: none"> models of critical reflection and self-reflection to enhance the quality of patient care you provide personally and as a team leader the underpinning theories and benefits to staff of excellent appraisal processes how to lead an appraisal/performance review and support the development of an action plan
Health, Safety And Security	<ul style="list-style-type: none"> manage delegated junior staff training in security/health/safety practices that underpin their work, especially in infection control undertake delegated risk assessments & implement changes 	<ul style="list-style-type: none"> legislation/policies/regulations relating to health and safety at work and your responsibilities risk assessment methodologies, including strategies for dissemination of the findings, and approaches to implementing the changes required
Quality	<ul style="list-style-type: none"> manage delegated clinical and quality management processes undertake delegated clinical technical audits in your area of work 	<ul style="list-style-type: none"> quality management/improvement processes within the regulatory environment analysis, interpretation and communication of audit findings to promote quality
Technical Scientific Services	<ul style="list-style-type: none"> independently analyse/interpret accurately clinical technical data be responsible for the safety and functioning of equipment present/explain technical results to other professionals & patients coordinate drafting of SOPs & updating techniques/procedures evaluate and implement solutions to clinical technical problems 	<ul style="list-style-type: none"> the underpinning scientific principles of investigations offered by HCS services the principles and practice of equipment management, maintenance, repair and safety how to draft and update SOPs technical skills teaching frameworks; assessment methods & assessment of technical skills critical evaluation of the evidence base that underpins your clinical technical practice
Clinical Care	<ul style="list-style-type: none"> ensure that responsibilities for safeguarding and protecting patient confidentiality, including record keeping, are met conduct sensitive discussions with patients as required, including obtaining meaningful consent supervise the delivery of high quality technical clinical procedures 	<ul style="list-style-type: none"> 'duty of care' and safeguarding the appropriate support available in difficult situations or when a complaint is made the rights of patients with regard to giving informed & meaningful consent when required the role and importance of the key factors influencing dignity/rights/privacy/confidentiality of patients/colleagues
Audit/Service Improvement	<ul style="list-style-type: none"> manage audit and/or service improvement programmes act on the outcomes of audit/service improvement programmes 	<ul style="list-style-type: none"> the governance/ethical frameworks applied to clinical audit continuous improvement principles for the delivery of high quality outcomes
Research & Innovation	<ul style="list-style-type: none"> use research, reasoning and problem solving skills to support quality care improvements/innovation in your area of work 	<ul style="list-style-type: none"> the opportunities for research/innovation/implementation of change how to contribute to research and grant proposal writing as appropriate
Leadership	<ul style="list-style-type: none"> coordinate leadership activities across a HCS technical team 	<ul style="list-style-type: none"> advanced concepts of leadership and their application to practice