

APPRENTICESHIP STANDARD FOR HEALTH CARE SCIENCE ASSOCIATE (Level 4)

Occupational profile: The Healthcare Science (HCS) Associate workforce supports the work of HCS Practitioners and Clinical Scientists in performing high quality, safe diagnostic, therapeutic and monitoring technical and scientific procedures from conception to end of life in job roles within hospitals, general practice and other settings in the healthcare sector and across all areas of HCS.¹ They perform a wide range of routine technical and scientific procedures, with minimal supervision, within one of the Divisions in HCS², following specific protocols and in accordance with health, safety, governance and ethical requirements. The clinical scientific environment determines the context of the HCS Associate work/role.

Responsibilities and duties of the role: Associates work within a multi-disciplinary team (MDT) within the limits of their competence, and must seek help and support whenever this is required. They must be aware of the requirements of *Good Scientific Practice (GSP)*, which articulates the standards for the HCS profession and upon which this apprenticeship standard is based.³ Using these professional standards, the HCS Associate must adhere to employers' policies/protocols to ensure safe, person-centred/consistent practice in HCS working environments, including paying close attention to detail, working effectively within a team and acting as a role model for more junior members of staff. While not exhaustive, activities undertaken by HCS Associates within the specific area/environment of HCS within which they work will include: supporting the development and maintenance of standards/protocols as required; contributing to the safe, effective and efficient functioning of diagnostic/therapeutic services; supporting more junior staff in learning required skills and behaviours of those who work in HCS; quality controlling the technical processing of biological samples and physiological and other diagnostic tests; performing routine investigations and telephoning authorised⁴ results according to protocols, e.g. in the Life Sciences, full blood counts/microscopy, antibiotic sensitivities/assays, endocrine assessments, immunology assays; in the Physiological Sciences: fitting/removing ambulatory blood pressure monitors and 24-hr ECGs; ophthalmic assessments of the structure and function of the eye; pure tonal audiometry; in the Physical Sciences: nuclear medicine imaging, post processing of images; decontaminating, repairing and maintaining medical devices, e.g. in Clinical Engineering medical device maintenance/calibration (including electro-medical); managing technical data and writing technical reports, e.g. in Clinical Bioinformatics which uses specifically designed methods/software for managing biological data.

Professional Recognition: On completion of the apprenticeship individuals will be eligible to join the Academy for HCS's (AHCS) accredited Associate Register at Level 4⁵.

Qualifications: The AHCS will require the Level 4 Diploma in HCS as an underpinning qualification for the HCS Associate apprenticeship. Apprentices without level 2 English and maths will need to achieve this prior to taking the end-point assessment.

Level: 4	Duration: typically 24 months	Review Date: after 3 years
-----------------	--------------------------------------	-----------------------------------

BEHAVIOURS and VALUES: You will be compassionate; honest; conscientious and adhere to the standards of *GSP* which sets out for the standards of behaviour/practice/personal conduct that underpin the delivery of HCS appropriate to the role/work undertaken.

SKILLS: Consistently working to the standards of GSP you will	In your scientific, technical & clinical practice you will understand & apply knowledge of		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; padding: 5px;">Professional Practice and Person-centred Care</td> <td style="padding: 5px;"> <ul style="list-style-type: none"> never discriminate against patients, carers or colleagues maintain the highest standards of person centred care, treating every person with compassion, dignity and respect develop partnerships with patients/carers/families </td> </tr> </table>	Professional Practice and Person-centred Care	<ul style="list-style-type: none"> never discriminate against patients, carers or colleagues maintain the highest standards of person centred care, treating every person with compassion, dignity and respect develop partnerships with patients/carers/families 	<ul style="list-style-type: none"> the requirements of the NHS Constitution/<i>GSP</i> for 'person centred care and support' equality and diversity legislation, policies and local ways of working probity and honesty in all aspects of your professional practice the importance of involving patients/the public in HCS and in making choices about their care
Professional Practice and Person-centred Care	<ul style="list-style-type: none"> never discriminate against patients, carers or colleagues maintain the highest standards of person centred care, treating every person with compassion, dignity and respect develop partnerships with patients/carers/families 		

¹ For a list of healthcare science specialisms go to: <http://www.ahcs.ac.uk/about-us/about-healthcare-science/>

² Life Sciences, Physiological Sciences, Physical Sciences and Clinical Engineering, Clinical Bioinformatics. The clinical scientific environment within which a HCS Associate works will determine the context of the specific work/role they will undertake.

³ The Academy for Healthcare Science's (AHCS) *Good Scientific Practice (GSP)* is at the core of professional HCS practice across the entirety of the HCS workforce and underpins the knowledge, skills and behaviours required for HCS apprenticeships.

⁴ Biomedical Scientists, Healthcare Science Practitioners and/or Clinical Scientists usually authorize results.

⁵ The AHCS's Professions Standard Authority's (PSA) register is formally recognised and supported by Health Education England for the HCS workforce, but there are other potentially suitable professional registers, e.g. the Science Council (Registered Science Technician).

SKILLS: Consistently working to the standards of GSP you will		In your scientific, technical & clinical practice you will understand & apply knowledge of
	<ul style="list-style-type: none"> promote mental health and well being convey information to agreed protocols to the public, patients, carers, colleagues, including giving and receiving feedback use technology to present information orally 	<ul style="list-style-type: none"> the principles underpinning the promotion of mental health and well-being active listening, observation and the use of appropriate language and feedback best practice in giving an oral presentation approaches to effective problem solving
Personal and Professional Development (PPD)	<ul style="list-style-type: none"> critically reflect on your technical/non-technical practice work within the limits of your personal competence/keep up-to-date support the CPPD⁶ of junior colleagues and respond constructively to appraisal/feedback 	<ul style="list-style-type: none"> critical reflection in helping maintain and support the quality and safety of patient care good mentoring practice, using underpinning theories of mentoring to support this good appraisal and performance review & the skills required to prepare an action plan
Health, Safety and Security	<ul style="list-style-type: none"> maintain a safe and healthy working environment train junior staff in relevant health, safety/security practices, including infection control and participate in risk assessments 	<ul style="list-style-type: none"> legislation/policies relating to health and safety at work and your responsibilities best practice in infection control practice and local protocols risk assessments, including dissemination of findings and implementation of outcomes
Quality	<ul style="list-style-type: none"> lead quality management technical audit processes as required 	<ul style="list-style-type: none"> quality management/improvement/audit and communication skills within the area of practice
Technical Scientific Services	<ul style="list-style-type: none"> where appropriate, perform a range of equipment management skills, e.g. fault-finding/preventative maintenance/calibration/repair participate in drafting Standard Operating Procedures (SOPs) make reasoned decisions to initiate/continue/modify or cease using techniques/procedures, reflecting SOPs and senior input recognise problems and seek technical solutions to them analyse/interpret/record/present accurately HCS technical data supervise/teach/assess practical skills to junior team members 	<ul style="list-style-type: none"> underpinning clinical science (e.g. anatomy, physiology, pathology, pharmacology, etc) genomics, clinical bioinformatics/personalised medicine principles and practice of equipment management requirements for drafting of Standard Operating Procedures (SOPs) critical evaluation of the evidence base that underpins your technical practice a range of different data presentation methods appropriate for the audience/circumstances practical skills teaching frameworks; assessment methods & assessment of practical skills the principles underpinning the practical training of others in techniques and procedures
Clinical Care	<ul style="list-style-type: none"> take responsibility for the care you provide and its impact on patients, including safeguarding, if involved in direct patient care obtain and document appropriate consent in line with protocols protect patient/carers confidentiality and privacy deliver high quality technical clinical procedures in the investigation/management of patients 	<ul style="list-style-type: none"> 'duty of care' and safeguarding the support available in difficult situations or when a complaint is made the rights of patients with regard to giving informed consent for treatment when required confidentiality of consultation/medical records and the limits of the concept of confidentiality the key factors influencing dignity/rights/privacy/confidentiality of patients/colleagues appropriate technical investigations for relevant clinical conditions
Audit/Service Improvement	<ul style="list-style-type: none"> participate in audit and/or service improvement programmes communicate the outcome of audit, service improvement 	<ul style="list-style-type: none"> the governance and ethical framework applied to audit and its contribution to patient care the delivery of high quality service outcomes/continuous improvements
Research & Innovation	<ul style="list-style-type: none"> undertake appropriate audit/research/innovation activities which support quality improvement in your area of work 	<ul style="list-style-type: none"> the benefits of research to the critical evaluation of practice the principles of developing and introducing innovation into practice
Leadership	<ul style="list-style-type: none"> plan/assess the work of a team and individuals within it lead where appropriate and work effectively within the HCS team 	<ul style="list-style-type: none"> the principles of leading teams/individuals based on the healthcare NHS Leadership Model⁷ common models, and examples of leadership and team-working

⁶ Continuing Personal and Professional Development

⁷ <http://www.leadershipacademy.nhs.uk/resources/>