

Overview of the role

Supporting the prevention, diagnosis and treatment of medical conditions.

Standard in development

L6: Healthcare science practitioner (integrated degree)

Title of occupation

Healthcare science practitioner (integrated degree)

UOS reference number

ST0413

Core and options

No

Level of occupation

Level 6

Occupational maps data

Route: Health and science

Pathway: Healthcare Science

Cluster: Healthcare Science Professional

Typical duration of apprenticeship

36 months

Degree apprenticeship

integrated degree

Target date for approval

01/09/2024

Resubmission

No

Would your proposed apprenticeship standard replace an existing framework?

Yes

Does professional recognition exist for the occupation?

Yes

Occupation summary

Healthcare Science covers a vast range of specialist areas such as cardiology, clinical engineering, nuclear medicine, radiation protection and audiology.

This occupation is found in many different settings including hospitals, primary care, public health, and private sector hospitals. Employers vary in size from a large national organisation such as the NHS through to a private practice.

Healthcare science practitioners work in, physiological sciences, physical sciences, clinical engineering, clinical bioinformatics. They work in environments such as outpatient departments, hospital wards and engineering workshops.

The broad purpose of the job is to use expertise to deliver diagnostic or treatment procedures on patients, or quality assured tests or investigations on equipment. This is all underpinned by 'good scientific practice'.

Healthcare science practitioners are responsible for reviewing tests that contribute to the clinical assessment of patients for the presence of disease. While working to departmental protocols they use judgement plus scientific skills and knowledge, to perform clinical, technological or scientific duties. They supervise the training of trainee practitioners and the healthcare science support workforce.

They develop and follow Standard Operating Procedures (SOPs). They perform complex procedures to a high degree of safety and accuracy, and record and interpret clinical or technical data.

Healthcare science practitioners are accountable for their own practice and that of others in respect of the outcomes of tests, procedures and analyses. They organise and prioritise work and resources. They perform demanding tasks and achieve objectives against deadlines. They also lead and support teams.

In their daily work, they may interact with healthcare science professionals, the wider multi-disciplinary team, patients, carers and the public.

Typical job titles

Healthcare scientist practitioner

Are there any statutory/regulatory or other typical entry requirements?

No

Occupation duties

DUTY	KSBS
Duty 1 Practice according to the legal, ethical and professional standards and codes of conduct for Healthcare Scientists.	K1 K2 K3 K4 K5 S1 S2 S3 S4 S5 B1 B2 B3 B4 B6
Duty 2 Provide, plan, monitor, assess and troubleshoot the technical scientific services delivered by yourself and the team.	K6 K7 K8 K9 S6 S7 S8 S9 B1 B2 B3 B4
Duty 3 Provide clinical care using scientific and professional knowledge and skills to provide or support others to do the same.	K10 K11 K12 K13 S10 S11 S12 S13 B1 B2 B3 B4 B6
Duty 4 Communicate with others using techniques that facilitate understanding.	K14 K15 K16 S14 S15 S16 B1 B2 B3 B4
Duty 5 Lead and support colleagues to work in partnership with the wider healthcare team.	K19 K20 K21 K22 S19 S20 S21 S22 B1 B2 B3 B4
Duty 6 Maintain a healthy, safe and secure workplace, supporting others to do the same.	K23 K24 S23 S24 B1 B2 B3 B4
Duty 7 Monitor the quality of service, via audit, governance and incident investigation processes and leading service improvement programmes.	K25 K26 K27 K28 S25 S26 S27 S28 B1 B2 B3 B4 B6
Duty 8 Contribute to the development of services through innovation or research within scope of own role.	K29 K30 S29 S30 B1 B2 B3 B4
Duty 9 Maintain and develop own competence and that of others using ongoing reflection and continual professional development.	K31 K32 K33 S31 S32 S33 B1 B2 B3 B4 B5 B6
Duty 10 Manage complex and sensitive information adhering to information governance requirements.	K17 K18 S17 S18 B1 B2 B3 B6

KSBs

Knowledge

K1: Legislation, standards of proficiency, codes of conduct and ethics, underpinned by the principals of Good Scientific Practice, that apply to the role of Healthcare Science Practitioner.

K2: Equality and diversity legislation, local and national policies and local ways of working.

K3: Principles of duty of candour, probity, honesty and integrity in professional practice.

K4: Importance of critical reflection and evaluation of the evidence base that underpins clinical technical practice.

K5: Factors impacting on mental health and the importance of promoting mental health and wellbeing.

K6: Scientific principles of investigations and therapeutics offered by healthcare science services.

K7: Principles and practice of equipment management, maintenance, repair and safety.

K8: Technical skills teaching frameworks, assessment methods, including the assessment of technical skills.

K9: Standard Operating Procedures that apply to the role and the procedures for maintaining and reviewing them.

K10: Principles that underpin the delivery of person-centred care.

K11: Principles of a duty of care, safeguarding and protection as they apply to adults and children.

K12: The rights of individuals that apply when giving informed and meaningful consent.

K13: Clinical technical procedures that apply to clinical conditions encountered within own role.

K14: How to determine the correct level of language to use when sharing oral or written information with others or when giving feedback, including for those with complex needs.

K15: Support available in difficult situations or when a complaint is made.

K16: Policies and protocols that relate to the right of individuals to make informed decisions.

K17: Importance of accurate, up to date and signed record keeping.

K18: Principles relating to confidentiality, including its limitations, and how it applies in relation to own work.

K19: Value and impact of healthcare science in the delivery of healthcare services and on the wider healthcare team.

K20: Advanced concepts of leadership and their application to own practice.

K21: Delegation, reporting and escalation protocols that apply in the workplace and how these support team working.

K22: Conditions that support the delivery of safe and effective work practices carried out by the team.

K23: Health, safety and security legislation, local and national policies, including infection prevention and control that apply in the workplace.

K24: Risk assessment methodologies, including strategies for dissemination of the findings, and approaches to implementing the changes required.

K25: Quality assurance/accreditation and service improvement or innovation processes.

K26: Tools and techniques used to undertake audit, including analysis, interpretation and communication of audit findings to promote quality.

K27: Governance and ethical frameworks applied to service improvement programmes.

K28: Continuous improvement principles for the delivery of quality outcomes.

K29: Importance of identifying opportunities for research, innovation and implementing change.

K30: Process and tools used for contributing to research, innovation, service improvement and grant proposals.

K31: Models of critical reflection and self-reflection to enhance the quality of patient care.

K32: Underpinning theories and benefits to staff of the ongoing appraisal processes.

K33: How to participate in an appraisal or performance review and support the development of an action plan.

Skills

S1: Practice in line with the legislation, standards of proficiency, codes of conduct and ethics that apply to Healthcare Science Practitioners.

S2: Promote non-discriminatory, equitable and inclusive practices and ensure that each person is treated with dignity and respect.

S3: Promote the principles of a duty of candour, acting with integrity and in the best interest of individuals.

S4: Recognise and resolve problems and support others to do the same.

S5: Identify ways of promoting own good mental health and wellbeing and that of others.

S6: Independently analyse or interpret accurately clinical technical data.

S7: Be responsible and accountable for the safety and functioning of equipment evaluating and resolving issues.

S8: Analyse, present or explain technical results to others.

S9: Develop and review Standard Operating Procedures and support others to participate in the process.

S10: Practice or support the provision of person-centred care.

S11: Promote and maintain the principles of a duty of care, safeguarding and protection, working with others to ensure individuals do not come to harm.

S12: Practice and support others to apply policy and protocols that relate to informed consent.

S13: Deliver or support the delivery of high quality clinical technical procedures as applicable to own role.

S14: Share complex technical information and feedback with others.

S15: Manage difficult and complex situations and complaints according to protocols.

S16: Conduct sensitive discussions as required, including obtaining meaningful informed decisions.

S17: Ensure accurate record keeping, producing reliable data, inputting, retrieving or reporting information within required governance processes and supervising others to do the same.

S18: Maintain confidentiality, adhering to the correct procedures for disclosure, and support others to do the same.

S19: Work in partnership with the healthcare science and wider healthcare team.

S20: Demonstrate leadership skills appropriate to own role, coordinating leadership activities and critically reflecting on the contribution that you provide personally and as a team leader.

S21: Delegate work to others in the team, following delegation, reporting and escalation protocols appropriate to own role.

S22: Contribute to a supportive, safe and effective environment in the workplace.

S23: Maintain health, safety and security practices in the workplace, including infection prevention and control, and support others to do the same.

S24: Undertake delegated risk assessments, disseminate findings and suggest changes or improvements.

S25: Participate in clinical and quality management processes.

S26: Undertake delegated clinical technical and quality audits in your area of work.

S27: Manage audit and participate in service improvement programmes.

S28: Share and suggest changes from the outcomes of audit or service improvement programmes.

S29: Apply research innovation, reflection and reasoning skills to support quality care and service improvements in your area of work.

S30: Contribute to research, innovation, service improvement or grant proposal writing as required by own role.

S31: Critically reflect on your technical and non-technical practice, keeping knowledge and skills updated and responding to appraisal or feedback.

S32: Work within your scope of practice as an autonomous practitioner using action plans developed from appraisal processes.

S33: Promote and support professional development and training of others.

Behaviours

B1: Treat people with dignity.

B2: Show compassion, respect and empathy.

B3: Be honest, conscientious and committed.

B4: Champion equality, diversity and inclusion.

B5: Committed to continuously developing their own professional practice.

B6: Committed to working to the standards of good practice for the Healthcare science professions.

Qualifications

English and Maths

Apprentices without level 2 English and maths will need to achieve this level prior to taking the End-Point Assessment. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

Does the apprenticeship need to include any mandated qualifications in addition to the above-mentioned English and maths qualifications?

Yes

Other mandatory qualifications

BSc (Hons) in Healthcare Science

Level: 6 (integrated degree)

Professional recognition

This standard aligns with the following professional recognition:

- Academy for Healthcare Science for Practitioner Register
- Institute of Physics and Engineering Medicine for Register of Clinical Technologists
- The Science Council for Registered Scientist (RSCi)

Consultation

A 4 week online consultation survey was available in February and March 2023, hosted on the Healthcare Apprenticeship Standards Online (HASO) website.

Members of the Trailblazer promoted access to the survey through their professional networks and the survey was publicised through the weekly HASO newsletter.

The survey attracted 40 responses from employers, professional bodies and universities across England. Three quarters of responses were from NHS Trusts, which is the most common employer of Healthcare Science Practitioners. Over two thirds of respondents had not been involved with the Trailblazers work, but used the survey as an opportunity to contribute to the development of the apprenticeship.

Respondents unanimously agreed that the duties and behaviours in the draft standard reflect those of a Healthcare Science Practitioner. Between 86-100% of responses agreed with the content of the knowledge and skills mapped to each duty. Where respondents provided qualitative comments, these were reviewed by the Trailblazer and used to inform the final draft.

Progression Routes

Supporting uploads

Mandatory qualification uploads

Mandated degree evidence uploads

[ST0413 standard mandated-degree-evidence ST0413 L6 HCSP Mandated Degree Evidence August 2023.xlsx](#)

Professional body confirmation uploads

[ST0413 standard professional-body-confirming-alignment AHCS professional body letter to IfATE L6 28.09.23.pdf](#)

[ST0413 standard professional-body-confirming-alignment Science Council letter of support - L6 HCSP - ST0413.pdf](#)

[ST0413 standard professional-body-confirming-alignment AHCS professional body letter to IfATE L6 28.09.23.pdf](#)

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Involved employers

Moorfields Eye Hospital NHS Foundation Trust, East Kent Hospitals University NHS Foundation Trust, East Suffolk and North Essex NHS Foundation Trust, Sherwood Forest

Hospitals NHS Foundation Trust, Doncaster and Bassetlaw Hospitals NHS Foundation Trust, Mersey & West Lancashire Teaching Hospitals NHS Trust, Cheshire & Merseyside Healthcare Partnership, Academy for Healthcare Science, North-East and Yorkshire Genomic Laboratory Hub, Association of Anatomical Pathology Technologists, Manchester University NHS Foundation Trust, Sheffield Teaching Hospitals NHS Foundation Trust, STERIS Instrument Management Services, Leeds Teaching Hospitals NHS Trust, Birmingham Women's and Children's NHS FT, NHS Blood and Transplant, King's College Hospital NHS Foundation Trust, NHS Blood & Transplant, University Hospitals Coventry & Warwickshire NHS Trust, Association for Clinical Genomic Science, Science Council, Great Ormond Street Hospital for Children NHS Foundation Trust

Subject sector area

1.3 Health and social care