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

Route
Health and science

Typical duration of apprenticeship
36 months

Degree apprenticeship
integrated degree

Target date for approval
01/01/0001

Resubmission
No

Would your proposed apprenticeship standard replace an existing framework?
Does professional recognition exist for the occupation? 
Yes

Occupation summary

This occupation is found in hospitals, general practice and other settings in the health sector.

Employers can vary in size from a large national organisation such as the NHS through to a private practice.

Healthcare Science Assistants work in Life Sciences, Physiological Sciences, Physical Sciences, Clinical Engineering, Clinical Bioinformatics in environments such as outpatient departments laboratories and engineering workshops.

The broad purpose of the occupation is to use expertise in applied scientific techniques underpinned by ‘good scientific practice’ to deliver patient sensitive and quality assured tests, investigations and procedures on samples, patients and equipment.

Healthcare Science Practitioners are responsible for the analysis of a wide range of diagnostic tests that contribute to the clinical assessment of patients for the presence of disease, the monitoring of health and the effectiveness of treatments. While working to departmental protocols, Healthcare Science Practitioners are required to use judgement, deal with ambiguity and supervise the training of those in the trainee practitioner and healthcare science support workforce.

Healthcare Science Practitioners work in a range of different settings including hospitals, primary care, public health, and private sector hospitals.

They may undertake activities within the scope of practice of their healthcare science specialism. They develop, review, write and adhere to Standard Operating Procedures. They perform complex clinical procedures to a high degree of safety, accuracy and precision, and record and interpret clinical technical data.

Healthcare Science Practitioners take responsibility and accountability for their own practice and that of others in respect of the detailed diagnostic, technical and clinical outcomes of tests, procedures and analyses. They organise and prioritise work and resources, performing demanding tasks and achieving objectives against deadlines. They also lead and support teams.

In their daily work, an employee in this occupation may interact with Healthcare Science professionals, the wider multi-disciplinary healthcare 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
<table>
<thead>
<tr>
<th>DUTY</th>
<th>KSBS</th>
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<tbody>
<tr>
<td><strong>Duty 1</strong> Practice according to the legal, ethical and professional standards and codes of conduct for Healthcare Scientists.</td>
<td>K1 K2 K3 K4 K5 S1 S2 S3 S4 S5 B1 B2 B3 B4 B6</td>
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<tr>
<td><strong>Duty 2</strong> Provide, plan, monitor, assess and troubleshoot the technical scientific services delivered by yourself and your team.</td>
<td>K6 K7 K8 K9 S6 S7 S8 S9 B1 B2 B3 B4</td>
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<tr>
<td><strong>Duty 3</strong> Use scientific and professional knowledge and skills to provide, and support others to provide, clinical care.</td>
<td>K10 K11 K12 K13 S10 S11 S12 S13 B1 B2 B3 B4 B6</td>
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<tr>
<td><strong>Duty 4</strong> Use communication techniques that facilitate understanding.</td>
<td>K14 K15 K16 S14 S15 S16 B1 B2 B3 B4</td>
</tr>
<tr>
<td><strong>Duty 5</strong> Demonstrate leadership skills and support to colleagues and encourage them to work in partnership with the wider healthcare team.</td>
<td>K19 K20 K21 K22 S19 S20 S21 S22 B1 B2 B3 B4</td>
</tr>
<tr>
<td><strong>Duty 6</strong> Maintain a healthy, safe and secure workplace, supporting others to do the same.</td>
<td>K23 K24 S23 S24 B1 B2 B3 B4</td>
</tr>
<tr>
<td><strong>Duty 7</strong> Monitor the quality of service, via audit, governance and incident investigation processes and leading service improvement programmes.</td>
<td>K25 K26 K27 K28 S25 S26 S27 S28 B1 B2 B3 B4 B6</td>
</tr>
<tr>
<td><strong>Duty 8</strong> Assist healthcare science service development by contributing with innovation and/or research within scope of own role.</td>
<td>K29 K30 S29 S30 B1 B2 B3 B4</td>
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</table>
**Duty 9** Take responsibility as a reflective practitioner to maintain and develop own competence and that of others via ongoing review and continual professional development for the benefit of service users.

<table>
<thead>
<tr>
<th>Knowledge Standards of Practice (KSBs)</th>
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<tbody>
<tr>
<td>K31 K32 K33</td>
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<tr>
<td>S31 S32 S33</td>
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<td>B1 B2 B3 B4 B5 B6</td>
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**Duty 10** Manage complex and sensitive information adhering to information governance requirements.

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<tbody>
<tr>
<td>K17 K18</td>
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<tr>
<td>S17 S18</td>
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<tr>
<td>B1 B2 B3 B6</td>
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**KSBs**

**Knowledge**

**K1**: The 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**: The importance of duty of candour, probity, honesty and integrity in all aspects of your professional practice.

**K4**: The 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**: The scientific principles of investigations and therapeutics offered by healthcare science services.

**K7**: The principles and practice of equipment management, maintenance, repair and safety.

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

**K9**: The application of Standard Operating Procedures.

**K10**: The importance of person-centred care.

**K11**: The importance of a duty of care and safeguarding.

**K12**: The right of individuals to make decisions and own role with regard to informed consent.

**K13**: The 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: The support available in difficult situations or when a complaint is made.

K16: The rights of patients with regard to giving informed and meaningful consent.

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

K18: The importance of confidentiality, including its limitations, and how it applies in relation to own work.

K19: The importance of working within the wider healthcare team and how healthcare science impacts on the wider delivery of services.

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

K21: The principles of teamworking and best practice in relation to team management.

K22: The importance of creating conditions in which safe and effective work practices can be carried out by the team.

K23: Health and safety at work legislation, local and national policies and regulations, including your responsibilities and those of others in the team.

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: The importance of analysis, interpretation and communication of audit findings to promote quality.

K27: The governance and ethical frameworks applied to clinical audit and/or service improvement programmes.

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

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

K30: The 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: The 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 relevant to own role.

S2: Take steps to prevent discriminatory practice against others and ensure that each person is treated with dignity and respect.

S3: Act with honesty and integrity in all aspects of your professional practice.

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: Contribute to reviewing Standard Operating Procedures.

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

S11: Ensure that responsibilities for safeguarding, duty of care and protecting patients are met as applicable to own role.

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 consent.

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: Follow and demonstrate delegation, reporting and escalation protocols appropriate to own role.
S22: Contribute to the creation of conditions that assist the team in providing a supportive environment for colleagues.

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: Demonstrate involvement in clinical and quality management processes.

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

S27: Manage audit and/or service improvement programmes.

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

S29: Use 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 in Healthcare Science

Level: 6 (integrated degree)

**Professional recognition**

This standard aligns with the following professional recognition:

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

**Consultation**

The consultation ran from 8 December 2021 to 26 January 2022. It was publicly available and open for anyone to respond.

We had a total of 110 responses from individuals working in a wide range of organisations and with a good geographical spread across England.

A large number of the respondents (79%) had not been involved in the trailblazer previously.

Overall there was good support for the draft standards with an average of 90% in agreement with the content. There was also very useful qualitative feedback. All the qualitative data was analysed and led to a series of amendments to the standard that were shared with and agreed by the Trailblazer group.

**Progression Routes**

**Supporting uploads**

- Mandatory qualification uploads
- Mandated degree evidence uploads
- Professional body confirmation uploads