

Higher Specialist Scientist Equivalence Guidance for Applicants

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1. Welcome

Thank you for considering the Higher Specialist Scientist (HSS) Equivalence programme as an approved route to registration with the Academy for Healthcare Science (AHCS). Joining the AHCS Higher Specialist Scientist Register demonstrates a commitment to maintaining standards of education, competence and conduct - providing assurance for employers, patients and the public. It also helps to strengthen and highlight Healthcare Science (HCS) as a key clinical profession by uniting together, and enabling diverse disciplines to speak with one clear voice.

We hope you find this guidance document in preparing to apply for HSS equivalence.

Most recent changes to the document as at September 2018

- Requirement to complete the Stage 1 Mapping Template has been removed
- Clarification that the Stage 2 Portfolio should only cover the domains identified by the assessment panel as not having been met through the Stage 1 assessment.

2. Background

The AHCS was established as a joint initiative of the UK Health Departments and the HCS professional bodies. The overarching purpose of the AHCS is to bring together the UK's diverse scientific community who work across the UK health and care system including: NHS Trusts, NHS Blood and Transplant Services, Public Health England, independent healthcare organisations and the academic sector.

The AHCS has been commissioned to undertake and support a range of projects including:

- **The development of consistent, rigorous and meaningful regulation for the healthcare science workforce** This has involved the implementation of an accredited Register that is accessible to all HCS disciplines. This profession-wide access to registration directly contributes to patient safety and will extend the provision of high quality patient care for the future benefit of all.
- **The development of a system to assess and confer Equivalence to the NSHCS training programmes in HCS.** This enables applicants to gain recognition for the experience, knowledge and skills they possess, and also enables entry to and progression through the MSC career framework without the need for repeat training.

Accordingly, the AHCS has established an equivalence process to determine parity between the outcomes of the HSS Training programme (www.nshcs.ac.uk) and relevant pre-existing knowledge, skills and experience in the HCS divisions. Successful completion of this process results in the award of the AHCS HSS Certificate of Equivalence, which gives eligibility to apply to join the AHCS HSS Register which is accredited by the Professional Standards Authority (PSA).

3. Equivalence

In the context of education, training, qualifications and experience, equivalence is said to exist when the outcomes of two processes are directly comparable even though the paths to achieving them are different. When equivalence is shown to exist between a new qualification and the qualification or experience a person already has, further education or training is unnecessary.

Applicants for HSS Equivalence are assessed against the AHCS' HSS Standards of Proficiency (SoPs). The SoPs form the basis of the NSHCS HSS training programme and therefore by demonstrating that the applicant meets the SoPs, they are also demonstrating equivalence to the HSS Training programme. Embedded within the HSS SoPs are the five domains of Good Scientific Practice (GSP); collectively these constitute the minimum standard that applicants must meet to gain a Certificate of Equivalence and join the AHCS HSS Register.

Equivalence at HSS level is achieved by applicants presenting a detailed analysis of their prior learning and experience to demonstrate that they have the professional attributes, advanced clinical competence and subject-specific knowledge commensurate with that of a doctoral level award.

Applicants will also need to evidence the breadth of clinical practice in their specialism in alignment with the relevant HSS Training programme. To achieve these requirements applicants should refer to the subject-specific knowledge and competences that are contained in the HSS Training curricula, which can be accessed at: <https://curriculum.nshcs.org.uk/>

Assessors will not expect to see evidence covering all of the learning outcomes in the relevant HSS Training curriculum, but applicants should use the curriculum as a guide to inform the level and content of applications.

4. Scope of practice

The AHCS defines 'scope of practice' as the area(s) of a healthcare scientist's profession in which they have the knowledge, skills and experience to practise lawfully, safely and effectively, in a way that meets the HSS SoPs and does not pose any danger to the public or to themselves.

The AHCS recognises that the practice of an experienced healthcare scientist often becomes more focused and specialised. This might be because of specialisation or because the healthcare scientist has moved into roles in leadership, management, education or research. As scope of practice changes, the healthcare scientist may not be able to demonstrate that they meet every standard required in the SoPs in all areas of the HSS Training curriculum. This does not present a problem, provided the applicants present enough evidence to demonstrate an equivalent level of expertise and achievement to the HSS Training programme and shows that they are able to practise safely and effectively within their given scope of practice.

5. Eligibility

In order to be eligible to apply for HSS Equivalence, applicants must:

- be a Clinical Scientist registered with the Health and Care Professions Council (HCPC);
- be able to demonstrate a wealth of professional experience and have practised at an appropriate level in a healthcare and/or another relevant scientific setting, usually for at least five years. Examples of such levels would include working at director level, leading in education, achievement in research and development, acting as head of department or in a lead scientist role.

To make a HSS Equivalence application, applicants do not need to possess a PhD or equivalent degree. However, the evidence provided in the application must demonstrate that they have a comparable level of expertise and achievement to the HSS Training programme. It is important to note that holding a specific qualification or job title or being paid within a particular Agenda for Change band does not by itself provide evidence of HSS Equivalence.

The Equivalence process is a form of demonstration and accreditation of prior experience and learning and there are therefore no mechanisms (for example “grandfathering”) to gain exemption from elements of the process.

6. Overview of the HSS Equivalence process

Prior to submitting an application for HSS Equivalence, applicants are advised to familiarise themselves with the relevant information sources including:

- HSS Equivalence guidance on the [AHCS website](#)
- [HSS Training curricula](#)
- [AHCS Good Scientific Practice](#)

Applicants are advised to discuss their intention to apply for HSS Equivalence with their line manager, mentors and colleagues, and may also wish to consult their professional body.

There are two stages involved with the HSS Equivalence process - Stage 1 and Stage 2. All applicants enter the process at Stage 1. The outcome received following the completion of Stage 1 determines whether applicants can achieve equivalence at this point, or will need to provide further information by also completing Stage 2 of the equivalence process. Applications are dealt with on a case-by-case basis and applicants will be notified as to whether they need to complete Stage 2 of the process. Both Stages 1 and 2 are completed online.

Stage 1

Applicants must provide the following:

- job description and person specification¹;
- an extended curriculum vitae (CV);
- two appropriate professional references;
- qualification certificates;
- payment of equivalence fee.

Further detail regarding the required documentation is provided later in this Guidance (Section 7). When the Stage 1 application has been submitted, the AHCS will arrange a basic administration check – applicants will be notified if the documentation provided does not meet the required minimum administrative standards.

If the administrative standards are met, the submission will be assigned to an assessment panel comprising: a lay assessor, who will also act as the Chair of the assessment panel, and two professional assessors. One professional assessor will be an expert in the relevant specialism; the other assessor will be from the same scientific division, or from another aligned specialty in HCS.

The assessment panel will review the documentation submitted through the AHCS online system and recommend one of the following Stage 1 Outcomes:

- **Outcome 1:** Applicant has demonstrated equivalence and should be awarded the Certificate of Equivalence;
- **Outcome 2:** Applicant may be able to demonstrate equivalence, but further evidence is required: Submit Stage 2 portfolio
- **Outcome 3:** Applicant has not demonstrated equivalence.

If Outcome 1 is achieved, the process is complete, and once ratification of the outcome has taken place (see below) the applicant receives a Certificate of Equivalence. The applicant is then eligible to apply for inclusion on the AHCS HSS Register.

In the event of Outcome 2, the applicant will be asked to provide supplementary evidence to support their application by progressing to Stage 2 of the process. **The assessment panel will identify the HSS Standards of Proficiency Domains that have not been met and where the supplementary evidence is required.**

Submission of Stage 2 evidence will normally be required within six months of receipt of the Stage 1 outcome statement.

In the event of Outcome 3, applicants will receive individual feedback from the assessment panel about possible next steps.

Stage 2

For the Domains that the assessment panel has identified as not being met at Stage 1, Applicants must provide the following documentation:

- Stage 2 [Detailed Mapping Template](#);
- A portfolio of evidence (containing a summary not exceeding 5000 words).

Upon receipt of these documents, the AHCS will arrange a basic administration check – applicants will be notified if the documentation provided does not meet the required minimum administrative standards. If the administrative standards are met, the applicant will be assigned to an assessment panel.

Once the assessment is complete, one of the following Stage 2 Outcomes will be awarded:

- **Outcome 1:** Applicant has demonstrated equivalence and can be awarded the Certificate of Equivalence;
- **Outcome 2:** Applicant may be able to demonstrate equivalence, but further evidence is required;
- **Outcome 3:** Applicant has not demonstrated equivalence.

If Outcome 1 is achieved following Stage 2, the process is complete, the applicant will receive a Certificate of Equivalence and is then eligible to apply for inclusion on the AHCS HSS Register

In the event of Outcome 2, the applicant will be asked to provide supplementary evidence within a specified period (normally six months) to support the portfolio submission. The applicant will receive feedback from the assessment panel regarding the nature and content of the required supplementary evidence.

In the event of Outcome 3, the applicant will receive individual feedback from the assessment panel about possible next steps.

Ratification Process

All equivalence outcomes require ratification by the AHCS' Education and Training Committee before the outcome can be released formally. If the committee accepts the assessors' recommended outcome, applicants are sent an email confirming the outcome.

Interviews

HSS Equivalence assessments do not normally require an interview. However, the AHCS reserves the right to hold interviews if required.

7. Stage 1 detailed guidelines

Stage 1 Application

- All applications for HSS Equivalence are submitted and processed online. System-generated emails are sent at various stages throughout the application process. Applicants are advised to check their 'junk mail' and set email rules to ensure these emails are received
- Applicants should register interest in HSS Equivalence via the AHCS website (www.ahcs.ac.uk) and will then be able to set up a personal profile, including a passport-sized photograph.
- Applicants then upload the elements of the application. They can save their work and return to the application at any point before final submission. NB. Once 'Submit' has been clicked, no part of the application can be amended.
- Once the Stage 1 application is complete, a confirmation email will be sent.

Stage 1 Extended Curriculum Vitae

The extended CV is an opportunity to demonstrate how the applicant's knowledge, skills and experience meet the HSS SoPs. Careful thought should be given to the structure of the CV, which should include a summary (not exceeding 1500 words – a word count should be provided) of the applicant's career to date, making explicit reference to how the five domains of GSP have been met.

In addition to the summary, other sections that may be included (as appropriate) are:

- if the applicant leads a team, provide details of the number of people in the team and how the applicant leads the team;

- highlight how the applicant provides patient group/population or service specific advice with respect to the clinical application of scientific techniques and instrumentation including the analysis and interpretation of scientific/technical data/results that impact on patients;
- indicate the applicant's responsibilities for example:
 - the investigation of incidents and the improvement of services;
 - setting the strategic direction of work;
 - the wider role the applicant may have in the organisation the applicant works in and/or other organisations such as professional bodies and guidelines committees;
 - leading service accreditation for a department or section of a department;
- supply details of the applicant's research including publications, research grants, supervision of graduate/postgraduate students - being clear about the applicant's role, for example:
 - current and past publications which, for recent publications, could include the impact factor of the journal and how the research has led to changes in practice;
 - active research collaborations highlighting the applicant's role in a research team;
 - current research grants;
 - supervision of research students;
 - initiation or direction/leadership of innovation projects that may have resulted in service improvements;
 - leadership of audit programmes and the outcome of audit;
 - evidence of involvement in procedural improvements or clinical audit within the wider clinical team
 - evidence of involvement in governance, quality assurance, service accreditation etc.
- supply details of how the applicant leads and contributes to education and training of members of the HCS workforce and other healthcare staff or to patient education. This could include:
 - the applicant's approach to teaching and learning and how the applicant embeds theories of learning and assessment in the teaching role;
 - how the applicant promotes student-centred, active learning;
 - how the applicant plans, delivers, evaluates and evolves their teaching practice;
 - educational research or innovation in the teaching role.
- outline the applicant's clinical leadership role and differentiate aspects where the applicant is the leader and aspects where they take direction from others;
- show how the applicant is directly responsible for leading others/teams/services and the skills they bring to that role - for example motivating, supporting the continuing personal and professional development of the team, resolving conflict;
- indicate the applicant's responsibility for budget(s) and how they link this to the strategic direction of the service(s) they lead;
- clearly indicate how the applicant sets the direction of a service and the responsibility for staff working in the service e.g. how the applicant leads the service, undertakes staff appraisal, mentors staff and/or graduate/postgraduate students seconded to their department where appropriate.

References

Applicants must provide references from two referees who are willing to support their application. Guidance for referees can be found in Appendix 2.

Applicants should nominate referees who can comment authoritatively from their direct knowledge of the applicant's current level of expertise. When nominating referees, applicants must ensure that:

- referees have agreed to be nominated;
- referees are willing to write a reference;
- referees have been made aware of the information they will be asked for (Appendix 2);
- referees have access to the relevant curriculum for HSS Training in the applicant's chosen specialism;
- referees have a copy of the extended CV they are prepared to verify the content of and support the application.

One of the referees will normally be the applicant's current line manager. The other referee should be someone with detailed knowledge of the applicant's current work who can attest to their ability to meet the Standards of Proficiency (see below and Appendix 2 for guidance).

In addition, one of the referees must be registered on either the HCPC Clinical Scientist or the General Medical Council Registers. Applicants must ensure the referee's HCPC/GMC number is included in their reference and that the reference is presented on headed paper, signed and dated within 6 months of the application date.

Note: Applicants are responsible for contacting each referee, providing them with all the relevant information and uploading their references to the system

Careful thought should be given to the choice of referees, and how they can provide evidence across the different areas of the applicant's work against the HSS SoPs. Examples of individuals who may be approached to provide a reference may include:

- A senior colleague: for example, a Consultant Clinical Scientist or Medical Consultant; a Clinical Academic (for example Senior Lecturer, Reader, Professor) or Industry Partner within the scientific service/s the applicant currently works with, a senior manager or senior nurse, or a colleague on the HSS Register;
- The Clinical Director of the service in which the applicant works, a member of a Clinical Commissioning Group, the Chief Executive or a Board member of the hospital/Trust or a colleague on a committee/Board of a professional body;
- The Principal Investigator of a research project or head of a research programme/team of which the applicant is a member, a colleague in an organisation where the applicant has led the introduction of a service innovation, or the Editor of a journal if the applicant is a member of the Editorial Board or contributes regularly as a reviewer or author.

Applicants should ensure that their referees are not likely to be taking an extended period of leave or travelling abroad as this can delay the assessment process.

Certified Proof of Identity

Applications must be accompanied by a certified photocopy of a passport, or other government-issued photo identification document to provide proof of identity. The certification of a document confirms that the photograph is a true copy of the original. This must be achieved by getting the copy signed and dated by a professional person. The person who certifies the document(s) must write *'I certify that this is a true copy of the original document'* on the back and must sign and print their name and professional title. More details regarding certified proof of identity can be found at: <https://www.gov.uk/certifying-a-document>

Disclosure and Barring Certificate

Applicants must upload a current Disclosure and Barring Service (DBS) certificate dated within three years of the application date. This can be obtained either from the employer or an individual can apply directly for a basic level DBS check at <http://www.disclosurescotland.co.uk/>. A DBS check performed for any other role can be used for an Equivalence application provided it has been undertaken within three years of the date the application is submitted. International applicants are advised to contact the AHCS at equivalence@ahcs.ac.uk for further information.

English Language Requirements and NARIC

If English is not the applicant's first language, evidence of English language competency must be provided to show an ability to communicate clearly with patients or fellow members of staff. For European Economic Area (EEA) nationals, this evidence will be assessed on a case-by-case basis. Applicants who are not EEA nationals are required to provide certification to demonstrate achievement of International English Language Testing System (IELTS) 7.0 with no element below 6.5, or a Test of English as a Foreign Language (TOEFL) Internet Based Test (IBT) minimum score of 100/120. Upload evidence under the "qualification" section on the documents webpage. Where qualifications are obtained overseas, a National Recognition Information Centre (NARIC) check is required. Further information can be found at: <https://www.naric.org.uk/naric/Individuals/Compare%20Qualifications/Statement%20of%20Comparability.aspx>

8. Stage 2 detailed guidelines

Stage 2 of HSS Equivalence is applicable for those individuals who receive Outcome 2 following Stage 1 of the equivalence process.

Stage 2 involves the submission of supplementary information in the form of a portfolio. This will assist with the demonstration of a high level of understanding, knowledge, and provide a clear interpretation of how those standards have been, or are embedded in the applicant's clinical practice history. The SoPs should be evidenced in the context of the HSS Training curriculum taking into account the knowledge base for the relevant specialism, and include detailed examples where appropriate.

All portfolios must include the [Stage 2 Detailed Mapping Template](#) (Appendix 4), which is an integral part of the portfolio submission, since it demonstrates how the portfolio evidence supports each standard and forms a high level index to allow an assessor to find appropriate pieces of evidence when necessary.

The portfolio and Stage 2 Mapping Template should only cover the HSS Standards of Proficiency domains that have not been met.

For example: If at the end of the Stage 1 assessment an applicant is told that they have to go through to Stage 2, the assessors will indicate which Domains have been met and which ones have not. In this example the applicant has met the standards in the Professional Practice, Scientific Practice and Clinical Practice domains, therefore the portfolio and mapping template should only cover the Research, Development and Innovation domain, and the Clinical Leadership domains. Stage 2 submissions also require the inclusion of a summary in no more than 5000 words of the applicant's education, training and clinical experience in relation to their chosen discipline. **Again, this summary should only cover the Domains that have not been met.** A word count must be included at the end of the summary.

Portfolio Structure and Content

For the Domains that have not been met, portfolios must contain the following information in this order:

- a contents page;
- the completed [Stage 2 Detailed Mapping Template](#) (Appendix 4) which acts as a cross reference between the AHCS HSS SoPs and the evidence to enable easy location of relevant information by assessors;
- the summary of the applicant's training and experience to date in not more than 5000 words. The summary must clearly indicate how competence has been developed, and both the summary and the accompanying supporting evidence must be cross-referenced to the AHCS HSS SoPs using the [Stage 2 Detailed Mapping Template](#).

Note: applicants are not required to map their evidence directly to each of the outcomes of the HSS Training curricula; however, the content and level of those outcomes should be used to guide and inform the evidence submitted for the Stage 2 Detailed Mapping Template.

The portfolio must demonstrate a thorough understanding of the subject matter. Evidence should be carefully selected – a few well-chosen examples will be more valuable than a mass of poorly organised material.

Variable amounts of information in different formats may be submitted for each standard to adequately demonstrate the level of competence and understanding required. The use of one piece of evidence to support multiple standards is permitted, but this must be clearly indexed.

The portfolio should be clear and the content should be explicit and concise. Statements of attendance or participation in meetings or training are on their own insufficient, and must be supported by personal reflection and a concise description of how the experience helped in achieving a particular competence. Evidence of 'hands-on' experience is important.

The portfolio should NOT include: the full text of any case studies, theses, projects, papers or essays; summaries should be provided. It should not include certificates of attendance for every meeting – only those that have demonstrable benefit towards the standards.

Portfolio Presentation

Each page in the portfolio should be numbered. Completed portfolios should NOT be longer than 200 pages. Any portfolio exceeding these limits will be rejected on receipt and returned to the applicant for abbreviation. Assessors are looking for well-selected, high quality evidence. Examples of evidence types are contained in Appendix 3. As a guide, portfolios less than 50 pages are unlikely to contain sufficient evidence for adequate assessment. Patient confidentiality must be respected; applications containing identifiable patient details will be rejected.

Font size for text should not be smaller than 12 point. Certificates or other evidence should not be photo-reduced to fit more than one to a page. If any part of the evidence is not in English, certified translations must be provided.

Portfolio Submission

Portfolios must be submitted online and within six months of receipt of the Stage 1 outcome statement.

9. Payment

The fee for HSS Equivalence is £280 and MUST accompany the Stage 1 application. Payments can be made using the AHCS secure payment system. The fee is **non-refundable** once the application has undergone administrative checking and has been approved for Stage 1 assessment.

Applicants should note that Stage 1 and Stage 2 involve administrative screening to ensure all relevant information is present and legible. If administrative screening identifies issues with the application that cannot be resolved satisfactorily, the application will not be progressed and the fee will be refunded less a charge of £50 to cover administration costs.

10. Complaints and appeals

The AHCS has mechanisms to ensure that applicants, assessors, staff and the public have the opportunity to participate fully in the development and improvement of services. It is expected that all parties will take full advantage of these in making their views known through feedback.

It is recognised that there may be occasions when feedback is not sufficient to deal with issues and for this reason a Complaints Procedure has been established. The Complaints Procedure should be used when informal attempts to resolve the matter with the AHCS have not resolved an issue. More information about the complaints process can be found at: <http://www.ahcs.ac.uk/aboutus/about-the-academy-for-healthcarescience/a-z-of-academy-policies/>

Applicants also have the opportunity to appeal outcome decisions based on procedural matters related to the Equivalence process. Appeals against judgements of assessors, ratification decisions or other decisions made by the Education, Training and Professional Standards Committee will not be accepted. Appeals must be made within 28 days of receipt of the outcome decision.

Appeals will be considered by a dedicated Appeals Panel and this panel may undertake an investigation including a request for written statements or interviews as appropriate. The Appeals Panel will then summarise their determination in a report, which will be provided to the appellant, the assessors and retained on file by AHCS. The judgements of the Appeals Panel are final. The AHCS Appeals policy can be found on the AHCS website:
www.ahcs.ac.uk/equivalence/equivalenceguidance/

11. Equality and diversity

The AHCS believes that excellence is achieved through recognising the positive value and contribution of every individual. It is committed to providing an inclusive development culture in which all individuals are:

- enabled and encouraged to participate fully;
- treated on the basis of merit, ability and potential, with dignity and respect;
- valued for their positive contributions.

The monitoring data we collect is to analyse the Equivalence outcomes and to review our processes and procedures.

Further information on the equality and diversity policies of the AHCS can be found at:

<http://www.ahcs.ac.uk/about-us/about-theacademy-for-healthcare-science/a-z-ofacademy-policies/>

12. Abbreviations used in this document

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| AHCS | Academy for Healthcare Science |
| CV | Curriculum Vitae |
| EEA | European Economic Area |
| GSP | Good Scientific Practice |
| HCPC | Health and Care Professions Council |
| HCS | Healthcare Science |
| HSS | Higher Specialist Scientist |
| IELTS | International English Language Test System |
| IBT | Internet Based Test |
| MSC | Modernising Scientific Careers |
| NARIC | National Recognition Information Centre |
| PSA | Professional Standards Authority |
| SoPs | Standards of Proficiency |
| TOEFL | Test of English as a Foreign Language |

Appendix 1

GUIDANCE FOR REFEREES

This guidance is for individuals who have been asked to complete a reference for an applicant applying for entry onto the Higher Specialist Scientist (HSS) Register via the equivalence route.

In order to provide a reference, referees will require:

- a copy of the applicant's extended CV as submitted for HSS Equivalence – containing a summary of the applicant's career to date, which makes explicit reference to how the five domains of GSP have been met;
- a copy of the relevant Higher Specialist Scientist Training curriculum;

Applicants are assessed against the standards of proficiency for the HSS, in the context of the HSS Training curriculum for their particular specialism. The requirement is that the applicant can demonstrate clinical competence and a level of specialist scientific knowledge commensurate with a doctoral level award relevant to the specialism.

The line manager (or other appropriate senior colleague) is asked to confirm the content of the applicant's extended CV in respect of their current duties and responsibilities. Both referees are asked to attest to the applicant's professional abilities/achievements against of the domains of GSP and the standards of proficiency, confirming the summary section of the extended CV and providing any additional supporting information.

Referees must also provide the following information about themselves:

- their highest educational and professional qualifications, current position and place of work;
- their position and place of work when the applicant was working with them, if different;
- their relationship to the applicant, for example line manager, colleague, Medical Director, research supervisor etc;
- their HCPC/GMC registration number if applicable.

The reference must be presented on official headed paper from the referee's organisation.

WHEN COMPLETED, THE REFERENCE SHOULD BE SENT TO THE APPLICANT, WHO WILL UPLOAD THIS TO THE AHCS SYSTEM. THERE IS NO NEED FOR REFEREES TO LIAISE WITH THE AHCS DIRECTLY.

Appendix 2

EXAMPLE EVIDENCE TO DEMONSTRATE HSS SoPs

| AHCS Standard of Proficiency | Example Evidence |
|--|---|
| Professional Practice | |
| Standard 2 – Ensure professionalism in working with peers and with service users | |
| 2.1 Lead a team to work effectively with senior colleagues in cross professional settings and across organisational boundaries | <ul style="list-style-type: none"> • Job description • Curriculum vitae • Appraisals demonstrating effective team working • 360-degree feedback • Anonymised complaints/incident investigations • Service review reports including patient and public input • Presentations to peers, conferences, patients and the public |
| 2.2 Lead a team to work in partnership with colleagues and other organisations in the best interest of patients, local communities and the wider population | |
| 2.3 Create a culture of openness with patients, their families, carers or representatives and colleagues, including if anything goes wrong; welcoming and listening to feedback and addressing concerns promptly | |
| 2.4 Communicate complex clinical scientific and technical information in a wide range of settings and formats, including to patients and the public | |
| 2.5 Liaise with peers, clinical users of the service, patients and the public on all aspects of service delivery to ensure that the service is fit for purpose | |
| 2.6 Communicate research, innovation and development findings as appropriate, including peer reviewed journals and at national and international conferences | |

| AHCS Standard of Proficiency | Example Evidence |
|---|---|
| Scientific Practice | |
| Standard 6 – Direct scientific validation and evaluation | |
| 6.1 Ensure the clinical scientific validation of analytical results ensuring that complex investigations are accurately and critically evaluated | <ul style="list-style-type: none"> • Validation report on a new technique • Examples of consultant level advice • Examples of reports demonstrating an assessment of legislative compliance • Advice to employers on legislative compliance • Report or business case on the implementation of a new technique demonstrating that it is evidence based and clinically effective. |
| 6.2 Provide consultant level clinical scientific advice, including interpretation of investigations and their outcomes, therapies and their implications for patient care and management, and recommendations for additional or more complex investigations | |
| 6.3 Provide scientific advice on legislative compliance in own specialist area of practice | |
| 6.4 Bring critical analysis to the practice of the clinical scientific specialism, ensuring that regular review of research and evidence is undertaken so that adaptation to practice can be made in a timely and cost effective manner | |

| Clinical Practice | |
|--|---|
| Standard 8 – Ensure clinical relevance of scientific services provided | |
| AHCS Standard of Proficiency | Example Evidence |
| 8.1 Ensure highly developed and advanced clinical scientific expertise, advice and interpretation to the multi-professional clinical team and to patients, undertaking scientific responsibilities at a level of accountability similar to that of consultant doctors, but with the recognition that the overall clinical responsibility for patients resides with an accountable medical consultant or General Practitioner | <ul style="list-style-type: none"> • Job description • Curriculum Vitae • Individual patient case studies demonstrating expertise, including assessments, reports, advice to clinical colleagues • Service review reports demonstrating quality improvements • Service accreditation/certification against recognised standards • Evidence of contribution to a multidisciplinary clinical team • Evidence of clinical audits undertaken and resulting impact on service |
| 8.2 Lead high quality patient focused clinical scientific services that promote excellent patient outcomes, support patient involvement and engagement and continually seek to improve the safety and quality of NHS clinical scientific services | |
| 8.3 Collaborate with colleagues across organisational boundaries to develop, promote and participate in a multi-professional approach to high quality patient care and management | |

| Research, Development and Innovation | |
|---|---|
| AHCS Standard of Proficiency | Example Evidence |
| 10.1 Contribute at the highest level to the strategic development and direction of the organisation so that the added value of clinical science services and their impact on patient care is fully realised | <ul style="list-style-type: none"> • Research, Development and Innovation Strategy for the service • Record of grant applications |
| 10.2 Lead and shape the application of advances in science, technology, research, innovation, especially in the area of genomics and personalised / precision medicine, and education to support continuous improvement of patient outcomes | <ul style="list-style-type: none"> • Contribution to organisational research governance structures • Peer reviewed publications • Report or business case on the implementation of a new technique demonstrating that it is evidence based and clinically effective. |
| 10.3 Through the initiation and translation of cutting edge scientific research and education, bring strategic direction, innovation and continuous improvement into practice | |
| 10.4 Promote safe and high quality care by ensuring that research and evidence based practice is at the vanguard of clinical scientific services | |

| Clinical Leadership | |
|--|--|
| Standard 14 – Ensure strategic leadership | |
| 14.1 Lead strategic service improvement across a broad service, demonstrating an ability to successfully initiate, manage and sustain change aimed at improving patient outcomes | <ul style="list-style-type: none"> • Job description • Curriculum Vitae • Strategic business plans for a broad service • Service performance reviews against service objectives • Appraisals • 360 degree feedback |

APPENDIX 3

STAGE 2 DETAILED MAPPING TEMPLATE FOR PORTFOLIO SUBMISSION

| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
|---|-----------------------------------|
| Professional Practice | |
| Standard 1 – Practise with the professionalism expected of a Consultant Clinical Scientist | |
| 1.1 Demonstrate an understanding of <i>Good Scientific Practice</i> at Consultant Clinical Scientist level | |
| 1.2 Comply with the codes of conduct of the Health and Care Professions Council; and the Academy for Healthcare Science | |
| 1.3 Ensure that conduct at all times justifies the trust of patients and colleagues and maintains the public's trust in the scientific profession | |
| Standard 2 – Ensure professionalism in working with peers and with service users | |
| 2.1 Lead a team to work effectively with senior colleagues in cross professional settings and across organisational boundaries | |
| 2.2 Lead a team to work in partnership with colleagues and other organisations in the best interest of patients, local communities and the wider population | |

| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
|--|-----------------------------------|
| 2.3 Create a culture of openness with patients, their families, carers or representatives and colleagues, including if anything goes wrong; welcoming and listening to feedback and addressing concerns promptly | |
| 2.4 Communicate complex clinical scientific and technical information in a wide range of settings and formats, including to patients and the public | |
| 2.5 Liaise with peers, clinical users of the service, patients and the public on all aspects of service delivery to ensure that the service is fit for purpose | |
| 2.6 Communicate research, innovation and development findings as appropriate, including peer reviewed journals and at national and international conferences | |
| Standard 3 – Ensure professionalism in areas of governance and service accreditation | |
| 3.1 Assume overall accountability for ensuring compliance with the governance and risk management requirements for a broad scientific service | |
| 3.2 Demonstrate a high level of professionalism in personal performance including confidentiality, ethical standards and financial probity | |

| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
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| 3.3 Ensure effective clinical governance of scientific services and personal practice according to their organisation's clinical governance policies | |
| 3.4 Ensure the service meets service accreditation standards | |
| 3.5 Ensure the formal reporting and recording of any adverse incidents is in line with organisational policy | |
| 3.6 Investigate adverse events and complaints ensuring that lessons learnt are shared appropriately and that systems are put in place to minimize the risk or recurrence | |
| Standard 4 – Direct the education and training of others | |
| 4.1 Develop a strategic approach to the provision of appropriate training programmes for the breadth of the scientific workforce and contribute to training other groups of staff within healthcare | |
| 4.2 Advise on national training requirements and curriculum for the breadth of training in the scientific workforce | |
| 4.3 Evaluate and make provision for the teaching and training requirements of scientific staff, professional colleagues and users of the service | |

| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
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| 4.4 Provide scientific staff with appropriate professional and personal development opportunities through robust appraisal processes, with access to appropriate training for their jobs and the line management support needed to succeed | |
| 4.5 Participate in clinical scientific and technical teaching, training and assessment of peers, undergraduates, post-graduates and other healthcare professionals within relevant scientific areas of practice using effective methods of learner-centred feedback | |
| 4.6 Develop and introduce teaching programmes in own area of specialist practice and continually evaluate and improve teaching and assessment activities using critical reflection | |
| 4.7 Demonstrate personal training, skills and qualifications (where relevant) to provide high quality teaching, training, assessment and feedback | |
| 4.8 Evaluate the quality of teaching and training provided and make recommendations for improvement | |

| Scientific Practice | |
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| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
| Standard 5 – Lead scientific services | |
| 5.1 Assess the demand and specification for evolving scientific services with users, clinical colleagues and other relevant stakeholders | |
| 5.2 Evaluate the scientific literature and other scientific sources and work with others to develop scientific and business cases for service improvement | |
| 5.3 Lead a clinical scientific department offering a broad range of services and creating a culture of continuous improvement and innovation | |
| 5.4 Provide a high level of scientific expertise to complex problems in own area of specialist practice | |
| 5.5 Ensure that clinical scientific services are delivered with a commitment to excellent quality, safety, confidentiality, accountability, reliability, communication and professional and managerial integrity | |
| Standard 6 – Direct scientific validation and evaluation | |
| 6.1 Ensure the clinical scientific validation of analytical results ensuring that complex investigations are accurately and critically evaluated | |

| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
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| 6.2 Provide consultant level clinical scientific advice, including interpretation of investigations and their outcomes, therapies and their implications for patient care and management, and recommendations for additional or more complex investigations | |
| 6.3 Provide scientific advice on legislative compliance in own specialist area of practice | |
| 6.4 Bring critical analysis to the practice of the clinical scientific specialism, ensuring that regular review of research and evidence is undertaken so that adaptation to practice can be made in a timely and cost effective manner | |
| Standard 7 – Assure safety in the scientific setting | |
| 7.1 Ensure delivery of the highest standards of health & safety in the working environment | |
| 7.2 Introduce and critically evaluate measures to identify, actively manage and reduce risk to patients | |
| 7.3 Ensure services are delivered in clean and safe environments that are fit for purpose, based on national best practice | |

| Clinical Practice | |
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| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
| Standard 8 – Ensure clinical relevance of scientific services provided | |
| 8.1 Ensure highly developed and advanced clinical scientific expertise, advice and interpretation to the multi-professional clinical team and to patients, undertaking scientific responsibilities at a level of accountability similar to that of consultant doctors, but with the recognition that the overall clinical responsibility for patients resides with an accountable medical consultant or General Practitioner | |
| 8.2 Lead high quality patient focused clinical scientific services that promote excellent patient outcomes, support patient involvement and engagement and continually seek to improve the safety and quality of NHS clinical scientific services | |
| 8.3 Collaborate with colleagues across organisational boundaries to develop, promote and participate in a multi-professional approach to high quality patient care and management | |
| Standard 9 – Deliver effective clinical services | |
| 9.1 Play a direct role in the management of complex patients, as part of a multi-professional team, including assessment of the patient's relevant history, developing an investigation strategy, interpreting results and agreeing a management and treatment plan in partnership with the patient, medical staff and the rest of the multi professional team | |

| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
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| <p>9.2 In appropriate circumstances and within the context of particular and defined clinical circumstances, impart scientific results to and discuss with patients or their families, investigations, risks and outcomes that may be highly sensitive, emotive or have serious prognostic implications, recognising that the responsibility for the overall care of the patient rests with the accountable medical consultant or General Practitioner</p> | |
| <p>9.3 Respond positively to and promote new developments that enable patients to have greater access to information about their care</p> | |
| <p>Research, Development and Innovation</p> | |
| <p>Standard 10 – Lead research, development and innovation in clinical priority areas</p> | |
| <p>10.1 Contribute at the highest level to the strategic development and direction of the organisation so that the added value of clinical science services and their impact on patient care is fully realised</p> | |
| <p>10.2 Lead and shape the application of advances in science, technology, research, innovation, especially in the area of genomics and personalised / precision medicine, and education to support continuous improvement of patient outcomes</p> | |

| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
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| 10.3 Through the initiation and translation of cutting edge scientific research and education, bring strategic direction, innovation and continuous improvement into practice | |
| 10.4 Promote safe and high quality care by ensuring that cutting edge research and evidence based practice is at the vanguard of clinical scientific services | |
| Standard 11 – Evaluate research, development and innovation outcomes to improve scientific service provision | |
| 11.1 Develop and apply a strategy to optimise the impact of clinical audit to deliver outcome focused quality improvement programmes | |
| 11.2 Continually improve the quality of clinical scientific services by directing and planning the introduction, evaluation and application of improved scientific and operational procedures | |
| 11.3 Evaluate published research and innovation for patient benefit and make recommendations for improvements in the quality of services and patient outcomes based on these | |

| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
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| Standard 12 – Promote a culture of innovation | |
| 12.1 Generate a culture that values and supports innovation and quality by promoting and stimulating research and innovation both within the service and across service boundaries | |
| 12.2 Initiate and direct research and innovation programmes to completion, evaluate outcomes and amend service provision as appropriate | |
| 12.3 Identify opportunities to innovate and create a culture where innovation flourishes | |
| Standard 13 – Assure research governance | |
| 13.1 Design and lead a strategy to achieve and / or maintain service accreditation | |
| 13.2 Ensure compliance with the NHS ethical and research governance framework | |

| Clinical Leadership | |
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| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
| Standard 14 – Ensure strategic leadership | |
| 14.1 Lead strategic service improvement across a broad service, demonstrating an ability to successfully initiate, manage and sustain change aimed at improving patient outcomes | |
| 14.2 Lead and motivate clinical scientific staff to ensure effective delivery and achievement of agreed service objectives in a changing healthcare environment | |
| Standard 15 – Ensure clinical scientific leadership | |
| 15.1 Ensure scientific services reflect the needs and preferences of patients, their families, carers as well as the public health requirements of the populations they serve | |
| 15.2 Direct the operation of a broad service to ensure compliance with local, national and internationally accepted standards and guidelines | |
| 15.3 Participate in appropriate local regional, national and international scientific groups | |
| 15.4 Play a leading role in appropriate local, regional, national and international clinical scientific groups | |
| 15.5 Contribute to the activities of national professional bodies and the formulation of national/international guidelines on clinical, scientific, and safety issues relating to services | |
| AHCS Standard of Proficiency | Location of Evidence in Portfolio |
| 15.6 Ensure that scientific services are delivered in accordance with recommendations for national screening programmes, diagnostic practice and health and safety guidance | |
| 15.7 Ensure that engagement in the commissioning of scientific services is carried out with full compliance to good practice | |
| Standard 16 – Assure effective management of resources | |
| 16.1 Ensure that staff and non-staff resources are assessed and deployed to obtain the required high quality whilst offering best value for money | |