



AHCS
Academy for Healthcare Science

Good Scientific Practice



Section 1: The purpose of this document

There are three key components to the Healthcare Science workforce in the UK:

1. Healthcare Science Associates and Assistants who perform a diverse range of task based roles with appropriate levels of supervision.
2. Healthcare Science Practitioners have a defined role in delivering and reporting quality assured investigations and interventions for patients, on samples or on equipment in a healthcare science specialty, for example Cardiac Physiology, Blood Sciences or Nuclear Medicine. They also provide direct patient care and more senior Healthcare Science Practitioners develop roles in specialist practice and management.
3. Healthcare Scientists are staff that have clinical and specialist expertise in a specific clinical discipline, underpinned by broader knowledge and experience within a healthcare science theme. Healthcare scientists undertake complex scientific and clinical roles, defining and choosing investigative and clinical options, and making key judgements about complex facts and clinical situations. Many work directly with patients. They are involved, often in lead roles, in innovation and improvement, research and development and education and training. Some pursue explicit joint academic career pathways, which combine clinical practice and academic activity in research, innovation and education.

This document sets out the principles and values on which good practice undertaken by the Healthcare Science workforce is founded.

Good Scientific Practice sets out for the profession and the public the standards of behaviour and practice that must be achieved and maintained in the delivery of work activities, the provision of care and personal conduct.

Good Scientific Practice uses as a benchmark the Health and Care Professions Council (HCPC) Standards of Proficiency and Standards of Conduct, Performance and Ethics, but expresses these within the context of the specialities within Healthcare Science, recognising that three groups of the workforce, Biomedical Scientists, Clinical Scientists and Hearing Aid Dispensers are regulated by the HCPC. The aim is that the standards are accessible to the profession and understandable by the public.

Good Scientific Practice represents standards and values that apply throughout an individual's career in healthcare science at any level of practice. The standards will be contextualised by the role within Healthcare Science that an individual undertakes. This means that the standards must be interpreted based on the role that an individual performs. For example, in supervised roles where individuals work within defined procedures, rather than autonomously, some standards will need to be interpreted appropriately for the context of the specific role. There will, however, always be a requirement for an individual to work within the limits of their scope of practice and competence.

Students and trainees will be expected to be working towards meeting the expectations set out in this document. However, if an individual is undertaking further training and development following qualification from a professional training programme, he or she will be expected to be able to meet the standards in this document within their scope of practice.

The standards have been used to support curriculum development and will be used to underpin the process of judging individual equivalence, particularly for emerging specialisms.

The standards have been divided into five domains. The domains of Good Scientific Practice detailed in section 2 are:

1. Professional Practice
2. Scientific Practice
3. Clinical Practice
4. Research and development and innovation
5. Clinical Leadership

Section 2: The domains of Good Scientific Practice

Domain 1: Professional Practice

All patients and service users are entitled to good standards of professional practice and probity from the Healthcare Science workforce including the observance of professional codes of conduct and ethics. In maintaining your fitness to practice as a part of the Healthcare Science workforce, you must:

1.1 Professional Practice

- 1.1.1 Make the patient your first concern
- 1.1.2 Exercise your professional duty of care
- 1.1.3 Work within the agreed scope of practice for lawful, safe and effective healthcare science
- 1.1.4 Keep your professional, scientific, technical knowledge and skills up to date
- 1.1.5 Engage fully in evidence based practice
- 1.1.6 Draw on appropriate skills and knowledge in order to make professional judgements
- 1.1.7 Work within the limits of your personal competence
- 1.1.8 Act without delay on concerns raised by patients or carers or if you have good reason to believe that you or a colleague may be putting people at risk
- 1.1.9 Never discriminate unfairly against patients, carers or colleagues
- 1.1.10 Treat each patient as an individual, respect their dignity and confidentiality and uphold the rights, values and autonomy of every service user, including their role in the diagnostic and therapeutic process and in maintaining health and well-being
- 1.1.11 Respond constructively to the outcome of audit, appraisals and performance reviews, undertaking further training where necessary

1.2 Probity

- 1.2.1 Make sure that your conduct at all times justifies the trust of patients, carers and colleagues and maintains the public's trust in the scientific profession

- 1.2.2 Inform the appropriate regulatory body without delay if, at any time, you have accepted a caution, been charged with or found guilty of a criminal offence, or if any finding has been made against you as a result of fitness to practice procedures, or if you are suspended from a scientific post, or if you have any restrictions placed on your scientific, clinical or technical practice
- 1.2.3 Be open, honest and act with integrity at all times, including but not limited to: writing reports, signing documents, providing information about your qualifications, experience, and position in the scientific community, and providing written and verbal information to any formal enquiry or litigation, including that relating to the limits of your scientific knowledge and experience
- 1.2.4 Take all reasonable steps to verify information in reports and documents, including research
- 1.2.5 Work within the Standards of Conduct, Performance and Ethics set by your profession

1.3 Working with colleagues

- 1.3.1 Work with other professionals, support staff, service users, carers and relatives in the ways that best serve patients' interests
- 1.3.2 Work effectively as a member of a multi-disciplinary team
- 1.3.3 Consult and take advice from colleagues where appropriate
- 1.3.4 Be readily accessible when you are on duty
- 1.3.5 Respect the skills and contributions of your colleagues
- 1.3.6 Participate in regular reviews of team performance

1.4 Training and developing others

- 1.4.1 Contribute to the education and training of colleagues
- 1.4.2 If you have responsibilities for teaching, develop the skills, attitudes and practices of a competent teacher
- 1.4.3 Ensure that junior colleagues and students are properly supervised
- 1.4.4 Support colleagues who have difficulties with performance, conduct or health
- 1.4.5 Share information with colleagues to protect patient safety
- 1.4.6 Provide work-based development for colleagues to enhance/improve skills and knowledge

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Domain 2: Scientific Practice

As a part of the Healthcare Science workforce, you will keep your scientific and technical knowledge and skills up to date to effectively:

2.1 Scientific Practice

- 2.1.1 Develop investigative strategies/procedures/processes that take account of relevant clinical and other sources of information
- 2.1.2 Provide scientific advice to ensure the safe and effective delivery of services
- 2.1.3 Undertake scientific investigations using qualitative and quantitative methods to aid the screening, diagnosis, prognosis, monitoring and/or treatment of health and disorders appropriate to the discipline
- 2.1.4 Investigate and monitor disease processes and normal states
- 2.1.5 Provide clear reports using appropriate methods of analysing, summarising and displaying information
- 2.1.6 Critically evaluate data, draw conclusions from it , formulate actions and recommend further investigations where appropriate

2.2 Technical Practice

- 2.2.1 Provide technical advice to ensure the safe and effective delivery of services
- 2.2.2 Plan, take part in and act on the outcome of regular and systematic audit
- 2.2.3 Work within the principles and practice of instruments, equipment and methodology used in the relevant scope of practice
- 2.2.4 Demonstrate practical skills in the essentials of measurement, data generation and analysis
- 2.2.5 Assess and evaluate new technologies prior to their routine use
- 2.2.6 Identify and manage sources of risk in the workplace, including specimens, raw materials, clinical and special waste, equipment, radiation and electricity
- 2.2.7 Apply principles of good practice in health and safety to all aspects of the workplace
- 2.2.8 Apply correct methods of disinfection, sterilisation and decontamination and deal with waste and spillages correctly
- 2.2.9 Demonstrate appropriate level of skill in the use of information and communications technology

2.3 Quality

- 2.3.1 Set, maintain and apply quality standards, control and assurance techniques for interventions across all clinical, scientific and technological activities
- 2.3.2 Make judgements on the effectiveness of processes and procedures
- 2.3.3 Participate in quality assurance programmes
- 2.3.4 Maintain an effective audit trail and work towards continuous improvement

Domain 3: Clinical Practice

As a part of the Healthcare Science workforce, you will keep your clinical skills up to date and undertake the clinical duties appropriate to your role in order to effectively:

3.1 Clinical Practice

- 3.1.1 Ensure that you and the staff you supervise understand the need for and obtain relevant consent before undertaking any investigation, examination, provision of treatment, or involvement of patients and carers in teaching or research
- 3.1.2 Ensure that you and the staff you supervise maintain confidentiality of patient information and records in line with published guidance
- 3.1.3 Ensure that you and your staff understand the wider clinical consequences of decisions made on your actions or advice
- 3.1.4 Demonstrate expertise in the wider clinical situation that applies to patients who present in your discipline
- 3.1.5 Maintain up to date knowledge of the clinical evidence base that underpins the services that you provide and/or supervise and ensure that these services are in line with the best clinical evidence
- 3.1.6 Plan and determine the range of clinical/scientific investigations or products required to meet diagnostic, therapeutic, rehabilitative or treatment needs of patients, taking account of the complete clinical picture
- 3.1.7 Plan and agree investigative strategies and clinical protocols for the optimal diagnosis, monitoring and therapy of patients with a range of disorders
- 3.1.8 Ensure that detailed clinical assessments are undertaken and recorded using appropriate techniques and equipment and that the outcomes of these investigations are reviewed regularly with users of the service

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- 3.1.9 Ensure the provision of expert interpretation of complex and or specialist data across your discipline in the context of clinical questions posed
- 3.1.10 Undertake and record a detailed clinical assessment using appropriate techniques and equipment
- 3.1.11 Provide specialised clinical investigation and/or analysis appropriate to your discipline
- 3.1.12 Provide interpretation of complex and/or specialist data in the context of the clinical question posed
- 3.1.13 Provide clinical advice based on results obtained, including a diagnostic or therapeutic opinion for further action to be taken by the individual directly responsible for the care of the patient
- 3.1.14 Provide expert clinical advice to stakeholders in order to optimise the efficiency and effectiveness of clinical investigation of individuals and groups of patients
- 3.1.15 Prioritise the delivery of investigations, services or treatment based on clinical need of patients
- 3.1.16 Represent your discipline in multidisciplinary clinical meetings to discuss patient outcomes and the appropriateness of services provided
- 3.1.17 Ensure that regular and systematic clinical audit is undertaken and be responsible for modifying services based on audit findings.

3.2 Investigation and reporting

- 3.2.1 Plan and conduct scientific, technical, diagnostic, monitoring, treatment and therapeutic procedures with professional skill and ensuring the safety of patients, the public and staff
- 3.2.2 Perform investigations and procedures/design products to assist with the management, diagnosis, treatment, rehabilitation or planning in relation to the range of patient conditions/equipment within a specialist scope of practice
- 3.2.3 Monitor and report on progress of patient conditions/use of technology and the need for further interventions.
- 3.2.4 Interpret and report on a range of investigations or procedures associated with the management of patient conditions/equipment

Domain 4: Research, Development and Innovation

As part of the Healthcare Science workforce, research, development and innovation are key to your role. It is essential in helping the NHS address the challenges of the ageing population, chronic disease, health inequalities and rising public expectations of the NHS. In your role, you will undertake the research, development and innovation appropriate to your role in order to effectively:

4.1 Research, Development and Innovation

- 4.1.1 Search and critically appraise scientific literature and other sources of information
- 4.1.2 Engage in evidence-based practice, participate in audit procedures and critically search for, appraise and identify innovative approaches to practice and delivery of healthcare
- 4.1.3 Apply a range of research methodologies and initiate and participate in collaborative research
- 4.1.4 Manage research and development within a governance framework
- 4.1.5 Develop, evaluate, validate and verify new scientific, technical, diagnostic, monitoring, treatment and therapeutic procedures and, where indicated by the evidence, adapt and embed them in routine practice
- 4.1.6 Evaluate research and other available evidence to inform own practice in order to ensure that it remains at the leading edge of innovation.
- 4.1.7 Interpret data in the prevailing clinical context
- 4.1.8 Perform experimental work, produce and present results
- 4.1.9 Present data, research findings and innovative approaches to practice to peers in appropriate forms
- 4.1.10 Support the wider healthcare team in the spread and adoption of innovative technologies and practice

Domain 5: Clinical Leadership

All patients and service users have a right to expect that Healthcare Science services efficiently and effectively managed to meet service needs. As a leader in Healthcare Science, you will seek to effectively:

5.1 Leadership

- 5.1.1 Maintain responsibility when delegating healthcare activities and provide support as needed
- 5.1.2 Respect the skills and contributions of your colleagues
- 5.1.3 Protect patients from risk or harm presented by another person's conduct, performance or health
- 5.1.4 Treat your colleagues fairly and with respect
- 5.1.5 Make suitable arrangements to ensure that roles and responsibilities are covered when you are absent, including handover at sufficient level of detail to competent colleagues
- 5.1.6 Ensure that patients, carers and colleagues understand the role and responsibilities of each member of the team
- 5.1.7 Ensure that systems are in place through which colleagues can raise concerns and take steps to act on those concerns if justified
- 5.1.8 Ensure regular reviews of team performance and take steps to develop and strengthen the team
- 5.1.9 Take steps to remedy any deficiencies in team performance
- 5.1.10 Refer patients to appropriate health professionals
- 5.1.11 Identify and take appropriate action to meet the development needs of those for whom you have management, supervision or training responsibilities
- 5.1.12 Act as an ambassador for the Healthcare Science community



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