

Good Scientific Practice 2021 Summary of Changes

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Following an extensive review, the Academy has updated its document 'Good Scientific Practice' first published in 2012.

During the review the Academy considered a number of key regulatory documents published since 2012, including those provided by the Health and Care Professions Council, the Nursing and Midwifery Council, the General Medical Council, the Registration Council for Clinical Physiologists (RCCP) and the Register of Clinical Technologists (RCT). In addition, feedback was sought from a selection of stakeholders including: patient representatives, the National Health Service, Health Education England, NHS Education for Scotland, the National School of Healthcare Science, RCCP, RCT and the Academy for Healthcare Science itself. An earlier draft of the revised standards was also consulted on and appropriate amendments made.

Through the review the Academy has:

- reiterated the need to put the patient at the centre of all practice
- provided greater clarity about the purpose of the standards and how they relate to different parts of the workforce
- clarified how the document can be used by different readers
- reduced the number of standards from 90 to 64
- removed duplication of standards
- introduced more side headings for greater clarity
- changed the style of language to make it clearer that standards must be met or evidenced.

What has not changed

- The five Domains remain the same
- Alignment to other key statutory documents

Good Scientific Practice 2012	Good Scientific Practice 2021
Domain 1: Professional Practice	No change
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:	Removed to avoid confusion regarding the status of this statement and the standards. Content covered within the standards.
Domain side headings 1.1 Professional Practice 1.2 Probity 1.3 Working with colleagues 1.4 Training and developing others	Additional/revised side headings: 1.1 Professional Practice 1.2 Scope of Practice 1.3 Communication 1.4 Professional Responsibilities 1.5 Working with others
1.1 Professional Practice	Changed to 1.1 Patient-Centred Practice
1.1.1 Make the patient your first concern	Subsumed in revised standard 1.1.1 1.1.1 You put patients first and do the following: <ul style="list-style-type: none"> - Act in the interests of patients' safety and well-being at all times. - Fulfil your duty of care if you have a concern about a patient's safety. - Fulfil your duty of candour if something goes wrong in a patient's care. - Adhere to safeguarding requirements and uphold the interests of vulnerable individuals in how you deliver care.
1.1.2 Exercise your professional duty of care	Subsumed into revised standard 1.1.1

<p>1.1.3 Work within the agreed scope of practice for lawful, safe and effective healthcare science</p>	<p>Subsumed in new standard 1.2.1</p> <p>1.2.1 You take responsibility for the following:</p> <ul style="list-style-type: none"> - Understanding and engaging with your scope of practice, your personal competence and the parameters of your job role (recognising that these may be different and each will change, as you develop and service needs change). - Your decisions and actions (and inactions) and explaining and justifying these when required to do so. - Working within your current scope of practice, competence and job role. - Being clear to others about the nature of your roles and responsibilities. - Identifying and taking appropriate action when a potential activity or area of decision-making falls outside your scope of practice and competence.
<p>1.1.4 Keep your professional, scientific, technical knowledge and skills up to date</p>	<p>Subsumed in revised standard 1.2.2</p> <p>1.2.2 You engage in continuing professional development (CPD) and do the following:</p> <ul style="list-style-type: none"> - Maintain and develop your knowledge, understanding and skills in line with your practice and role, including in response to changes in patient need, the evidence base, technological advances and service delivery requirements. - Identifying when planned changes to your job role or your broader plans for developing your career create CPD needs.

	<ul style="list-style-type: none">- Keep a structured record of your CPD activity to evidence how you maintain and update your knowledge, understanding and skills in line with changing needs in patient care, service delivery and your job role.- Adhere to the specific CPD requirements of your regulatory and/or professional body.
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1.1.5 Engage fully in evidence based practice	Subsumed in revised standard 1.2.2 (see above)
1.1.6 Draw on appropriate skills and knowledge in order to make professional judgements	Subsumed in revised standard 1.2.2 (see above)
1.1.7 Work within the limits of your personal competence	Subsumed in revised standard 1.2.1 (see above)
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	Subsumed into revised standard 1.4.7 1.4.7 You take appropriate steps if you identify that a patient, their carer or a colleague poses a risk to your own or others' health and safety, including by making alternative arrangements for patient care, if required, to avoid fulfilment of need being compromised.
1.1.9 Never discriminate unfairly against patients, carers or colleagues	Subsumed into revised standard 1.1.2 (see above) and 1.3.2 1.3.2 You communicate in ways that take account of the needs of your intended audience, adapting how you present information to seek to achieve relevance and clarity and to aid understanding.
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	Subsumed into revised standards 1.1.2 (see above), 1.1.3, 1.1.4 1.3.1, 1.3.2 (see above) 1.1.3 You respect patients' privacy and only use and disclose confidential information about their care in accordance with legal, ethical and data protection requirements. 1.1.4 You support patients and the public to promote and manage their own health and well-being.

	<p>1.3.1 You listen to patients, carers, service users and colleagues to understand their needs, preferences and requests and take account of non-verbal cues to inform how you communicate and respond.</p>
<p>1.1.11 Respond constructively to the outcome of audit, appraisals and performance reviews, undertaking further training where necessary</p>	<p>Subsumed into review standard 1.2.3</p> <p>1.2.3 You engage with individual, team and service performance review and audit processes, including by doing the following:</p> <ul style="list-style-type: none"> - Responding constructively to the outcomes of specific processes. - Engaging in emergent learning and development activities to enhance individual and team performance, service delivery and patient care.
<p>1.2 Probity</p>	<p>Changed to 1.2 Scope of Practice</p>
<p>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 Good Scientific Practice Good Scientific Practice</p>	<p>Subsumed in revised standards 1.4.2 and 1.4.5</p> <p>1.4.2 You act as an ambassador for healthcare science, behaving and conducting yourself in ways that uphold the profession's reputation and reflect the trust that the public, patients, employers and colleagues place in the profession.</p> <p>1.4.5 You engage and co-operate promptly, fully and honestly in complaints and investigation processes, including the following, as the need arises:</p> <ul style="list-style-type: none"> - The complaints and fitness to practise policies and procedures of your employer, regulatory and/or professional body. - An investigation into a complaint made about your own conduct or competence. - An investigation into others' conduct or competence if you are invited to input to the process.

<p>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</p>	<p>Subsumed in revised standard 1.4.6</p> <p>1.4.6 You declare any matter relating to your health, character or conduct to your employer, regulatory and/or professional body, in line their requirements, that has the potential to do the following:</p> <ul style="list-style-type: none"> - Affect or impede your capacity to practise safely and effectively. - Put others' health and safety at risk. - Undermine the trust and confidence placed in you as a healthcare scientist.
<p>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</p>	<p>Subsumed in revised standards 1.3.6, 1.4.2 (see above) and 4.1.1</p> <p>1.3.6 You produce materials about your service and professional activity that do the following:</p> <ul style="list-style-type: none"> - Present clear, accurate information in a format appropriate for the target audience (e.g. patients, carers or other healthcare professionals). - Provide clarity on when you are giving advice or expressing a professional opinion and the basis and parameters of this. - Comply with relevant legal, ethical and professional requirements and codes, including those relating to advertising, presenting research data, and writing for publication <p>4.1.1 You act with honesty, probity and integrity in all stages of the research process, including by adhering to research governance frameworks and protocols relating to the following:</p> <ul style="list-style-type: none"> - Project design. - Ethics approval.

	<ul style="list-style-type: none"> - Funding. - Public/patient involvement. - Data-gathering and analysis. - Reporting, dissemination and publication.
1.2.4 Take all reasonable steps to verify information in reports and documents, including research	<p>Subsumed in revised standard 1.4.1</p> <p>1.4.1 You engage with the standards of conduct and behaviour set by your regulatory and/or professional body.</p>
1.2.5 Work within the Standards of Conduct, Performance and Ethics set by your profession	<p>Subsumed in revised standard 1.4.1</p> <p>1.4.1 You engage with the standards of conduct and behaviour set by your regulatory and/or professional body.</p>
1.3 Working with colleagues	<p>Section moved to 1.5</p> <p>New section 1.3 Communication</p>
1.3.1 Work with other professionals, support staff, service users, carers and relatives in the ways that best serve patients' interests	<p>Subsumed in revised standard 1.5.1</p> <p>1.5.1 You work with colleagues in your workplace and representatives of other organisations, engaging in multi-disciplinary team-working and inter-agency collaboration to meet patient needs safely, effectively and efficiently.</p>
1.3.2 Work effectively as a member of a multi-disciplinary team	<p>Subsumed in revised standard 1.5.1 (see above)</p>
1.3.3 Consult and take advice from colleagues where appropriate	<p>Subsumed in revised standard 1.5.2</p> <p>1.5.2 You use available resources, including others' time and expertise, efficiently and judiciously to optimise the quality and efficacy of patient care and service delivery.</p>

1.3.4 Be readily accessible when you are on duty	Removed
1.3.5 Respect the skills and contributions of your colleagues	Subsumed in revised standards 1.5.1 (see above) and 1.5.2 (see above)
1.3.6 Participate in regular reviews of team performance	Subsumed in revised standard 1.2.3 1.2.3 You engage with individual, team and service performance review and audit processes, including by doing the following: <ul style="list-style-type: none"> - Responding constructively to the outcomes of specific processes. - Engaging in emergent learning and development activities to enhance individual and team performance, service delivery and patient care.
1.4 Training and developing others	Section subsumed into section 1.5 Working with others
1.4.1 Contribute to the education and training of colleagues	Subsumed in revised standard 1.5.3 1.5.3 You contribute to others' learning and development in line with your scope of practice, competence and job role, and engage with the importance of being a competent educator as an integral component of your role as a healthcare scientist.
1.4.2 If you have responsibilities for teaching, develop the skills, attitudes and practices of a competent teacher	Subsumed in revised standard 1.5.3 (see above)
1.4.3 Ensure that junior colleagues and students are properly supervised	Subsumed in revised standard in 1.5.4 1.5.4 You undertake safe, effective supervision of junior colleagues and trainees, including by doing the following: <ul style="list-style-type: none"> - Engaging with the responsibilities that you retain when you delegate activity to others. - Satisfying yourself that the colleague to whom you plan to delegate a specific activity has the knowledge, understanding and skills to undertake it safely and effectively

	<ul style="list-style-type: none"> - Checking that the colleague understands their role and responsibilities in enacting the planned delegated activity, including relating to informed consent and raising any concerns about patient safety. - Checking that the colleague knows how to seek advice, if required, once undertaking the delegated activity. - Providing appropriate levels of guidance, support and intervention to maintain patients' and others' safety through the specific delegation arrangements that you put in place. - Keeping delegation arrangements under review and modifying them if this is needed to uphold safe patient care and effective service delivery.
<p>1.4.4 Support colleagues who have difficulties with performance, conduct or health</p>	<p>Subsumed in revised standard in 5.2.2</p> <p>5.2.2 You contribute to distributed leadership within your team or service, including by doing the following in line with your scope of practice and job role:</p> <ul style="list-style-type: none"> - Acting as a role model and leading by example. - Addressing the development needs of those for whom you have leadership, management, supervision and/or training responsibilities. - Engaging in reviews of team performance. - Engaging in activity (including CPD) to enhance team performance. - Engaging in exercises to address deficiencies in team performance. - Distilling, sharing and applying learning from team development activities. - Celebrating team success.
<p>1.4.5 Share information with colleagues to protect patient safety</p>	<p>Subsumed in revised standard 3.2.6</p>

	<p>3.2.6 You share all relevant information with colleagues involved in individual patients' care, ensuring adherence to legal and ethical requirements relating to confidential and sensitive personal data, when you do the following:</p> <ul style="list-style-type: none"> - Delegate or refer care to colleagues in your team/service. - Refer patients to other health or social care providers.
<p>1.4.6 Provide work-based development for colleagues to enhance/improve skills and knowledge</p>	<p>Subsumed in revised in standard 5.2.2 (see above)</p>
<p>New standards</p>	<p>1.3 Communications</p> <p>1.3.3 You have appropriate English language proficiency and communication skills to provide the required standard of service delivery and care in the UK.</p> <p>1.4 Professional Responsibilities</p> <p>1.4.3 You declare anything that could create a conflict of interest in your professional and workplace activity and are transparent in how you exercise and share your professional opinion in different contexts.</p> <p>1.4.4 You have appropriate indemnity cover (recognising) that this may be provided by your employer) for your activity as a healthcare scientist, including for any activity that you undertake outside your primary job role.</p>

Domain 2: Scientific Practice	No change
Domain side headings 2.1 Scientific Practice 2.2 Technical Practice 2.3 Quality	Domain side headings 2.1 Data and reporting 2.2 Technical Proficiency 2.3 Quality Assurance
As a part of the Healthcare Science workforce, you will keep your scientific and technical knowledge and skills up to date to effectively:	Removed to avoid confusion regarding the status of this statement and the standards. Content covered within the standards.
2.1 Scientific Practice	Changed to 2.1 Data and reporting
2.1.1 Develop investigative strategies/procedures/processes that take account of relevant clinical and other sources of information	Minor revision and listed as 2.1.3 2.1.3 You develop investigative strategies, procedures and processes, taking account of relevant clinical and other sources of information and evidence-based practice.
2.1.2 Provide scientific advice to ensure the safe and effective delivery of services	Subsumed in revised standard 2.1.5 2.1.5 You provide scientific advice to do the following: <ul style="list-style-type: none"> - Inform the safe, effective delivery of services. - Support your colleagues' clinical decision-making relating to individual patients
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	Subsumed in revised standard 2.1.1 2.1.1 You undertake investigations and/or therapy, including by doing the following: <ul style="list-style-type: none"> - Adhering to up-to-date standard operating procedures.

	<ul style="list-style-type: none"> - Using appropriate qualitative and quantitative methods in how you undertake activities relating to screening, diagnosis, prognosis, monitoring and/or treatment of disease, disorders and normal states of health. - Using appropriate methods and approaches to analyse information.
2.1.4 Investigate and monitor disease processes and normal states	<p>Subsumed in revised standard 2.1.2</p> <p>2.1.2 You report on investigations and/or therapy that you undertake in a timely manner, presenting information on your activity, analysis and findings in a clear and succinct format.</p>
2.1.5 Provide clear reports using appropriate methods of analysing, summarising and displaying information	<p>Subsumed in revised standards 1.3.5 and 2.1.4</p> <p>1.3.5 You use communication formats and channels (spoken, written and digital, and including social media and online networking platforms) in appropriate, professional ways.</p> <p>2.1.4 You interpret and critically evaluate data to inform the following:</p> <ul style="list-style-type: none"> - Your decision-making. - Your development of action plans. - Your advice and recommendations to others on further investigations, screening and management options.
2.1.6 Critically evaluate data, draw conclusions from it , formulate actions and recommend further investigations where appropriate	<p>Subsumed in revised standard 2.1.4 (see above)</p>
2.2 Technical Practice	<p>Changed to 2.2 Technical Proficiency</p>
2.2.1 Provide technical advice to ensure the safe and effective delivery of services	<p>Subsumed in revised standard 2.2.1</p>

	<p>2.2.1 You develop and maintain your technical proficiency, in line with your scope of practice, competence and job role, including to do the following:</p> <ul style="list-style-type: none"> - Use instruments, equipment and methodologies. - Gather, measure, generate and analyse data. - Engage and comply with current best practice in how you select and use available, relevant instruments and equipment. - Provide technical advice to others 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	<p>Subsumed in revised 2.3.2</p> <p>2.3.2 You participate in quality assurance processes as an integral part of service delivery, including regular and systematic audit and service evaluation exercises.</p>
2.2.3 Work within the principles and practice of instruments, equipment and methodology used in the relevant scope of practice	Subsumed in revised standard 2.2.1 (see above)
2.2.4 Demonstrate practical skills in the essentials of measurement, data generation and analysis	Subsumed in revised standard 2.2.1 (see above)
2.2.5 Assess and evaluate new technologies prior to their routine use	<p>Revised and moved to standard 4.2.3</p> <p>4.2.3 You assess and evaluate new technologies before introducing and integrating them into your routine clinical practice, informed by the available evidence base.</p>
2.2.6 Identify and manage sources of risk in the workplace, including specimens, raw materials, clinical and special waste, equipment, radiation and electricity	<p>Subsumed in revised standard 2.2.3</p> <p>2.2.3 You follow all relevant health and safety procedures in your day-to-day practice, including by doing the following:</p> <ul style="list-style-type: none"> - Selecting and correctly using and disposing of appropriate personal protective equipment to ensure your safe contact with and use of

	<p>specimens, raw materials, clinical and special waste, equipment, ionisation, radiation and electricity.</p> <ul style="list-style-type: none"> - Using correct methods of disinfection, sterilisation and decontamination. - Dealing with waste and spillages correctly <p>Subsumed in revised standard 2.3.3 2.3.3 You actively engage in risk assessment, management and mitigation activities</p>
<p>2.2.7 Apply principles of good practice in health and safety to all aspects of the workplace</p>	<p>Subsumed in revised standard 2.2.2</p> <p>2.2.2 You engage with health and safety requirements and do the following:</p> <ul style="list-style-type: none"> - Adhere to relevant legislation. - Comply with health and safety protocols and requirements in your workplace. - Actively participate in regular mandatory health and safety training. - Remain up-to-date changes to health and safety protocols. <p>Escalate a health and safety issue either that you identify or to which you are alerted that poses a risk or actual hazard to yourself and/or others.</p>
<p>2.2.8 Apply correct methods of disinfection, sterilisation and decontamination and deal with waste and spillages correctly</p>	<p>Subsumed in revised standard 2.2.2 (see above)</p>
<p>2.2.9 Demonstrate appropriate level of skill in the use of information and communications technology</p>	<p>Subsumed in revised standard 2.2.4</p> <p>2.2.4 You engage with information and communications technology (ICT), including by doing the following:</p>

	<ul style="list-style-type: none"> - Maintaining your ICT knowledge, understanding and skills to perform your role safely, efficiently and effectively. - Keeping up-to-date with ICT developments and advances that have the potential to enhance service delivery and patient care.
2.3 Quality	Changed to 2.3 Quality assurance
2.3.1 Set, maintain and apply quality standards, control and assurance techniques for interventions across all clinical, scientific and technological activities	<p>Subsumed in revised standard 2.3.5</p> <p>2.3.5 You set, maintain and/or apply quality standards, control and assurance measures for service delivery, with a focus on the following:</p> <ul style="list-style-type: none"> - Maintaining and demonstrating the delivery of safe, effective patient care. - Identifying the need for restorative action to address deficiencies in service delivery. - Identifying opportunities for quality improvement.
2.3.2 Make judgements on the effectiveness of processes and procedures	<p>Subsumed in revised standard</p> <p>4.1.4 You develop, evaluate, validate and verify new developments (including to do with new scientific, technical, diagnostic, monitoring, treatment and therapeutic procedures) and adapt and integrate new procedures into your routine practice once you are assured by evidence of their safety, efficacy and effectiveness.</p>
2.3.3 Participate in quality assurance programmes	<p>Subsumed in revised standard 2.3.4</p> <p>2.3.4 You contribute to enacting, reviewing and updating service delivery processes and procedures to uphold patient, servicer user and public safety, in line with your scope of practice, competence and job role and informed by current best practice.</p>

<p>2.3.4 Maintain an effective audit trail and work towards continuous improvement</p>	<p>Subsumed in revised standards 2.3.1</p> <p>2.3.1 You maintain an effective audit trail of your activity, adhering to local protocols and practices.</p>

Domain 3: Clinical Practice	Unchanged
Domain side headings 3.1 Clinical Practice 3.2 Investigations and Reporting	3.1 Clinical Activity 3.2 Clinical Investigations
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:	Removed to avoid confusion regarding the status of this statement and the standards. Content covered within the standards.
3.1 Clinical Practice	Changed to 3.1 Clinical activity
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	Subsumed in revised standard 3.1.1 3.1.1 You obtain informed consent from individual parties (patients, or their carer, service users or other appropriate authorities) before you do the following: <ul style="list-style-type: none"> - Undertake an investigation or examination. - Provide treatment. - Involve individuals in teaching or research activity.
3.1.2 Ensure that you and the staff you supervise maintain confidentiality of patient information and records in line with published guidance	Subsumed in revised 1.1.3 and 1.5.4 1.1.3 You respect patients' privacy and only use and disclose confidential information about their care in accordance with legal, ethical and data protection requirements. 1.5.4 You undertake safe, effective supervision of junior colleagues and trainees, including by doing the following:

	<ul style="list-style-type: none"> - Engaging with the responsibilities that you retain when you delegate activity to others. - Satisfying yourself that the colleague to whom you plan to delegate a specific activity has the knowledge, understanding and skills to undertake it safely and effectively - Checking that the colleague understands their role and responsibilities in enacting the planned delegated activity, including relating to informed consent and raising any concerns about patient safety. - Checking that the colleague knows how to seek advice, if required, once undertaking the delegated activity. - Providing appropriate levels of guidance, support and intervention to maintain patients' and others' safety through the specific delegation arrangements that you put in place. - Keeping delegation arrangements under review and modifying them if this is needed to uphold safe patient care and effective service delivery.
<p>3.1.3 Ensure that you and your staff understand the wider clinical consequences of decisions made on your actions or advice</p>	<p>Subsumed in revised standard 3.1.2</p> <p>3.1.2 You understand and engage with the significance of your actions, findings and advice for informing others' clinical decisions about individual patients' care.</p>
<p>3.1.4 Demonstrate expertise in the wider clinical situation that applies to patients who present in your discipline</p>	<p>Subsumed in revised standard 3.1.4</p> <p>3.1.4 You interpret and advise on complex and/or specialist data in the context of the clinical question being posed, your scope of practice and role, including by providing the following:</p> <ul style="list-style-type: none"> - The results obtained through your investigation or examination. - Your analysis and interpretation of the results.

	<ul style="list-style-type: none"> - The basis of your diagnostic or therapeutic opinion or advice, including any caveats to this. - The relevance of your findings for informing further decision-making and actions on the part of the responsible clinician. - The wider implications for optimising the efficiency and effectiveness of clinical investigations for individual patients or groups of patients.
<p>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</p>	<p>Subsumed in revised standards 1.2.2 and 2.3.4</p> <p>1.2.2 You engage in continuing professional development (CPD) and do the following:</p> <ul style="list-style-type: none"> - Maintain and develop your knowledge, understanding and skills in line with your practice and role, including in response to changes in patient need, the evidence base, technological advances and service delivery requirements. - Identifying when planned changes to your job role or your broader plans for developing your career create CPD needs. - Keep a structured record of your CPD activity to evidence how you maintain and update your knowledge, understanding and skills in line with changing needs in patient care, service delivery and your job role. - Adhere to the specific CPD requirements of your regulatory and/or professional body. <p>2.3.4 You contribute to enacting, reviewing and updating service delivery processes and procedures to uphold patient, servicer user and public safety, in line with your scope of practice, competence and job role and informed by current best practice.</p>
<p>3.1.6 Plan and determine the range of clinical/scientific investigations or products required to meet diagnostic, therapeutic, rehabilitative or</p>	<p>Subsumed in revised standard 3.2.1, 3.2.2, 3.2.3</p>

<p>treatment needs of patients, taking account of the complete clinical picture</p>	<p>3.2.1 You undertake detailed clinical or psycho-social assessments, investigations or analysis, including by doing the following:</p> <ul style="list-style-type: none"> - Using appropriate techniques and equipment. - Accurately and fully recording the nature and results of your assessments. - Regularly reviewing the outcomes of assessments, including in partnership with patients <p>3.2.2 You plan, decide and advise on clinical or scientific investigations or products to meet patients' diagnostic, predictive, therapeutic, rehabilitative and/or treatment needs, taking account of all relevant information that is available to you and in appropriate consultation and partnership with others</p> <p>3.2.3 You undertake a quality-assured approach to investigations and designing products and procedures as an integral part of your contribution to the following:</p> <ul style="list-style-type: none"> - Screening. - Diagnoses. - Treatments. - Contribution to care-planning, management and rehabilitation.
<p>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</p>	<p>Subsumed in revised standard 3.1.5</p> <p>3.1.5 You monitor and report on individual patients' condition, progress and prognosis.</p>

<p>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</p>	<p>Subsumed in revised standard 1.3.4 and 3.1.4 (see above)</p> <p>1.3.4 You complete accurate, legible and contemporary records of your activity and comply with legal and workplace requirements and protocols for safe record-keeping and storage.</p>
<p>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</p>	<p>Subsumed in revised standard 3.1.4 (see above)</p>
<p>3.1.10 Undertake and record a detailed clinical assessment using appropriate techniques and equipment</p>	<p>Subsumed in revised standards 1.3.4 and 3.2.1 (see above)</p> <p>1.3.4 You complete accurate, legible and contemporary records of your activity and comply with legal and workplace requirements and protocols for safe record-keeping and storage.</p>
<p>3.1.11 Provide specialised clinical investigation and/or analysis appropriate to your discipline</p>	<p>Subsumed in revised standard 3.1.3</p> <p>3.1.3 You provide clinical analysis and advice appropriate to your specialty, including by planning and progressing investigative strategies and clinical protocols to optimise diagnosis, monitoring and therapy of patients with a range of disorders.</p>
<p>3.1.12 Provide interpretation of complex and/or specialist data in the context of the clinical question posed</p>	<p>Subsumed in revised standard 3.1.4 (see above)</p>
<p>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</p>	<p>Subsumed in revised standard 3.1.4 (see above)</p>
<p>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</p>	<p>Subsumed in revised standard 3.1.4 (see above)</p>

<p>3.1.15 Prioritise the delivery of investigations, services or treatment based on clinical need of patients</p>	<p>Subsumed in revised standard 3.2.4</p> <p>3.2.4 You prioritise the delivery of investigations, interventions, services and treatments based on your informed understanding of individual patients' clinical need.</p>
<p>3.1.16 Represent your discipline in multidisciplinary clinical meetings to discuss patient outcomes and the appropriateness of services provided</p>	<p>Minor amendment to revised standard 3.1.7</p> <p>3.1.7 You represent the work of your team in multi-disciplinary clinical meetings, including to inform discussion on patient outcomes, service delivery and service evaluation.</p>
<p>3.1.17 Ensure that regular and systematic clinical audit is undertaken and be responsible for modifying services based on audit findings.</p>	<p>Subsumed in revised standard 2.3.2</p> <p>2.3.2 You participate in quality assurance processes as an integral part of service delivery, including regular and systematic audit and service evaluation exercises.</p>
<p>3.2 Investigation and reporting</p>	<p>Changed to 3.2 Clinical investigation and therapeutics</p>
<p>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</p>	<p>Subsumed in revised standard 3.2.2</p> <p>3.2.2 You plan, decide and advise on clinical or scientific investigations or products to meet patients' diagnostic, predictive, therapeutic, rehabilitative and/or treatment needs, taking account of all relevant information that is available to you and in appropriate consultation and partnership with others</p>
<p>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</p>	<p>Subsumed in revised standard 3.2.2 (see above)</p>

3.2.3 Monitor and report on progress of patient conditions/use of technology and the need for further interventions.	Subsumed in revised standard 3.2.5 3.2.5 You advise colleagues on using technologies, investigative processes and interventions to inform, progress and monitor individual patients' care.
3.2.4 Interpret and report on a range of investigations or procedures associated with the management of patient conditions/equipment	Subsumed in revised standard 3.1.4 (see above)

Domain 4: Research, Development and Innovation	Unchanged
Domain side headings 4.1 Research, Development and Innovations	Domain side headings 4.1 Research Activity 4.2 Service Developments
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:	Removed to avoid confusion regarding the status of this statement and the standards. Content covered within the standards.
4.1 Research, Development and Innovation	Changed to 4.1 Research activity
4.1.1 Search and critically appraise scientific literature and other sources of information	Subsumed in revised standard 4.1.5 4.1.5 You critically evaluate and apply research and other available evidence to do the following: <ul style="list-style-type: none"> - Inform your own practice and ensure that this remains leading-edge. - Inform your colleagues' practice and professional development. - Contribute to quality improvements in service delivery. - Enhance patient care and outcomes. - Contribute to and share new knowledge in line with meeting the public interest.
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	Subsumed in revised standards 4.2.1 and 4.2.2 4.2.1 You participate in service evaluation and quality improvement activities, including to do the following: <ul style="list-style-type: none"> - Seek and respond to patient and service user views and feedback.

	<ul style="list-style-type: none"> - Act on the outcomes of activities to inform service developments and enhance service delivery. <p>Share the outcomes of activities, in appropriate ways, to contribute to a culture of continuous quality improvement.</p> <p>4.2.2 You engage with innovative technologies and practice to enhance service delivery, including by doing the following:</p> <ul style="list-style-type: none"> - Identifying and appraising innovative approaches to service delivery relevant to your service and role. - Supporting and advising colleagues (including within the wider healthcare team) on adopting new technologies. - Sharing learning from adopting, implementing and evaluating specific technologies in service delivery.
<p>4.1.3 Apply a range of research methodologies and initiate and participate in collaborative research</p>	<p>Subsumed in revised standard 4.1.3</p> <p>4.1.3 You select and use research methodologies, including experimental and collaborative approaches, in ways that fit with your scope of practice and role and that achieve the following:</p> <ul style="list-style-type: none"> - Address a specific research question or topic. - Fit with the design and scale of a research project. - Involve patients and the public, when appropriate. - Are informed by and address all relevant ethical considerations.
<p>4.1.4 Manage research and development within a governance framework</p>	<p>Subsumed within revised statement 4.1.2</p>

	<p>4.1.2 You act with honesty, probity and integrity in all stages of the research process, including by adhering to research governance frameworks and protocols relating to the following:</p> <ul style="list-style-type: none"> - Project design. - Ethics approval. - Funding. - Public/patient involvement. - Data-gathering and analysis. - Reporting, dissemination and publication.
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	Subsumed in revised standard 4.1.4 (see above)
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.	Subsumed in revised standard 4.1.5 (see above)
4.1.7 Interpret data in the prevailing clinical context	Subsumed in revised standard 4.1.5 (see above)
4.1.8 Perform experimental work, produce and present results	Subsumed in revised standard 4.1.1 (see above)
4.1.9 Present data, research findings and innovative approaches to practice to peers in appropriate forms	Subsumed in revised standard 4.1.1 (see above)
4.1.10 Support the wider healthcare team in the spread and adoption of innovative technologies and practice	Subsumed in revised standard 4.1.1 (see above)
New section	4.2 Service Developments
Revised standards	<p>4.2.1 You participate in service evaluation and quality improvement activities, including to do the following:</p> <ul style="list-style-type: none"> - Seek and respond to patient and service user views and feedback.

	<ul style="list-style-type: none"> - Act on the outcomes of activities to inform service developments and enhance service delivery. - Share the outcomes of activities, in appropriate ways, to contribute to a culture of continuous quality improvement. <p>4.2.2 You engage with innovative technologies and practice to enhance service delivery, including by doing the following:</p> <ul style="list-style-type: none"> - Identifying and appraising innovative approaches to service delivery relevant to your service and role. - Supporting and advising colleagues (including within the wider healthcare team) on adopting new technologies. - Sharing learning from adopting, implementing and evaluating specific technologies in service delivery. <p>4.2.3 You assess and evaluate new technologies before introducing and integrating them into your routine clinical practice, informed by the available evidence base.</p>
Domain 5: Clinical Leadership	Unchanged
Domain side headings 5.1 Leadership	Domain side headings 5.1 Development of Self 5.2 Leading Others
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:	Removed to avoid confusion regarding the status of this statement and the standards. Content covered within the standards.
5.1 Leadership	Changed to 5.1. Developing of self

<p>5.1.1 Maintain responsibility when delegating healthcare activities and provide support as needed</p>	<p>Subsumed in revised standard 1.5.4</p> <p>1.5.4 You undertake safe, effective supervision of junior colleagues and trainees, including by doing the following:</p> <ul style="list-style-type: none"> - Engaging with the responsibilities that you retain when you delegate activity to others. - Satisfying yourself that the colleague to whom you plan to delegate a specific activity has the knowledge, understanding and skills to undertake it safely and effectively - Checking that the colleague understands their role and responsibilities in enacting the planned delegated activity, including relating to informed consent and raising any concerns about patient safety. - Checking that the colleague knows how to seek advice, if required, once undertaking the delegated activity. - Providing appropriate levels of guidance, support and intervention to maintain patients' and others' safety through the specific delegation arrangements that you put in place. - Keeping delegation arrangements under review and modifying them if this is needed to uphold safe patient care and effective service delivery.
<p>5.1.2 Respect the skills and contributions of your colleagues</p>	<p>Subsumed in revised standard 5.2.1</p> <p>5.2.1 You value and recognise your colleagues' knowledge, skills and contribution to service delivery and patient care.</p>
<p>5.1.3 Protect patients from risk or harm presented by another person's conduct, performance or health</p>	<p>Subsumed into revised standard 1.4.7</p> <p>1.4.7 You take appropriate steps if you identify that a patient, their carer or a colleague poses a risk to your own or others' health and safety, including</p>

	by making alternative arrangements for patient care, if required, to avoid fulfilment of need being compromised.
5.1.4 Treat your colleagues fairly and with respect	Subsumed in revised standard 5.2.1 (see above)
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	<p>Subsumed in revised standard 1.5.5</p> <p>1.5.5 You arrange with your line manager for essential elements of your roles and responsibilities to be covered during periods of planned absence, including by</p> <ul style="list-style-type: none"> - Contributing to handover to colleagues who have the scope of practice and competence to undertake activities in your place of you. - Adhering to your workplace's business continuity arrangements.
5.1.6 Ensure that patients, carers and colleagues understand the role and responsibilities of each member of the team	<p>Subsumed in revised standard in 1.5.4</p> <p>1.5.4 You undertake safe, effective supervision of junior colleagues and trainees, including by doing the following:</p> <ul style="list-style-type: none"> - Engaging with the responsibilities that you retain when you delegate activity to others. - Satisfying yourself that the colleague to whom you plan to delegate a specific activity has the knowledge, understanding and skills to undertake it safely and effectively. - Checking that the colleague understands their role and responsibilities in enacting the planned delegated activity, including relating to informed consent and raising any concerns about patient safety. - Checking that the colleague knows how to seek advice, if required, once undertaking the delegated activity. - Providing appropriate levels of guidance, support and intervention to maintain patients' and others' safety through the specific delegation arrangements that you put in place.

	<ul style="list-style-type: none"> - Keeping delegation arrangements under review and modifying them if this is needed to uphold safe patient care and effective service delivery.
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	Subsumed in revised standard 1.5.4 (see above)
5.1.8 Ensure regular reviews of team performance and take steps to develop and strengthen the team	<p>Subsumed in revised standard 5.2.2</p> <p>5.2.2 You contribute to distributed leadership within your team or service, including by doing the following in line with your scope of practice and job role:</p> <ul style="list-style-type: none"> - Acting as a role model and leading by example. - Addressing the development needs of those for whom you have leadership, management, supervision and/or training responsibilities. - Engaging in reviews of team performance. - Engaging in activity (including CPD) to enhance team performance. - Engaging in exercises to address deficiencies in team performance. - Distilling, sharing and applying learning from team development activities. - Celebrating team success.
5.1.9 Take steps to remedy any deficiencies in team performance	Subsumed in revised standard 5.2.2 (see above)
5.1.10 Refer patients to appropriate health professionals	<p>Subsumed in revised standard 3.1.6</p> <p>3.1.6 You refer patients to the most appropriate healthcare professional or service, ensuring that you do the following:</p> <ul style="list-style-type: none"> - Put individual patients' needs and safety first. - Recognise when elements of patient care sit outside your scope of practice, competence and job role.

5.1.11 Identify and take appropriate action to meet the development needs of those for whom you have management, supervision or training responsibilities	Subsumed in revised standard 5.2.2 (see above)
5.1.12 Act as an ambassador for the Healthcare Science community	<p>Subsumed in revised standard 1.4.2</p> <p>1.4.2 You act as an ambassador for healthcare science, behaving and conducting yourself in ways that uphold the profession’s reputation and reflect the trust that the public, patients, employers and colleagues place in the profession.</p>
New Standards	<p>5.1.1 You demonstrate self-awareness, including about your leadership style and its impact on others.</p> <p>5.1.2 You develop, maintain and apply your leadership skills, behaviours and qualities in line with your scope of practice and job role.</p>
New section	5.2. Leading others
	<p>Revised standards</p> <p>5.2.1 You value and recognise your colleagues’ knowledge, skills and contribution to service delivery and patient care.</p> <p>5.2.2 You contribute to distributed leadership within your team or service, including by doing the following in line with your scope of practice and job role:</p> <ul style="list-style-type: none"> - Acting as a role model and leading by example. - Addressing the development needs of those for whom you have leadership, management, supervision and/or training responsibilities. - Engaging in reviews of team performance. - Engaging in activity (including CPD) to enhance team performance.

	<ul style="list-style-type: none">- Engaging in exercises to address deficiencies in team performance.- Distilling, sharing and applying learning from team development activities.- Celebrating team success.
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Appendix 1 Glossary¹

Autonomous	An individual's ability to use their professional judgement to make independent decisions about their work
Audit procedures	Processes intended to review the quality of care, treatment and other services being provided, to determine where there could be improvements.
Carer	Anyone who looks after, or provides support to, a family member, partner or friend.
Care, treatment or other services	A general term to describe the different work that the healthcare science workforce carry out
Colleague	Other health and care professionals, students and trainees, support workers, professional carers and others involved in providing care, treatment or other services to service users.
Conduct	A health and care professional's behaviour.
Consent	Permission for a health and care professional to provide care, treatment or other services, given by a service user, or someone acting on their behalf, after receiving all the information they need to make that decision.
Delegate	To ask someone else to carry out a task on your behalf.
Disclose	Making a formal decision to share information about a service user with others, such as the police.
Discriminate	To unfairly treat a person or group of people differently from other people or groups of people. This includes treating others differently because of your views about their lifestyle, culture or their social or economic status, as well as the characteristics

¹ For consistency some definitions are drawn from HCPC's Standards for Conduct, Performances and Ethics - <https://www.hcpc-uk.org/globalassets/resources/standards/standards-of-conduct-performance-and-ethics.pdf>

protected by law – age, disability, gender reassignment, race, marriage and civil partnership, pregnancy and maternity, religion or belief, sex and sexual orientation.

Escalate	To pass on a concern about a patient, service users or carer’s safety or wellbeing to someone who is better able to act on it, for example, a more senior colleague, a manager or a regulator.
Ethics	The values that guide a person’s behaviour or judgement.
Fitness to practise	Having the skills, knowledge, character and health required to practise your profession safely and effectively.
Leadership	The ability to act as an example to others by exhibiting positive values and behaviours. This is not limited to positions of management and can be demonstrated in any role or professional context.
Multidisciplinary clinical meetings	A general term to describe when professionals from different specialties/professions meet to discuss a patient or service user’s care.
Patient	Those who are receive care or a service provided by the healthcare science workforce. The term includes service users and clients.
Refer	To ask someone else to provide care, treatment or other services which are beyond your scope of practice or, where relevant, because the service user has asked for a second opinion.
Research	Clinical research is the basis of how we develop new treatments, techniques and gain the understanding to continually improve healthcare and to build the evidence for new, safe and effective approaches
Scope of practice	The areas in which a health and care professional has the knowledge, skills and competence necessary to practise safely and effectively.
Service user	Anyone who uses or is affected by the services of health and care professional for example, patients or clients, or other colleagues and organisations