

## **Biomedical scientists**

Valid from: [Date]

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## Introduction

*Currently, the PDFs of the standards of proficiency have a 3 page introduction which sets out what the standards of proficiency are, explain what we expect of registrants, how the standards relate to their scope of practice and clarify the language used.*

*During the review, we have noted some misconceptions about the standards, their purpose and their application. We have also been asked for clarification on a number of areas.*

*In light of this, we propose to change the introduction text of the standards to the below.*

This document sets out the standards of proficiency.

The standards of proficiency set out threshold standards for safe and effective practice in the professions we regulate. They set out what a student must know, understand and be able to do by the time they have completed their training, so that they are able to apply to register with us. Once on our Register you must continue to meet those standards of proficiency which apply to your scope of practice.

We also expect you to keep to our Standards of conduct, performance and ethics and our Standards for continuing professional development. We publish these in separate documents, which you can find on our website. All three sets of standards are important for safe and effective practice.

### About the standards

Our standards complement information and guidance issued by other organisations, such as your professional body or your employer. We recognise the valuable role played by professional bodies in providing guidance and advice about good practice, which can help you to meet the standards in this document.

The standards of proficiency are structured around 15 overarching standards which are the same for all our registrants, no matter their profession. These are written in bold.

The standards beneath these are made up of 'generic' standards and 'profession-specific' standards. 'Generic' standards appear in the standards of proficiency for every one of the professions we regulate, to reflect the commonality across all our registrants. The 'profession-specific' standards are standards which are unique to particular professions.

**The generic standards that apply to all professions are written in blue text.**

We have numbered the standards so that you can refer to them more easily. The standards are not hierarchical and are all equally important for safe and effective practice.

## About this document

It is important that you read and understand this document. If your practice is called into question we will consider these standards (and our standards of conduct, performance and ethics) in deciding what action, if any, we need to take.

In the Standards of proficiency, we use terminology which we believe makes the standards as clear as possible for all our professions. This is because our registrants work in a range of different settings, which include direct practice, management, education, research and roles in industry, and use different words to describe the work they do.

Many of our registrants use different terms to describe the groups or individuals that use - or are affected by – their services, such as ‘patients’, ‘clients’ and ‘service users’. In this document we have used the term ‘service user’ to apply to all those who benefit from your services.

We also use phrases such as ‘understand’, ‘know’, and ‘be able to’. This is so the standards remain applicable to both students who have not yet started practising, and current registrants.

For registrants on our Register, the language we use should not act as a limit on the skills, knowledge and abilities you are able to develop or demonstrate. For example, you should not feel that the wording of certain standards limits you to demonstrating only ‘understanding’ and prevents you from applying your knowledge where appropriate. Registrants should feel able to develop their practice and demonstrate skills, knowledge and abilities which go beyond those listed in the Standards of proficiency as appropriate.

## Meeting the standards

The standards of proficiency set out threshold standards for safe and effective practice. You must meet all the standards of proficiency to register with us, and continue to meet the standards relevant to your scope of practice to stay registered with us.

However, we recognise that our registrants’ scope of practice evolves over time, as you develop your practice.

Your scope of practice is the area or areas of your profession in which you have the knowledge, skills and experience to practise lawfully, safely and effectively, in a way that meets our standards and does not pose any danger to the public or to yourself.

Your scope of practice may change over time, depending on how your practice develops. This might be because of specialisation in a certain area or a movement into roles in management, education or research.

If you want to move outside of your scope of practice, you should be certain that you are capable of working lawfully, safely and effectively. This means that you need to exercise personal judgement by undertaking any necessary training or gaining experience, before moving into a new area of practice.

We expect registrants to evolve and develop their practise throughout the career, in line with our expectations around continuing professional development. Therefore this might mean your scope of practice moves beyond these standards as you develop and your skills and understanding become more advanced. This might mean that not all the standards of proficiency are relevant to you throughout your entire career.

**Your particular scope of practice may mean that you are unable to continue to demonstrate that you meet all of the standards that apply for the whole of your profession.**

As long as you are practising safely and effectively within your given scope of practice and do not practise in the areas where you are not proficient to do so, this will not be a problem. Every time you renew your registration, you will be asked to sign a declaration that you continue to meet the standards of proficiency that apply to your scope of practice.

It is important that you meet our standards and are able to practise lawfully, safely and effectively. However, we do not dictate how you should meet our standards. There is normally more than one way in which each standard can be met and the way in which you meet our standards might change over time because of improvements in technology or changes in your practice.

We often receive questions from registrants who are concerned that something they have been asked to do, a policy, or the way in which they work might mean they cannot meet our standards. They are often worried that this might have an effect on their registration.

As an autonomous professional, you need to make informed, reasoned decisions about your practice to ensure that you meet the standards that apply to you. This includes seeking advice and support from education providers, employers, colleagues, professional bodies, unions and others to ensure that the wellbeing of service users is safeguarded at all times.

There may also be circumstances which affect the care you give, but are beyond your control. The standards of proficiency are drafted to apply to actions within your control.

So long as you make decisions in accordance with the standards and can justify your decisions if asked to, it is very unlikely that you will not meet our standards.

## Standards of proficiency

*The below reflects what the standards would look like, if the proposed changes we are consulting on are accepted. They are merely illustrative.*

*We would recommend using the table of proposed changes when responding to the consultation, to see exactly which changes we have proposed.*

Registrant biomedical scientists must:

**1 be able to practise safely and effectively within their scope of practice**

1.1 know the limits of their practice and when to seek advice or refer to another professional or service

1.2 recognise the need to manage their own workload and resources safely and effectively

**2 be able to practise within the legal and ethical boundaries of their profession**

2.1 understand the need to promote and protect the service user's interests at all times

2.2 understand the importance of safeguarding and the need to engage in appropriate safeguarding processes where necessary

2.3 understand what is required of them by the Health and Care Professions Council

2.4 understand the need to respect and uphold the rights, dignity, values, and autonomy of service users including their role in the diagnostic and therapeutic process and in maintaining health and wellbeing

2.5 recognise that relationships with service users should be based on mutual respect and trust, and be able to maintain high standards of care even in situations of personal incompatibility

2.6 understand the importance of and be able to obtain informed consent

2.7 be able to exercise a professional duty of care

2.8 understand about current legislation applicable to the work of their profession

2.9 be aware of the British, European and International Standards that govern and affect pathology laboratory practice

**3 be able to maintain fitness to practise**

3.1 understand the need to maintain high standards of personal and professional conduct

- 3.2 understand the importance of maintaining their own mental and physical health and be able to take appropriate action if their health may affect their ability to practise safely and effectively
- 3.3 understand the role that coping strategies can play in maintaining fitness to practise and the importance of seeking help and support when necessary
- 3.4 understand both the need to keep skills and knowledge up to date and the importance of continuous professional development

#### **4 be able to practise as an autonomous professional, exercising their own professional judgement**

- 4.1 recognise that they are personally responsible for and must be able to justify their decisions
- 4.2 be able to use their skills, knowledge and experience, and the information available to them, to make informed decisions or initiate solutions where necessary
- 4.3 be able to make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasoning appropriately
- 4.4 be able to make and receive appropriate referrals
- 4.5 be able to initiate resolution of problems and be able to exercise personal initiative
- 4.6 be able to demonstrate a logical and systematic approach to problem solving
- 4.7 be able to use research, reasoning and problem solving skills to determine appropriate actions
- 4.8 understand the importance of active participation in training, supervision and mentoring

#### **5 be aware of the impact of culture, equality and diversity on practice**

- 5.1 understand the need to adapt practice to respond appropriately to the needs of all different groups and individuals
- 5.2 be aware of the impact of their own values and beliefs on practice
- 5.3 be aware of the characteristics and consequences of verbal and non-verbal communication and how this can be affected by factors such as age, culture, disability, ethnicity, gender, marriage or civil partnership, pregnancy or maternity, race, sex, sexual orientation, socio-economic status and spiritual or religious beliefs

#### **6 be able to practise in a non-discriminatory manner**

- 6.1 be aware of the characteristics and consequences of barriers to inclusion

## **7 understand the importance of and be able to maintain confidentiality**

- 7.1 be aware of the limits of the concept of confidentiality
- 7.2 understand the principles of information governance and be aware of the safe and effective use of health, social care and other relevant information
- 7.3 be able to recognise and respond appropriately to situations where it is necessary to share information to safeguard service users or the wider public

## **8 be able to communicate effectively**

- 8.1 be able to use effective and appropriate verbal and non-verbal skills to communicate with service users, carers, colleagues and others
- 8.2 be able to communicate in English to the standard equivalent to level 7 of the International English Language Testing System, with no element below 6.5<sup>1</sup>
- 8.3 be able to work with service users or their carers to facilitate the service user's preferred role in decision-making, and provide service users and carers with the information they may need where appropriate
- 8.4 be able to modify their means of communication to address the individual communication needs and preferences of service users and carers, and remove any barriers to communication where possible
- 8.5 be able to use information and communication technologies appropriate to their practice
- 8.6 be able to communicate the outcomes of biomedical procedures

## **9 be able to work appropriately with others**

- 9.1 be able to work, where appropriate, in partnership with service users, their relatives and carers, other professionals, support staff and others
- 9.2 understand the need to build and sustain professional relationships as both an independent practitioner and collaboratively as a member of a team
- 9.3 be able to contribute effectively to work undertaken as part of a multi-disciplinary team
- 9.4 understand the qualities, behaviours and benefits of leadership and be able to apply them in the context of your practice
- 9.5 understand the need to engage service users and carers in planning and evaluating diagnostics, treatments and interventions to meet their needs and goals

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<sup>1</sup> The International English Language Testing System (IELTS) tests competence in the English language. Applicants who have qualified outside of the UK, whose first language is not English and who are not nationals of a country within the European Economic Area (EEA) or Switzerland, must provide evidence that they have reached the necessary standard. Please visit our website for more information.

9.6 be aware of the impact of pathology services on the service user care pathway

**10 be able to maintain records appropriately**

10.1 be able to keep accurate, comprehensive and comprehensible records in accordance with applicable legislation, protocols and guidelines

10.2 recognise the need to manage records and all other information in accordance with applicable legislation, protocols and guidelines

10.3 be able to recognise, communicate and understand the risks and possible serious consequences of errors and omissions in both requests for, and results of, laboratory investigations

10.4 be able to use systems for the accurate and correct identification of service users and laboratory specimens

10.5 understand the need to adhere to protocols of specimen identification, including bar coding and electronic tag systems

10.6 understand the importance of backup storage of electronic data

**11 be able to reflect on and review practice**

11.1 understand the value of reflection on practice and the need to record the outcome of such reflection

11.2 recognise the value of case conferences and other methods of review

**12 be able to assure the quality of their practice**

12.1 be able to engage in evidence-based practice

12.2 be able to gather and use feedback and information, including qualitative and quantitative data, to evaluate the responses of service users to their care

12.3 be able to monitor and systematically evaluate the quality of practice, and maintain an effective audit trail to work towards continual improvement

12.4 be able to participate in audit procedures and quality management, including quality control, quality assurance and the use of appropriate outcome measures

12.5 be able to evaluate intervention plans using recognised outcome measures and revise the plans as necessary in conjunction with the service user

12.6 recognise the value of contributing to the generation of data for quality assurance and improvement programmes

12.7 be able to select and apply quality and process control measures

12.8 be able to identify and respond appropriately to abnormal outcomes from quality indicators



**13 understand the key concepts of the knowledge base relevant to their profession**

- 13.1 understand the structure and function of the human body, together with knowledge of health, disease, disorder and dysfunction relevant to their profession
- 13.2 be aware of the principles and applications of scientific enquiry, including the evaluation of treatment efficacy and the research process
- 13.3 recognise the role(s) of other professions in health and social care and understand how they may relate to the role of biomedical scientist
- 13.4 understand the structure and function of health and social care services in the UK
- 13.5 understand the theoretical basis of, and the variety of approaches to, assessment and intervention
- 13.6 be able to demonstrate knowledge of the underpinning scientific principles of investigations provided by clinical laboratory services
- 13.7 understand the role of the following specialisms in the diagnosis, treatment and management of disease: cellular science, blood science, infection science, molecular and genetic science and reproductive science
- 13.8 be able to evaluate analyses using qualitative and quantitative methods to aid the diagnosis, screening and monitoring of health and disorders
- 13.9 understand the techniques and associated instrumentation used in the practice of biomedical science
- 13.10 understand the biological hazards groups and associated containment levels

**14 be able to draw on appropriate knowledge and skills to inform practice**

- 14.1 be able to change their practice as needed to take account of new developments, technologies and changing contexts
- 14.2 be able to gather appropriate information
- 14.3 be able to analyse and critically evaluate the information collected
- 14.4 be able to select and use appropriate assessment techniques
- 14.5 be able to undertake and record a thorough, sensitive and detailed assessment, using appropriate techniques and equipment
- 14.6 be able to undertake or arrange investigations as appropriate
- 14.7 be able to conduct appropriate diagnostic or monitoring procedures, treatment, therapy or other actions safely and effectively
- 14.8 be aware of a range of research methodologies
- 14.9 recognise the value of research to the critical evaluation of practice
- 14.10 be able to critically evaluate research and other evidence to inform their own practice

- 14.11 be able to perform and supervise procedures in clinical laboratory investigations to reproducible standards
- 14.12 be able to operate and utilise specialist equipment according to their discipline
- 14.13 be able to validate scientific and technical data and observations according to pre-determined quality standards
- 14.14 be able to demonstrate proficiency in practical skills in cellular science, blood science, infection science, molecular and genetic science and reproductive science, where appropriate to the discipline
- 14.15 be able to demonstrate practical skills in the processing and analysis of specimens including specimen identification, the effect of storage on specimens and the safe retrieval of specimens
- 14.16 be able to demonstrate practical skills in the investigation of disease processes
- 14.17 be able to work in conformance with standard operating procedures and conditions
- 14.18 be able to work with accuracy and precision
- 14.19 be able to perform calibration and quality control checks
- 14.20 be able to demonstrate operational management of laboratory equipment to check that equipment is functioning within its specifications and to respond appropriately to abnormalities
- 14.21 understand the implications of non-analytical errors
- 14.22 know the extent of the role and responsibility of the laboratory with respect to the quality management of hospital, primary care and community based laboratory services for near- service user testing and non-invasive techniques
- 14.23 be able to formulate specific and appropriate management plans including the setting of timescales
- 14.24 be able to select suitable specimens and procedures relevant to service users' clinical needs, including collection and preparation of specimens as and when appropriate
- 14.25 be aware of the need to assess and evaluate new procedures prior to routine use
- 14.26 be able to investigate and monitor disease processes and normal states
- 14.27 be able to use standard operating procedures for analyses including point of care in vitro diagnostic devices
- 14.28 be able to use statistical packages and present data in an appropriate format
- 14.29 be able to design experiments, report, interpret and present data using scientific convention, including application of SI units and other units used in biomedical science

**15 understand the need to establish and maintain a safe practice environment**

- 15.1 understand the need to maintain the safety of both service users and those involved in their care
- 15.2 be aware of applicable health and safety legislation, and any relevant safety policies and procedures in force at the workplace, such as incident reporting, and be able to act in accordance with these
- 15.3 be able to work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in a safe manner and in accordance with health and safety legislation
- 15.4 be able to select appropriate personal protective equipment and use it correctly
- 15.5 be able to establish safe environments for practice, which appropriately manages risk to service users, those treating them and others, including the use of hazard control and particularly infection control
- 15.6 understand the application of principles of good laboratory practice

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## Glossary

### **Apologising**

Making it clear that you are sorry about what has happened. The HCPC does not

*Currently, the Standards of conduct, performance and ethics have a glossary, but the standards of proficiency do not. We have received feedback from stakeholders that it would be helpful for the standards to define certain terms. We therefore propose to define the following terms.*

regard an apology, of itself, as an admission of liability or wrongdoing.

### **Autonomous**

In these standards, 'autonomous' refers to a professional'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. This is sometimes done by working directly with service users and drawing on their experience.

### **Case conferences**

A general term to describe when professionals meet to discuss a service user's care.

### **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 our registrants carry out.

### **Child or Children**

A service user under the age of 18. This includes neonates, where relevant to the scope of practice of a registrant.

### **Colleague**

A general term to describe someone our registrants work with in a professional context. This might include other health and care professionals (including from different professions or disciplines), 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 registrant 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**

In these standards, this refers to 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 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 service user'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.

**Inclusive**

Providing all people or groups of people with equal and fair access to health and care services.

**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.

**Practitioner**

A health and care professional who is currently practising in their profession.

**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.

**Scope of practice**

The areas in which a registrant has the knowledge, skills and experience necessary to practise safely and effectively.

**Service user**

Anyone who uses or is affected by the services of registrants, for example, patients or clients.

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