The College of Radiographers

Public Voluntary Register of Sonographers

Standards of Proficiency

March 2017

Introduction

This document sets out the Standards of Proficiency and are based closely on the Health and Care Professions Council (HCPC) Standards of Proficiency for Radiographers (2013)\(^1\)

When the term ‘we’ is used in this document this refers to the College of Radiographers who manage and administer this voluntary register.

The Standards of Proficiency are the minimum standards considered necessary to protect members of the public. You must meet these standards when you first become voluntary registered. After that, every time you renew your voluntary registration you will be asked to sign a declaration that you continue to meet the standards of proficiency that apply to your scope of ultrasound practice.

We also expect you to keep to our standards of conduct, performance and ethics, which are published in a separate document.

The standards of proficiency in this document include both generic and ultrasound specific elements. The generic standards explain the key obligations that we expect of you. Occasionally, we have pointed out specific elements of those key obligations. We have not attempted to create exhaustive lists of all the areas that each generic standard covers; we have simply highlighted specific elements where we consider this to be helpful.

A note about our expectations of you

The standards of proficiency play a central role in how you can gain admission to, and remain on, the public voluntary register of sonographers. It is important that you read and understand this document. If your practice is called into question, we will consider these standards (and the standards of conduct, performance and ethics) in deciding what action, if any, we need to take. The standards set out in this document complement information and guidance issued by other organisations, such as a statutory regulator, professional body or your employer.

Your scope of practice

Your scope of practice is the area or areas of your ultrasound practice 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.
We recognise that a voluntary registrant’s scope of practice will change over time and that the practice of experienced voluntary registrants often becomes more focused and specialised than that of newly voluntarily registered colleagues. This might be because of specialisation in a certain clinical area or with a particular client group, or a movement into roles in management, education or research.

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

As long as you make sure that 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. If you want to move outside 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 and experience.

**Meeting the standards**

It is important that voluntary registrants meet our standards and are able to practise lawfully, safely and effectively. However, we don’t 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. As a 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 and others to ensure that the wellbeing of service users is safeguarded at all times. In particular, we recognise the valuable role played by professional bodies in representing and promoting the interests of their members. This often includes guidance and advice about good practice which can help you meet the standards laid out in this document.

As an autonomous professional, you need to make informed, reasoned decisions about your practice to ensure that you meet the standards. 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. So long as you do this and can justify your decisions if asked to, it is very unlikely that you will not meet our standards.

**Service users**

We recognise that our voluntary registrants work in a range of different settings, which include clinical practice, education, research and roles in industry. We recognise that different professions sometimes use different terms to refer to those who use or who are affected by their practice and that the use of terminology can be an emotive issue.

We have tried to use a term in the standards which is as inclusive as possible. Throughout the standards we have used the term ‘service users’ to refer to anyone who uses ultrasound services and this will depend on how and where you work. For example, if you work in clinical practice, your service users might be your patients or your staff if you manage a team. The term also includes other people who might be affected by your practice, such as
carers and relatives. In the profession specific standards, we have retained the terminology which is relevant to ultrasound.

Reference

Standards

Voluntary registrant sonographers 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

   1.2 be able to manage their own workload and resources effectively and be able to practise accordingly.

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

   2.1 understand the need to act in the best interests of service users at all times

   2.2 understand what is required of them by the College of Radiographers

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

   2.4 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

   2.5 know about current legislation applicable to the work of their profession

   2.6 be able to practise in accordance with current legislation and guidelines governing the use of non-ionising and ionising radiation for medical and other purposes.

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

   2.8 be able to exercise a professional duty of care

   2.9 understand the legislative, policy, ethical and research frameworks that underpin, influence and inform the practice of sonography.

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 health

3.3 understand both the need to keep skills and knowledge up to date and the importance of life long learning

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

4.1 be able to assess a professional situation, determine the nature and severity of the problem and call upon the required knowledge and experience to deal with the problem.

4.2 be able to make reasoned decisions to initiate, continue, modify or cease treatment or cease ultrasound examinations and record the decisions and reasoning appropriately

4.3 be able to initiate resolution of problems and be able to exercise personal initiative

4.4 recognise that they are personally responsible for and must be able to justify their decisions

4.5 be able to make and receive appropriate referrals

4.6 understand the importance of participation in training, supervision and mentoring.

5 be aware of the impact of culture, equality and diversity in practice

5.1 understand the requirement to adapt practice to meet the needs of different groups and individuals

5.2 understand the emotions, behaviours and psychosocial needs of people undergoing ultrasound imaging, as well as that of their carers and families.

5.3 be able to provide appropriate information and support for service users throughout their ultrasound examination.

6. be able to practise in a non-discriminatory manner

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 and social care 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 demonstrate effective and appropriate verbal and non-verbal skills in communicating information, advice, instruction and professional opinion to service users, 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.

8.3 understand how communication skills affect assessment and engagement of service users and how the means of communication should be modified to address and take account of factors such as age, capacity, learning ability and physical ability.

8.4 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, ethnicity, gender, socio-economic status and spiritual or religious beliefs.

8.5 understand the need to provide service users or people acting on their behalf with the information necessary to enable them to make informed decisions.

8.6 understand the need to assist the communication needs of service users such as through the use of an appropriate interpreter, wherever possible.

8.7 recognise the need to use interpersonal skills to encourage the active participation of service users.

8.8 be able to advise other healthcare professionals about the relevance and application of ultrasound to the service user’s needs

8.9 be able to formulate and provide information to service users about the diagnostic ultrasound examination or treatment with regular reappraisal of their information needs, as appropriate.

9. be able to work appropriately with others.

9.1 be able to work, where appropriate, in partnership with service users, other professionals, support staff and others.

9.2 understand the need to build and sustain professional relationships as both an independent professional and collaboratively as a member of a team

9.3 understand the need to engage service users and carers in planning and evaluating their ultrasound examination or procedure, treatment and follow up.

9.4 be aware of the need to empower service users to participate in the decision making process related to their ultrasound examination.
9.5 be able to contribute effectively to work undertaken as part of a multi-disciplinary team.

9.6 be able to understand, interpret and act upon information from other healthcare professionals, in order to maximise health gain.

**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.

**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 multidisciplinary team reviews 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, evaluate practice systematically, and participate in clinical and other audit procedures.

12.2 be able to gather feedback and information that helps to evaluate the response of service users to their care.

12.3 understand the principles of quality control and quality assurance as they apply to the practice of ultrasound.

12.4 be aware of the role of audit and review in quality management, including quality control, quality assurance and the use of appropriate outcome measures.

12.5 be able to maintain an effective audit trail and work towards continual improvement.

12.6 be aware of, and be able to participate in, quality assurance programmes, where appropriate.

12.7 recognise the need to monitor and evaluate the quality of practice and the value of contributing to the generation of data for quality assurance and improvement programmes.

**13. understand the key concepts of the knowledge base relevant to the use of ultrasound**

13.1 understand the philosophy underpinning the development of the profession of sonography.
13.2 understand the concept of leadership and its application to practice

13.3 understand the role of the sonographer in the promotion of health and health education in relation to healthy living and health screening for disease detection.

13.4 recognise the role of other professions and services in health and social care

13.5 understand the structure and function of the human body, together with knowledge of health, disease, disorder and dysfunction relevant to sonography

13.6 understand the physical principles on which the practice of sonography is based.

13.7 understand be aware of the principles and applications of scientific enquiry, including the evaluation of test or treatment efficacy and the research process

13.8 understand and be able to apply the physical principles of ultrasound production and reception, interaction with matter and beam modification.

13.9 know the physical and scientific principles on which the formation of the final displayed images is based, including an understanding of the principles of Doppler ultrasound.

13.10 understand the safety considerations related to the use of ultrasound

13.11 understand the theoretical basis underpinning patient assessment prior to and during ultrasound examinations.

13.12 understand the capability, applications and range of technological equipment used in ultrasound.

13.13 be able to formulate a clinically useful report based on the ultrasound appearances

13.14 know the concepts and principles involved in the practice of ultrasound and how these inform and direct clinical judgement and decision making

13.15 know the pharmacology of drugs used in ultrasound and how these inform and direct clinical judgement and decision making

13.16 understand the methods of administration of drugs

13.17 be able to remove and re-apply dressings and supports appropriately and in a safe and effective manner

13.18 understand and apply the quality assurance processes in place within ultrasound.

13.19 be aware of current developments and trends in the science and practice of ultrasound.
14. **be able to draw on appropriate knowledge and skills to inform practice.**

14.1 be able to conduct and report diagnostic ultrasound examinations or treatments within personal scope of practice safely and accurately

14.2 be able to formulate specific and appropriate management plans including the setting of timescales

14.3 be able to assess, monitor and care for the service user before, during and after diagnostic ultrasound procedures or treatments

14.4 be able to pursue independent methods to establish and confirm service user identity prior to undertaking diagnostic ultrasound examinations or treatments

14.5 be able to arrange investigations as appropriate

14.6 be able to undertake and record a thorough, sensitive and detailed clinical assessment, electing and using appropriate techniques.

14.7 be able to gather appropriate information

14.8 be able to use physical, graphical, verbal and electronic methods to collect and analyse information from a range of sources including the service user’s clinical history, diagnostic images and reports and pathological tests and results.

14.9 be able to interrogate and process data and information gathered accurately in order to conduct the diagnostic ultrasound examination or treatment.

14.10 be able to appraise diagnostic ultrasound images for technical accuracy, and take further actions as required.

14.11 be able to manage complex and unpredictable situations including the ability to adapt planned diagnostic ultrasound examinations, interventions or treatments.

4.12 be able to demonstrate a logical and systematic approach to problem solving

14.13 be able to change their practice as needed to take account of new developments, technologies and changing contexts

14.14 be able to use research, reasoning and problem solving skills to determine appropriate actions.

14.15 be aware of a range of research methodologies

14.16 recognise the value of research to the critical evaluation of practice
14.17 be able to evaluate research and other evidence to inform their own practice.

14.18 be able to operate ultrasound equipment safely and accurately.

14.19 be able to demonstrate spatial awareness, visual precision and manual dexterity in the precise and safe manipulation of ultrasound equipment and related accessory units.

14.20 be able to check that ultrasound equipment is functioning accurately and within the specifications, and to take appropriate action in the case of faulty functioning and operation.

14.21 be able to use information and communication technologies appropriate to their practice.

14.22 be able to use ultrasound equipment safely and relate to published guidance on ultrasound intensity and exposure.

14.23 be able to select and explain the rationale for examination and treatment techniques and procedures appropriate to the service user’s physical and disease management requirements.

14.24 be able to position and when necessary immobilise service users for safe and accurate ultrasound examinations and treatments.

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

15.1 understand the need to maintain the safety of both the service user 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 understand the need to ensure the physical safety of all individuals in the immediate work environment at all times.

15.4 be able to establish safe environments for practice, which minimise risks to service users, those treating them and others, including the use of hazard control and particularly infection control.

15.5 be able to work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in accordance with health and safety legislation.

15.6 be able to select appropriate personal protective equipment and use it correctly.
15.7 be able to use basic life support techniques and be able to deal safely with clinical emergencies.

15.8 know and be able to apply moving and handling techniques

15.9 know the correct principles and applications of disinfectants, methods for sterilisation and for decontamination, and for dealing with wastes and spillages correctly.

15.10 be aware of immunisation and the role of occupational health