

Radiography Students – Standards of medical fitness to train

Introduction

This document has been drafted by HEOPS, following wide consultation, as guidance for those providing occupational health advice to Higher Educational Institutions (HEI's) on students' fitness to train and meet the required standards on completion of a training programme. All radiography students should complete a health screening program before commencing clinical placements. The standards for training in radiography (diagnostic and therapeutic) are defined by the Health and Care Professions Council (HCPC)¹ and the Department of Health (DH).^{4,5} These standards meet the criteria in the Equality Act in that they are a proportionate means of achieving the legitimate aim of ensuring service user safety.

Prospective students who have serious concerns that a medical condition may have implications for future fitness to train should, at an early stage, and even before making a formal application, contact the HEI and if appropriate be offered professional advice. There is an obligation on HEI's to make reasonable adjustments for students with disabilities where such adjustments enable a student with a disability to fulfil the required competencies. There is no requirement to make adjustments to competence standards themselves.

Medical and personal information disclosed during the assessment processes should be held "in confidence" by the occupational health service. Medical details should only be given to education programme leaders and others outside the occupational health service in so far as it is necessary for them to discharge their management responsibilities, in accordance with the Data Protection Act.⁹ Explicit informed consent should be obtained from the student if it is necessary for medical information to be shared more widely. Education programme leaders in HEI's should be advised of the nature of any relevant impairment, its effect on function, and adjustments necessary to allow the student to fulfil the required competencies for completion of training and professional practice. Specific information about underlying causes should not be disclosed, except where this serves a specific purpose to protect patients or benefit the student, and only with explicit, informed consent.

The criteria for medical fitness to train are:

1. **Testing for immunity and infection** should be in accordance with current DH guidance or an equivalent evidence based standard. This will change over time. Students should protect service users, colleagues and themselves by being immunised against serious communicable diseases when vaccines are available. The current DH guidance recommends the following:
 - a. TB – Evidence of immunity and freedom from TB disease.²
 - b. Measles, Rubella and Chickenpox – Evidence of immunity.²
 - c. Hepatitis B – Immunisation is only indicated for those exposed to unfixed human blood or tissues.³ This immunisation is for the protection of the student and not service users. Some training environments may expose students to increased risk. Local risk assessment should be undertaken to establish the risks. Students should be offered this immunisation if they are at risk but the decision to accept the immunisation is that of the student after provision of adequate information about risks and benefits.

2. **Assessment to achieve outcomes in radiography.** Mandatory outcomes and competencies published by the HCPC include the following:
 - a. Understanding the importance of maintaining their own health.¹
 - b. The ability to communicate effectively with service users, carers and others, in English to the standard equivalent to level 7 of the International English Language Testing System.¹
 - c. The ability to keep accurate, legible records.¹
 - d. The ability to calculate complex radiation doses and exposures, scrutinise and interpret the radiation prescription in such a way that radiotherapy is delivered accurately and reproducibly.¹

3. **Assessment of functional capacity.** These examples are not exhaustive. They are drawn from functions within the HCPC standards of proficiency. We suggest that these are examples of impairment needing careful assessment to ensure safe practice:
- Mobility** – This includes the ability to be independently mobile, if necessary with appliances. Students must be able to apply appropriate moving and handling techniques, use basic life support techniques and be able to deal safely with clinical emergencies.
 - Upper limb function** – All students must have one upper limb with full function, and the other upper limb capable of forming a support. All students must have manual dexterity sufficient to perform essential skills, including ensuring that service users are positioned (and if necessary immobilised) for safe and effective interventions. Students must be able to operate radiotherapy or diagnostic imaging equipment safely and accurately.
 - Vision** – N6 near vision is needed to read 1mm text. N8 near vision is needed to detect a 3mm movement. 6/18 acuity is required to read digital monitor at a distance. 6/18 and N8 are the threshold for seeking the opinion of an Occupational Physician. All acuities are with correction. Students must be able to select, move between and use appropriate forms of verbal and non-verbal communication with service users and others. Students must be able of using physical, graphical, verbal and electronic methods to collect information from a range of sources including service user history, radiographic images and biochemical reports. Student must be able to use independent methods to establish and confirm service user identity prior to treatment or imaging. Students must be able to appraise image information for clinical manifestations and technical accuracy, and take further action as required. Students must be able to recognise the need for spatial awareness, visual precision and manual dexterity in the precise and safe manipulation of treatment units or imaging equipment and related accessory equipment.
 - Hearing and Speech** – Students must be able to demonstrate effective and appropriate skills in communicating information, advice, instruction and professional opinion to colleagues, service users, their relatives and carers. Hearing loss of 40dB across all speech frequencies should be referred to the Occupational Physician. Assessment of hearing should be after correction with hearing aids. Students should have the ability to speak clearly in English and be understood at 3 metres in quiet room with background noise of no more than 60dB.
 - Learning, language and numeracy skills** - This refers to the student's learning ability rather than educational attainment. Students must have the ability to:
 - communicate information, advice, instruction and professional opinion to and from colleagues, service users, relatives and carers.
 - undertake assessments of risk, need and capacity and respond appropriately.
 - gather, analyse, critically evaluate and use information and knowledge.
 - keep accurate, legible records.
 - calculate complex radiation doses and exposures, scrutinise and interpret the radiation prescription in such a way that radiotherapy is delivered accurately and reproducibly.

Where a student has a disability causing impairment of these skills, the assessment should take into account the effects of reasonable adjustments that could enable the student to learn and to apply these skills appropriately in professional practice. An occupational health assessment can provide an objective opinion on the existence of a disability and advice on adjustments that may overcome disadvantage associated with the disability. The adequacy of these adjustments in enabling the student to achieve the mandatory competences may be better assessed by in-course assessments than evaluation in clinic.
 - Skin function** – Skin must have integrity compatible with protection of patients from increased risk of infection. This is especially so for the scalp, face and hands which cannot easily be covered with dressings. Skin conditions that may be aggravated by frequent hand cleaning, or which cannot be readily decontaminated should be assessed by an Occupational Physician.
 - Interruption of consciousness** – The risk must be low enough to represent minimal risk to service users.
 - Concentration, awareness, memory and ability to learn and understand** – Students must be able to meet HCPC proficiency standards in relation to spoken, written and electronic communication with service users, colleagues and carers. Students must have a full awareness of their own mental health, when to seek help and from whom. Students must understand the need to maintain safety of service users, carers and colleagues.
4. **The occupational health process** to assess fitness of students who declare specific functional impairments will usually require referral to an accredited specialist in occupational medicine. Screening and assessment should only be undertaken by qualified occupational health professionals or practitioners working under the clinical governance of specialist occupational health professionals. Occupational health opinions should always be provided by a suitably qualified practitioner, evidence based, logical and reasoned and should lie within a reasonable range of professional opinion^{7,8}. Depending on the nature of the condition being assessed, this process may involve:
- Taking a full, relevant medical history.
 - Physical examination and functional assessment.
 - Full mental state examination.
 - Seeking targeted, specific medical evidence, with consent, from treating NHS doctors, Educational Psychologists or other specialists, to confirm diagnosis, severity, treatment and prognosis.
 - Referral for physical or psychiatric assessment by medical specialists without a therapeutic conflict of interest.

- f. Reporting to the HEI in a timely manner, in accordance with current data protection legislation and rules of medical confidentiality.
5. **The format of health screening** should be in accordance with DH guidance² and should include the following steps:
- A health questionnaire completed and submitted to an occupational health service as soon as possible after an offer of a training place is issued. GP certification of accurate declaration is desirable.
 - An interview with an occupational health nurse to clarify any answers on the health questionnaire and to undertake specific tests and vaccinations where appropriate.
 - Onward referral to an Occupational Physician if this is appropriate.
 - A health clearance certificate issued before commencing clinical placements, stating whether the student is fit to train, and any adjustments necessary to allow the student to fulfil the required competencies by the completion of the training programme, in order to start professional practice. This should be issued to appropriate managers or the head of course. This will not include any clinical information, is sufficient proof of health clearance for all UK universities and NHS Trusts, and should prevent the need for repeat screening for all placements and electives, in accordance with DH guidance.²

References

- Standards of proficiency for radiographers – HCPC. <http://www.hpc-uk.org/publications/standards/> .
- Health Clearance for TB, Hepatitis B, Hepatitis C and HIV – DH 2007. <http://www.dh.gov.uk/en/index.htm> .
- Immunisation against infectious disease – DH. <http://immunisation.dh.gov.uk/green-book-chapters/> .
- The Management of Health, Safety and Welfare issues for NHS staff - DH 2005
- Mental Health and Employment in the NHS - DH 2008
- International English Language Teaching System.
- Jones v Post Office [2001] EWCA Civ 558, [2001] IRLR 384, Court of Appeal
- Kloss D Occupational Health Law ISBN 978-1405185905
- The Data Protection Act 1998 <http://www.legislation.gov.uk/ukpga/1998/29/contents>