HEOPS Higher Education Occupational Practitioners

Medical Students – Standards of Medical Fitness to Train

The GMC has provided advisory input to support alignment with its standards.

Introduction

This document has been drafted by Higher Education Occupational Practitioner (HEOPS), following wide consultation, as guidance for those providing occupational health advice to Higher Educational Institutions (HEIs) on applicants/students' fitness to train and meet the required standards on completion of graduation. All applicants[i] should complete a health screening program before commencing the programme. Students[ii] who develop a health condition that may affect their medical fitness to train, work or practise, may need to have their medical fitness re-assessed. The standards for training for doctors are defined by the General Medical Council (GMC)[1]. The immunity and immunisation standards are based on the Department of Health and Social Care (DHSC)[2,3,4] guidance. The general work health assessment standards are based on NHS Employer recommendations[5].

These standards meet the criteria in the Equality Act 2010[6] in that they are a proportionate means of achieving the legitimate aim of protecting

[i] In this document applicant refers to an individual who has applied to enrolled to the relevant training.
[ii] In this document student refers to an individual who has enrolled to the relevant training.

service user safety, and they are targeted at functions which are intrinsic to the discipline.

Applicants who have serious concerns that a medical condition may have implications for future ability to train as a doctor should, at an early stage, and even before making a formal application, contact the course provider and if appropriate be offered professional advice. There is an obligation on HEIs to make reasonable adjustments for applicants/students with disabilities where such adjustments enable an applicant/student with a disability to fulfil the required competencies to graduate and work as a doctor, meeting the GMC requirements.

Medical and personal information disclosed during the assessment processes should be held "in confidence" by the occupational health service in accordance to the statute (UK General Data Protection Regulation[7] (UK GDPR) and the Data Protection Act 2018[8]) and common law, professional requirements set by relevant regulators such the General Medical Council[9] (GMC) or Nursing and Midwifery Council[10] (NMC) and ethical principles[11]. Explicit informed consent should be obtained from the applicant/student if it is necessary for medical information to be shared more widely.

OH should advise the HEI of the effect of health condition(s) on functional capacity, medical fitness to embark on the course and any adjustments necessary to allow the applicant/student to fulfil the required competencies for completion of training and professional practice after graduation. It is ultimately for the HEI to determine if the recommended adjustments are reasonable to be accommodated for the course but also for future practice as a doctor.

The criteria for medical fitness to train as a doctor are:

Immunity assessment and immunisation

Assessment of immunity must be in accordance with current DHSC guidance[2,3,4]. It is imperative that OH applies the most recent guidance as the standard changes over time.

It is mandatory for the applicant/student to participate in necessary assessments to rule out active infection (for example TB symptom enquiry, or blood borne virus if they require exposure prone procedure (EPP) clearance) that can put patients and others at risk. Those who fail to participate in such mandatory assessment must not be cleared to start the course.

Healthcare professionals including students are strongly advised to be immunised against certain vaccine preventable infectious disease in order to protect patients and themselves. However, at the time of publication of this guidance, no vaccination is mandatory.

OH and HEIs should have clear, risk-based policy and procedure on how to manage applicants/students who refuse immunisation, cannot have certain vaccines because of contraindication or do not produce adequate immunity in response to a vaccine.

Table 1 Immunity screening and immunisation

TB	Freedom from open active TB by symptom enquiry (mandatory) Ruling out latent TB by IGRA or Mantoux test or evidence of such testing Offer BCG to those with direct TB patient contact or contact with infectious materials in accordance to Green Book and NICE Guideline
Measles	Evidence of 2 dose of measles containing vaccine Evidence of immunity (detectable measles IgG) 2x dose of measles containing vaccine
Rubella	Evidence of 2 dose of rubella containing vaccine Evidence of immunity (detectable rubella IgG) 2x dose of rubella containing vaccine
Varicella	Evidence of 2 dose of varicella vaccine Evidence of immunity (detectable varicella IgG) Consider accepting history of chickenpox 2x dose of varicella vaccine
Hepatitis B	Evidence of full course of vaccine Evidence of immunity (HBcAb positive, HBsAb >10 preferably >100) Full course of vaccine
Pertussis	Evidence of immunisation in the past 5 years might be necessary
EPP clearance	EPP is not a core part of the curriculum for medical students. Therefore, EPP clearance is optional for medical students. However, if they wish to participate in EPP, it is mandatory to have EPP clearance.

Outcomes to be achieved for graduates

HEIs must be sure that medical students can meet ALL the mandatory outcomes and competencies published by the regulator - the GMC (2018)[1] and therefore to be fit to practise safely as a doctor when they graduate.

Mandatory outcomes and competencies published by the regulator - the GMC (2018)[1] include the following: (these will not be assessed by occupational health)

Table 2 Mandatory outcomes at graduation

Outcomes 1 - Professional values and behaviours	• Professional and ethical responsibilities • Legal responsibilities • Patient safety and quality improvement • Dealing with complexity and uncertainty • Safeguarding vulnerable patients • Leadership and team working
Outcomes 2 - Professional skills	• Communication and interpersonal skills • Diagnosis and medical management • Prescribing medicines safely • Using information effectively and safely
Outcomes 3 - Professional knowledge	• The health service and healthcare systems in the four countries • Applying biomedical scientific principles • Applying psychological principles • Applying social science principles • Health promotion and illness prevention • Clinical research and scholarship
Supplementary	Practical skills and procedures[12].

Assessment of functional capacity

It is imperative to recognise that assessment of medical fitness to study (and to work independently pre and post qualification) is based on a

thorough and holistic functional capability assessment (FCA) to ensure that the applicant is, and will be on the balance of probability, able to safely achieve the core competencies and perform the core skills of the medical profession safely and efficiently. The method of FCA depends on the merit of each case and may include history, physical examination or assessment of practical capability (not skills) within simulated or real environments.

FCA will inform the adjustments including assistive technology.

Examples of conditions or impairment that may require in-depth assessment to ensure safe medical practice are listed below. These should be used as guidance only. Whilst not specifically mentioned below, conditions such as fatigue and or pain can temporarily, recurrently or chronically affect the following domains. The intensity and frequency of the impact should be taken into consideration when assessing the medical fitness of the applicant/student and the adjustments:

1. **Lower limb function, mobility**
   Applicants/students should be able to mobilise sufficiently and independently and should be able to perform physical examination and maintain awkward postures.

2. **Upper limb function, dexterity**
   Applicants/students should have sufficient bilateral manual functions (if need be by use of prosthesis or auxiliary aid) including dexterity and strength to perform essential skills, including ensuring that service users are positioned (and if necessary immobilised) for safe and effective physical examination and interventions and to operate equipment safely and accurately and undertake procedures such as insertion of intravenous cannulae. Applicants/students should be able to apply appropriate moving and handling techniques reliably and repeatedly, use basic or

advance life support techniques and be able to deal safely with clinical emergencies and cardiopulmonary resuscitation including directing others to perform manual tasks when appropriate.

3. 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.

Testing of vision is not required as part of the assessment. However, applicants who are known to have a significant visual loss should be referred to the Occupational Physician. Applicants/students should be able to select, move between and use appropriate forms of verbal and non-verbal communication with service users and others. Applicants/students should be able to use independent methods to establish and confirm service user identity prior to treatment. Applicants/students should have sufficient visual acuity to be able to use appropriate techniques and equipment safely.
Applicants/students should be able to sufficiently see and interpret pathology film, radiologic image, ECG, urine dipstick and alike. Colour deficiencies are relatively common. They are unlikely to be a barrier to train or practise however adjustments should be considered to enable them to practise safely.

They require vision that allows them to use an ophthalmoscope with one of their eyes.

4. Hearing

Applicants/students should be able to demonstrate effective and appropriate skills in communicating information, advice, instruction

and professional opinion to colleagues, service users of various ability to speak, their relatives and carers. Audiometry is not required as part of the assessment. However, applicants who are known to have a hearing loss of more than 40dB across all speech frequencies should be referred to the Occupational Physician. Assessment of hearing should be after correction with hearing aids. Practical functional assessment of hearing, in cases where there is concern may be is recommended.

Lip reading alone may not be insufficient in certain situations. Applicants/students should be able to communicate through telephone and face-to-face in noisy areas.

Applicants/students should be able to hear and interpret a variety of sounds (e.g. heart and lung sounds) including with additional aids such as electronic stethoscopes.

5. Speech

Applicants/students should have the ability to speak clearly in English and be understood in a noisy environment.

6. Skin function

Skin must have integrity compatible with protection of patients and the applicant/student from increased risk of infection. This is especially so for the scalp, face and hands which cannot easily be covered with dressings. Applicants/students should be capable of following approved processes for cleaning/washing hands regularly including before procedures or surgical operations including with adjustments as necessary.

7. Interruption of consciousness

The risk must be low enough to represent minimal risk to service users, colleagues, and the applicant/student.

8. Mental health and cognitive ability

Applicants/students should have the cognitive ability, memory, and awareness to understand and apply their knowledge base in a practical environment, including to be able to gather information, analyse, evaluate, form and follow appropriate patient care action plans. They should be able to meet the medical competence standards in relation to spoken, written and electronic communication with patients, colleagues, and carers, as well as the ability to undertake a full physical examination, including mental state examination. Applicants/students should have a full awareness of their own mental health, when to seek help and from whom. If an applicant/student has a condition that can significantly affect their judgement or performance the case should be assessed by a specialist in occupational medicine or suitably experienced occupational health physician with a qualification in occupational medicine.

The emotional and cognitive impact of mental health disorders and neurodiversity may overlap. The list below is not exhaustive or exclusive and is provided as an example of areas to consider:

a. ***Dyslexia/dyscalculia*** - Applicants/students should be able to read, understand, interpret, communicate, and keep notes effectively and accurately through written and electronic means. Adjustments to exam conditions and timings should be considered as well as time allowed for any project work. Applicants/students should be able to prescribe drugs safely and effectively, calculate accurate drug doses and other relevant mathematical skills, keep accurate, contemporaneous, and complete patient records. Applicants/students should be able to make patient records,

which are clear, legible, accurate, and can be easily understood.

b. ***Attention Deficit (Hyperactivity) Disorder*** - Applicants/students should be able to maintain effective concentration to remain safe and competent throughout the day, including with medication if required (and to meet the driving standards if required).

c. ***Autistic Spectrum Disorder*** - Applicants/students should be able to:

- communicate and understand verbal, non-verbal and written information.
- distinguish between literal and non-literal statements when taking a history.
- empathise with a patient and form effective working relationships with multidisciplinary teams.
- recognise a patient's vulnerability and safeguarding requirements by having situational awareness.

d. ***Personality disorders*** - Applicants/students should be able to maintain professionalism and always adhere to standards of ethics and behaviour. Disorders that result in recurrent lapses in conduct or judgement may not be compatible with fitness to train, work or practise.

e. **Mental Health** - Applicants/students should be stable with no altered perception of reality/psychotic episode for a reasonable period of time. In certain cases, the duration of stability can be a year or more and should be determined by an occupational health physician in liaison with the treating

doctor based on the individual circumstances. The cognitive ability including concentration, memory and higher brain functions must be within reasonably normal range with no or low risk[iii] of self-harm or suicide. Applicants/students should have sufficient emotional resilience to cope with the stress and demands of medical profession.

Applicants/students with long-term mental health conditions, especially conditions where impairment of insight or psychotic features may occur, may require individual assessment by an accredited specialist in Occupational Medicine. It is likely that reports from treating clinicians may be required to form part of this assessment.

Applicants/students should understand how to take appropriate action if their health may affect their ability to practise safely and effectively, including seeking help and support when necessary.

f. **Drug and alcohol misuse** - Alcohol and various recreational substances use can affect cognition. If there is history of drug or alcohol misuse/dependence/addiction, it is important that the applicant/student has sought and engaged with treatment for their condition. The risk of relapse should be negligent or low and they should be able to demonstrate that they are abstinent from use of drugs and alcohol or their alcohol intake is limited to the recommended limits for a reasonable period of time. All such cases should be reviewed by a specialist in occupational medicine to consider input from the treating doctor and to decide period of stability and abstinent as well

[iii] The assessment of the risk of self-harm and suicide should not be used the determine access to treatment or care for the applicant / student.

as drug and alcohol testing if required and in accordance with the institution's relevant policy.

9. Communication including Learning, language and numeracy skills

Applicants/students should be able to meet GMC proficiency standards in relation to spoken, written and electronic communication with service users, colleagues, and carers. Applicants/students should be able to follow the learning curriculum and meet the requirements of any knowledge and skill based professional learning outcomes. This refers to the student's learning ability rather than educational attainment. Applicants/students should have the ability to:

a. communicate information, advice, instruction and professional opinion to and from colleagues, service users, relatives and carers.

b. undertake assessments of risk, need and capacity and respond appropriately.

c. gather, analyse, critically evaluate, and use information and knowledge.

d. keep accurate, comprehensive, and comprehensible records.

e. be able to recognise the need to manage their own workload and resources safely and effectively.

Where an applicant/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 best assessed by in-course assessments under supervision.
There may be a need to have a specific assessment by a suitability qualified psychologist.

10. **Team Working**
    Applicants/students should be able to work in partnership with others including service users, carers, and colleagues. This includes being able to identify anxiety and stress in service users, carers, and colleagues, adapting their practice and providing support where appropriate.

Adjustments and support

The primary purpose of work health assessment is to identify adjustments that enable and support the applicant/student to study and work.

The OH practitioner should recommend adjustments based on an individual FCA for the consideration of the HEI. If the applicant is disabled within the meaning of the Equality Act 2010, the HEI must consider reasonable adjustments including auxiliary aid including but not limited to assistive technology, physical feature of the premises and alteration of provision, criterion, or practice (PCP). Medical schools should adhere to the GMC recommendations in order to supporting disabled learners in medical education and training.[13]

It is entirely for the HEI (and employer) to decide if the adjustments are reasonable to be implemented. There is no requirement to make adjustments to competency standards themselves.

The Occupational Health Process

The Occupational Health process should ensure suitable assessment of the applicant/student.

The process for applicants starts with a standardised Health questionnaire which should be submitted in confidence to OH. If any relevant health condition or specific functional impairments are declared the applicant must be assessed by suitably qualified and experienced OH practitioner. Assessment by an accredited specialist in occupational medicine may be required especially for complex cases and those that require complex adjustments and their fitness to study/work as a doctor in the future may be compromised.

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[5].

Depending on the nature of the condition being assessed, this process may involve:

1. Taking a full, relevant medical history.
2. Physical examination if required
3. Psychological and cognitive assessment
4. Functional assessment
5. Seeking targeted, specific medical evidence, with consent, from treating doctors, or other health professionals to confirm diagnosis, severity, treatment and prognosis.
6. Referral for physical or psychiatric assessment by medical specialists without a therapeutic conflict of interest.

7. Reporting to the HEI in a timely manner, in accordance with current data protection legislation and rules of medical confidentiality.

References

[1] Outcomes for graduates content GMC

[2] Immunisation against infectious disease

[3] Tuberculosis: NICE guideline [NG33]

[4] Integrated guidance on health clearance of healthcare workers and the management of healthcare workers living with bloodborne viruses (hepatitis B, hepatitis C and HIV) UK Advisory Panel for Healthcare Workers Living with Bloodborne Viruses (UKAP)

[5] Work health assessments standard

[6] Equality Act 2010

[7] Regulation (EU) 2016/679 of the European Parliament and of the Council (UK GDPR)

[8] Data Protection Act 2018

[9] Confidentiality: good practice in handling patient information - professional standards - GMC

[10] The Code Professional standards of practice and behaviour for nurses, midwives and nursing associates, NMC

[11] Ethics Guidance for Occupational Health Practice – 8th Edition, Faculty of Occupational Medicine

[12] Practical skills and procedures GMC

[13] Welcomed and valued - GMC