Dental 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 Dental Schools on students’ fitness to train and meet the required standards on graduation. All dental students should complete a health screening program before commencing clinical placements. The standards for training in dentistry are defined by the General Dental Council (GDC) and the Department of Health (DH). These standards meet the criteria in the Equality Act in that they are a proportionate means of achieving the legitimate aim of ensuring patient safety. On graduations, all dental students must be fit for independent practice.¹

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 School and if appropriate be offered professional advice. Reasonable adjustments are expected to be made for disabled students in allowing them to achieve the outcomes set out in Preparing for Practice.¹ There is no requirement to make adjustments to competence standards themselves.²

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 managers 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. Explicit informed consent should be obtained from the student if it is necessary for medical information to be shared more widely. Managers in training Schools should be informed of the nature of any relevant impairment, its effect on function, and adjustments necessary to allow the student to fulfil the required competencies for graduation 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 medical fitness to train criteria 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 patients, 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.⁵
   b. Measles, Rubella and Chickenpox – Evidence of immunity.⁵
   c. Hepatitis B – Immunisation and immunity test to check response to be offered to all students.⁵
   d. Additional health checks, which include antibody tests for infection with Hepatitis B, C and HIV, are mandatory for all dental students. Laboratory test results required for clearance for performing exposure prone procedures must be derived from an identified, validated sample. Definitions and details are available in online DH guidance.⁵

2. Examples of GDC outcomes. By graduation, students must have met all of the outcomes for registration with the GDC. These outcomes include the following:
   a. Obtain, record and interpret a comprehensive and contemporaneous patient history.
   b. Undertake an appropriate systematic intra and extra-oral clinical examination.
   c. Manage appropriate clinical and laboratory investigations.
   d. Undertake relevant special investigations and diagnostic procedures, including radiography.
   e. Explain the importance of, and maintain accurate, contemporaneous and comprehensive patient records in accordance with legal and statutory requirements and best practice.
   f. Communicate appropriately, effectively and sensitively at all times with and about patients, their representatives, the public and colleagues, by spoken, written and electronic methods.
   g. Undertake a range of clinical procedures within the dentist’s area of competence.
3. **Examples of practical procedures** within the dentist’s area of competence include the following:

   a. Cardiopulmonary resuscitation – possible one handed.
   
   b. Scaling and Restorations – Working hand must have three digits, two to hold an instrument in a pen grip and a third to act as a fulcrum. The other hand needs two digits to hold a dental mirror.
   
   c. Extractions – Needs second hand to support the jaw and retract soft tissues. The dominant hand needs to be capable of firm grip on forceps or chisel.
   
   d. Injections – Needs three points of contact with syringe.
   
   e. Chair side adjustments to crowns, bridges and dentures – Two hands to insert prostheses into and remove from mouth. When adjusting restorations/prostheses at the chair side one hand is needed to hold the item and the other must be capable of a firm grip on drill or pliers.
   
   f. Rubber dam placement – Two hands to manipulate pliers, clamps, dam and tie floss to clamps.
   
   g. Endodontics – requires fine control of very small instruments.
   
   h. Suturing – Three point contact with forceps and second hand to manipulate tissue and suture.
   
   i. Taking dental radiographs.
   
   j. Taking dental impressions.

4. **Assessment of functional capacity.** Examples of impairment needing careful assessment to ensure safe dental practice:

   a. **Mobility** – This must be compatible with outcomes in Preparing for Practice. This includes the ability to be independently mobile, if necessary with appliances and the student must be able to undertake an appropriate systematic intra and extra-oral clinical examination, avoiding injury to patients, colleagues and self.
   
   b. **Upper limb function** – All students must have one fully functional upper limb and the other upper limb capable of forming a support. All students must have manual dexterity sufficient to perform all clinical procedures within the dentist’s area of competence.
   
   c. **Vision** – N6 near vision is needed to read the 1mm text on an ampoule. N8 near vision is needed to detect a 3mm needle movement. 6/18 distance acuity is required to read digital monitor at the head of bed during CPR. 6/18 and N8 are the threshold for seeking the opinion of an Occupational Physician. All acuities are with correction.
   
   d. **Hearing** – The ability to understand the human voice at 1 metre in a quiet room. 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 and with additional aids such as electronic stethoscopes. Lip reading is not possible when patient has an airway cover in place. Lip reading of an assistant is not possible when viewing oral procedures.
   
   e. **Speech** – The ability to speak clearly in English and be understood at 3 metres in quiet room with background noise of no more than 60dB.
   
   f. **Literacy and Numeracy** – This refers to the student’s capability rather than educational attainment. All students must have the capability to attain the levels of literacy and numeracy needed to meet the outcomes in Preparing for Practice. Students must be sufficiently fluent in written and spoken English to communicate effectively with patients, their relatives, the dental team and other healthcare professionals in the United Kingdom. Students must be able to prescribe drugs safely and effectively, calculate accurate drug doses, keep accurate, contemporaneous and complete patient records. Students must be able to make patient records, which are clear, legible, accurate, and can be readily understood by others.
   
   g. **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. In accordance with Preparing for Practice, students must be capable of following approved processes for cleaning hands before procedures or surgical operations.
   
   h. **Interruption of consciousness** – The risk must be low enough to represent minimal risk to patients.
   
   i. **Concentration, awareness, memory and ability to learn and understand** – Students must be able to meet all of the outcomes described in Preparing for Practice in relation to spoken, written and electronic communication with patients, colleagues and carers, as well as the ability to undertake an appropriate physical examination. Students must have a full awareness of their own mental health, when to seek help and from whom. Students must protect patients and colleagues from risks posed by their health. If a student knows, or suspects, that patients may be at risk because of their health, they must consult a suitably qualified colleague immediately and follow advice on how to put the interests of patients first. Students must not rely on their own assessment of the risk posed to patients. Students should seek occupational health advice or other appropriate advice as soon as possible.
5. **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\(^\text{13,14}\). Depending on the nature of the condition being assessed, this process may involve:
   a. Taking a full, relevant medical history.
   b. Physical examination and functional assessment.
   c. Full mental state examination.
   d. Seeking targeted, specific medical evidence, with consent, from treating NHS doctors, Educational Psychologists or other specialists, to confirm diagnosis, severity, treatment and prognosis.
   e. Referral for physical or psychiatric assessment by medical specialists without a therapeutic conflict of interest.
   f. Reporting to the training School in a timely manner, in accordance with current data protection legislation and rules of medical confidentiality.

6. **The format of health screening** should be in accordance with DH guidance\(^5\) and should include the following steps:
   a. 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.
   b. An interview with an occupational health nurse to clarify any answers on the health questionnaire and to undertake specific tests and vaccinations where appropriate.
   c. Onward referral to an Occupational Physician if this is appropriate.
   d. A health clearance certificate stating whether the student is fit to train, cleared for exposure prone procedures and any adjustments necessary to allow the student to fulfil the required competencies for graduation and 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\(^5\).

References
1. Preparing for Practice – Dental Teams Learning Outcomes for Registration GDC
2. Student Fitness to Practise GDC
3. Standards for the Dental Team GDC
4. Scope of Practice GDC
8. HSC 2002/010 Hepatitis C
9. HSC 2000/020 Hepatitis B
10. NICE TB Guidelines 2006
11. HSC 2002/008 Pre and post appointment checks for all NHS staff – DH 2002
12. HIV Infected Healthcare Workers – DH 2005

First published 13/3/12 on [www.heops.org.uk](http://www.heops.org.uk) – Current version published 10/12/13 - Lead author for correspondence Dr N Wilson – wilsonnl@liv.ac.uk.