

***Tomorrow's Doctors 2009:* a draft for consultation**

15 December 2008 to 27 March 2009

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Introduction

1. We, the medical schools, the NHS, doctors and students all have different roles in medical education.
 2. The GMC is responsible for:
 - Protecting, promoting and maintaining the health and safety of the public.
 - Promoting high standards of medical education.
 - Determining the knowledge, skills and behaviours required of graduates.
 - Setting the standard of expertise that students need to achieve at qualifying examinations or assessments.
 - Making sure that the:
 - teaching and learning opportunities provided allow students to meet our requirements.
 - standard of expertise we have set is maintained by medical schools at qualifying examinations.
 - Appointing inspectors of qualifying examinations and assessments, and visitors to medical schools and proposed medical schools, to report on the standard of examinations and assessments and on the quality of teaching and learning.
 - In the light of the outcome of quality assurance activities, recognising, continuing to recognise or no longer recognising individual UK Primary Medical Qualifications (PMQs).
 - Maintaining a list of bodies that, having satisfactorily demonstrated compliance with our requirements, are entitled to award Primary Medical Qualifications (PMQs) and removing those bodies which have failed to meet our requirements.
 - Considering applications under Section 10A(2)(f) of the Medical Act 1983 for arrangements for a person with a disability not to be disadvantaged unfairly by the disability when participating in a programme for provisionally registered doctors.
 3. Medical schools are responsible for:
 - Protecting patients and making sure that no member of the public is harmed as a result of taking part in the training of their medical students.
 - Managing and enhancing the quality of their medical education programmes.
 - Delivering medical education in accordance with principles of equity.
 - Selecting students into their medical schools.
 - Providing a curriculum and associated assessments that meet:
 - the standards and outcomes in this document.
 - the requirements of the EU Medical Directive.
 - Providing academic and general support to students.
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- Providing support and training to those who teach and supervise students.
 - Providing appropriate student Fitness to Practise arrangements.
 - Ensuring that only students who demonstrate the outcomes set out in this document are permitted to graduate.
 - Managing the curriculum and ensuring that appropriate education facilities are provided in the medical school and by other education providers¹.
4. NHS organisations² are responsible for:
- Making available the facilities, staff and practical support necessary for delivering the clinical parts of the curriculum.
 - Including where appropriate a contractual requirement for doctors to undertake teaching.
 - Releasing doctors and other staff to complete the required training for teachers, and participate in professional development and quality assurance activities.
 - Participating in the management and development of the clinical education they undertake.
 - Providing quality control information to the medical school about their education provision.
5. Doctors are responsible for:
- Following the principles of professional practice that are set out in *Good Medical Practice*, including being willing to contribute to the education of students.
 - Developing the skills and practices of a competent teacher if they are involved in teaching.
 - Supervising students for whom they are responsible to support their learning and ensure patient safety.
 - Providing objective and honest assessments of students who they are asked to appraise or assess.
6. Students are responsible for:
- Their own learning, including achieving the outcomes set out in *Tomorrow's Doctors*.
 - Ensuring patient safety by working within the limits of their competence, training and status as medical students.
 - Raising any concerns about patient safety or the conduct of others which is inconsistent with good professional practice.
 - Providing evaluations of their education for quality management purposes.

¹ The term 'other education providers' is used to denote organisations involved in the delivery of undergraduate medical education outside of the medical school itself, including their staff: GP tutors; clinical tutors; NHS staff; and others in the local health economy or independent sector with specific roles in educational supervision.

² 'NHS organisations' include acute, primary care and mental health organisations, and the boards and authorities which oversee their work.

Standards for delivery of teaching, learning and assessment

7. The following paragraphs set out the standards expected for the delivery of teaching, learning and assessment in medical education, under nine domains. For each domain there are one or more 'standards', expressed at a broad summary level. Under these are the more technical 'criteria' by which we will judge whether medical schools are meeting these standards, and the 'evidence' used for this. The 'detailed requirements and context' expand upon the criteria with a more discursive approach, although important principles and requirements are contained in these paragraphs.

8. Statements using 'must' or 'will' are mandatory. Statements using 'should' may be taken into account in the quality assurance process when the GMC considers whether the overall criteria have been met.

Domain 1 – Patient safety

Standards

9. The safety of patients and their high-quality care must not be put at risk by students' duties, access to patients and supervision on placements³ or by the performance, health or conduct of any individual student.

10. To ensure the future safety of patients and their high-quality care, students who do not meet the outcomes set out in *Tomorrow's Doctors* or are otherwise not fit to practise must not be allowed to graduate.

Criteria

11. Systems and procedures will:

- Ensure that medical students only undertake appropriate tasks in which they are competent or are learning to be competent, with adequate supervision.
- Identify and address immediately any concerns about patient safety arising from the education of medical students.
- Identify and address immediately any concerns about a medical student whose conduct gives cause for concern or whose health is affected to such a degree that it could harm the public, where possible through providing support to the student (see Domain 6).
- Ensure that medical students who are not fit to practise are not allowed to graduate with a medical degree
- Inform students and those delivering medical education of their responsibility to raise concerns if they identify risks to patient safety, and provide ways to do this.

Evidence

12. Evidence for this domain will include medical school quality data (including inspections, reports of other visits and surveys), medical school guidance on fitness to practise policies and their implementation, data from other education providers and data from other healthcare regulators and organisations.

Detailed requirements and context

13. The medical school has a duty to ensure that no member of the public is harmed as a result of taking part in the training of medical students. Therefore, all those who teach, supervise, counsel, employ or work with medical students are

³ The term 'placement' refers to a structured period of supervised clinical experience and learning in a health or social care setting (including community health services and non-NHS settings)

responsible for protecting patients. The medical school must ensure that teachers and others are provided with relevant contextual information about what stage students are at in their training, what they are expected to do, and if necessary, any concerns about a student.

14. Whilst medical students may not be directly observed or supervised during all contact with the public – whether in hospitals, in general practice or in the community – a general oversight of students on placement must be in place to ensure patient safety. Closer supervision will be provided at lower levels of a student’s competence, ensuring that they are not put in situations where they are asked to work beyond their current competence without appropriate support.

15. The four UK Health Departments are responsible for deciding how students may have access to patients on NHS premises. Students are responsible for following guidance issued by the UK Health Departments and other organisations about their access to patients in NHS hospitals and community settings. They also need to be aware of any departmental guidance for healthcare workers, which may have an effect on their practice once they have gained registration.

16. As future doctors, students have a duty to follow the guidance in *Good Medical Practice* from their first day of study and understand the consequences if they fail to do so. In particular, students must appreciate the importance of protecting patients, even if this conflicts with their interests or those of friends or colleagues. If students have concerns about patient safety, they must report these to their medical school. Medical schools must provide ways for concerns to be reported and communicate these to students.

17. Students must be aware that under Section 49 of the Medical Act 1983 it is an offence for anyone who is not a registered doctor to pretend to be a qualified doctor.

18. Clinical tutors and supervisors⁴ must make honest and objective judgements when appraising or assessing the performance of students, including those they have supervised or trained. Patients may be put at risk if a student is described as competent without having reached or maintained a satisfactory standard of practice.

19. Guidance is given in the joint GMC and Medical Schools Council publication *Medical students: professional behaviour and fitness to practise* about how medical schools should handle concerns about a medical student’s performance, health or conduct. The most appropriate form of a medical school’s fitness to practise procedures will be determined by the medical school, taking into account the university’s structure and statutes, but should include provision for immediate steps to be taken to investigate any concerns to identify whether they are well-founded and to protect patients. There should also be a flow of information between medical schools and other education providers to ensure that clinical tutors and supervisors are appropriately informed.

20. A student awarded a recognised PMQ is eligible for provisional registration with the GMC, subject to their fitness to practise not being impaired. By awarding a

⁴ The terms ‘clinical tutor’ and ‘clinical supervisor’ refer to any doctor or other healthcare professional responsible for the supervision or assessment of a student on a placement.

medical degree, the awarding body⁵ is confirming that the medical graduate is fit to practise as a Foundation Year One doctor to the high standards that we have set in our guidance to the medical profession, *Good Medical Practice*. Therefore, university medical schools have a responsibility to the public, to employers and to the profession to ensure that only those students who are fit to practise as doctors should be allowed to complete the curriculum and gain provisional registration. This responsibility covers both the thorough assessment of students' knowledge, skills and behaviour towards the end of the course (see Domain 5), and appropriate consideration of any concerns about a student's performance, health or conduct.

⁵ This includes universities and non-university bodies with appropriate degree awarding powers that are recognised by the GMC

Domain 2 – Quality assurance, review and evaluation

Standard

21. The quality of medical education programmes will be monitored, reviewed and evaluated in a systematic way.

Criteria

22. The medical school will have a clear framework or plan for how it organises quality management and quality control, including who is responsible for this.

23. Management systems will be in place to plan and monitor undergraduate medical education (including admissions, courses, placements, student supervision and support, assessment and resources) to ensure that it meets required standards of quality.

24. The medical school will have agreements with providers of each clinical/vocational placement, and will have systems to monitor the quality of teaching and facilities on placements.

25. Regular reports about different stages or aspects of the curriculum and its delivery will be considered at appropriate levels of the medical school. There will be systems to plan, implement and review enhancements or changes to the curriculum or its delivery.

26. Quality data will include evaluations by students and data from medical school teachers and other education providers about placements, resources and assessment outcomes, as well as input from patients and the employers of graduates.

27. Concerns with or risks to the quality of any aspect of undergraduate medical education will be identified and managed quickly.

Evidence

28. The evidence for this domain will include: university and medical school quality assurance documentation including policies, handbooks and minutes of meetings; documentation about expected standards of curriculum delivery including placement agreements with other education providers; monitoring reports and reports of inspections or visits; quality control data including student evaluations.

Detailed requirements and context

29. General guidance on quality assurance is given in the *QAA Code of Practice for the assurance of academic quality and standards in higher education*, which should inform medical schools' systems and procedures for quality assurance, management and control.

30. Quality management policies and procedures at a medical school will vary according to the university's structure and statutes, but these must include clear

information about roles and responsibilities, committee structures, lines of reporting and authority, and the timing of monitoring reports and reviews.

31. Apart from the medical school officers and committees all education providers of clinical placements, clinical tutors and supervisors, students, employers and patients should be involved in quality management and control processes. Their roles must be defined and information made available to them about this.

32. Quality management must cover all aspects of undergraduate medical education, not just teaching. This covers the planning, monitoring and identification and resolution of problems, and includes the following areas:

- admission to medical school;
- the learning experience (including induction, teaching, supervision, placements, curriculum);
- appraisal of and feedback to students;
- pastoral and academic support for students;
- assessment of students;
- educational resources and capacity (including funding and facilities).

33. As part of quality management, there must be agreements in place with providers of each clinical/vocational placement. These agreements should set out roles and responsibilities as well as the learning objectives for the placement, and arrangements to ensure that medical students have appropriate learning opportunities to meet the learning outcomes.

34. There must be procedures in place to check the quality of teaching, learning and assessment, including that in clinical/vocational placements, and to ensure that standards are being maintained. This must be monitored through a number of different systems, including staff appraisals, student feedback, patient feedback and reviews of teaching by peers.

35. There must also be systems in place to check the quality and management of educational resources and capacity and to ensure that standards are maintained. This should include the management and allocation of funding and clear plans for the planning and management of facilities.

36. Any problems identified through the gathering and analysis of quality control data should be addressed as soon as possible. It should be clear who is responsible for this, with documentation of actions and feedback to students and staff on what is being done and the eventual resolution of problems.

37. Given the importance of assessment, including placement-based assessments, there must be specific quality control standards and systems in place to ensure the assessments are fit for purpose (see Domain 5).

38. The quality assurance system should ensure that, through the regular reporting upwards on all aspects of undergraduate medical education, the medical school can keep these under constant review, and introduce changes and

enhancements. This will include, but should not be limited to, the reviews of faculties, schools or degree programmes prescribed by university procedures.

Domain 3 – Equality, diversity and opportunity

Standard

39. Undergraduate medical education must be fair and based on principles of equality.

Criteria

40. The medical school will have policies which are aimed at ensuring that all applicants and students are treated fairly and have equality of opportunity, regardless of their diverse backgrounds and needs.

41. Staff will receive training about equality and diversity policies and what these mean for how they carry out their roles in the medical school.

42. Reasonable adjustments will be made for disabled students in accordance with current legislation and guidance.

43. Data relating to equality and diversity issues will be routinely collected and analysed to ensure that policies are being implemented and any concerns are identified.

44. The medical school will act promptly over any concerns about equality and diversity, implementing and monitoring any changes to policy and practice.

Evidence

45. Evidence for this domain will include: Medical school policies and action plans about equality and diversity, including disability; information about staff training in equality and diversity, including data on attendance/compliance; monitoring data about student applications, admissions, progression, assessment and supervision, including gender, ethnicity and disability; information about 'reasonable adjustments' made for disabled students; reports and minutes of meetings.

Detailed requirements and context

46. This domain is concerned with ensuring that students and applicants to medical schools are treated fairly and impartially, with equality of opportunity, regardless of factors that are irrelevant to their selection and progress such as gender, race, social background, disability (see below), religion and sexual orientation. It is also concerned with encouraging diversity within the student population to reflect modern society.

47. Specific advice on disabled applicants and students is given in guidance from a partnership led by the GMC: *Gateways to the professions - Advising Medical Schools: encouraging disabled students*. Medical schools should have policies on disability which take this guidance into account, as well as good practice elsewhere. This should cover the assessment of an applicant's ability to meet the 'outcomes for graduates', and the provision of reasonable adjustments and support for a student.

48. Medical schools should have clear policies, guidance and action plans for tackling discrimination and harassment and for promoting equality and diversity generally, ensuring that these meet the current and relevant legal requirements of their country.

49. Medical schools' policies for the training, conduct and assessment of students should have regard for sensitivity to the variety of cultural, social and religious backgrounds of students, whilst maintaining consistency in educational and professional standards.

50. Medical schools should have clear guidance on any areas where a student's culture or religion may conflict with usual practice or rules, such as the scheduling of classes and examinations or dress-code.

51. Monitoring data must be collected, used and stored in accordance with current legislation and guidance about data protection, confidentiality and privacy.

52. All providers of education and work experience must demonstrate their regard of equality and diversity issues in any equality schemes which apply.

53. An important part of ensuring equality and diversity is the support provided to students: see Domain 6.

Domain 4 – Student selection

Standard

54. Processes for student selection will be open, objective and fair.

Criteria

55. The medical school will publish information about the admission system, including guidance about the basis on which places at the school will be offered and the selection process.

56. Selection criteria will take account of the qualities needed in a doctor as set out in *Good Medical Practice*.

57. Selection processes will be valid, reliable and objective.

58. Those responsible for student selection will include individuals with a range of expertise and knowledge. They will be trained to apply selection guidelines consistently and fairly. They will also be trained to be able to promote equality and diversity (people's different backgrounds and circumstances) and follow current equal opportunities legislation and good practice, including about disabled applicants.

59. Students admitted will pass any health and other checks (such as criminal record checks), required by the medical school's fitness to practise policy.

Evidence

60. Evidence for this domain will include: information about medical school selection processes; data about applicants and selected students; minutes of committees and reports.

Detailed requirements and context

61. Medical schools should base their policies and procedures on research into effective, reliable and valid selection processes which can have the confidence of applicants and the public.

62. Medical schools should also take account of the guidance from a partnership led by the GMC: *Gateways to the professions - Advising Medical Schools: encouraging disabled students* in their student selection processes. This includes the requirement to make reasonable adjustments for students with a disability where the disability would not prevent the applicant from meeting the outcomes for graduates. Schools should be wary of not offering a place on the basis of a judgement about hypothetical barriers to achievement and employment specifically associated with an applicant's disability.

63. The assessment of any risks associated with an applicant's fitness to practise in relation to their health or conduct should be separated from other processes of selection.

Domain 5 – Design and delivery of curriculum including assessment

Standard

64. The curriculum must be designed, delivered and assessed to ensure that graduates demonstrate all the ‘outcomes for graduates’ specified in *Tomorrow’s Doctors*.

Criteria

65. A clear curriculum plan will set out how the ‘outcomes for graduates’ will be met across the programme as a whole. The curriculum will include a core, which will take up most curricular time, and student-selected components (SSCs) in which students can exercise choice in areas of interest.

66. The curriculum will be structured so as to provide a balance of learning opportunities and to integrate the learning of basic and clinical sciences, enabling students to link theory and practice.

67. The curriculum will include practical experience of working with patients throughout all years, increasing in duration and responsibility so that graduates are prepared for their responsibilities as a provisionally registered doctor. It will provide sufficient structured clinical placements to enable students to demonstrate the ‘outcomes for graduates’ across a range of clinical specialties, including at least one Student Assistantship⁶ period.

68. Students will have regular feedback on their performance.

69. All the ‘outcomes for graduates’ will be assessed at appropriate points during the curriculum (including SSCs), ensuring that only students who meet these outcomes are permitted to graduate. Assessments will be fit for purpose – that is: valid, reliable, feasible and fair.

70. Students will receive guidance about assessments.

71. Examiners and assessors will receive appropriate training for their role in assessment.

72. There will be systems in place to set appropriate standards for assessments to determine whether students have achieved the curriculum outcomes.

73. Assessment criteria will be consistent with the requirements for competence standards set out in disability discrimination legislation. Reasonable adjustments will be provided to help disabled students meet these competence standards.

⁶ A Student Assistantship is defined as a period during which a student acts as assistant to a junior doctor, with defined duties under appropriate supervision

Evidence

74. Evidence for this domain will include and principally be the curriculum plan, schemes of assessment and supporting documentation, including the proportion of the curriculum devoted to SSCs. Supplementary information about the delivery of teaching and clinical placements, the operation of assessments and evaluations from students will also be required.

Detailed requirements and context

Curriculum design and structure:

75. It is for medical schools to design their own curriculum to suit their own circumstances, working within these guidelines. Modern educational theory and current research must inform both curriculum design and delivery.

76. The overall curriculum, combining both the core curriculum and SSCs, must allow students to meet the outcomes specified in the first part of this document to ensure that graduates have the necessary knowledge, skills and behaviours to practise as a provisionally registered doctor. Medical schools must demonstrate the way in which these outcomes are met.

Student Selected Components:

77. Student Selected Components (SSCs) must be an integral part of the curriculum, contributing to the overall outcomes and providing students choice in studying in depth an area of particular interest to them.

78. The primary purpose of SSCs in the curriculum will be the progressive development of skills in research, critical appraisal and synthesis of evidence for maintaining good medical practice. They should also contribute to development of a range of personal and professional skills including teamworking, communication, time and resource management, teaching others, self-reflection and independent learning. They may also, especially in later years, provide opportunities to explore career options.

79. The curriculum should include sufficient SSCs to develop graduates' skills to meet the learning outcomes relevant to the purposes described above.

80. Whilst choice and exploration should be a key feature of SSCs, at least two thirds of each student's SSCs must be in subjects related to medicine, whether laboratory-based, clinical, biological or behavioural, research-oriented or in humanities related to medicine.

Teaching and learning:

81. Students must have different teaching and learning opportunities that should balance teaching in large groups with small groups, practical classes and opportunities for self-directed learning. Medical schools should take advantage of new technologies to deliver teaching.

82. The structure and content of courses and clinical attachments should integrate learning about basic medical sciences and clinical sciences. Students should wherever possible learn in a context relevant to medical practice, and re-visit topics at different stages and levels to reinforce understanding and develop skills.

83. Medical schools should provide opportunities for students to work and learn with other health and social care professionals. This will help students understand the importance of teamwork in providing care.

Clinical placements and experience:

84. The curriculum must include early and continuing contact with patients. Experiential learning in clinical settings, both real and simulated, is important to ensure graduates' preparedness for Foundation Year One (FY1) training, and over the curriculum it should increase in complexity and the level of involvement and responsibility of the student.

85. From the start, students must have opportunities to interact with people from a range of social, cultural and ethnic backgrounds. Such contact with patients encourages students to gain confidence in communicating with a wide range of people, and can help develop their ability to take patients' histories and examine patients.

86. The involvement of patients in teaching must be consistent with *Good Medical Practice* and other guidance on consent published by the GMC.

87. Clinical placements must be planned and structured to give each student experience across a range of specialties, rather than relying entirely upon this arising opportunistically. Placements should reflect the changing patterns of healthcare and must provide experience in a variety of environments including hospitals, general practices and community medical services. Within each placement there must be a plan of which outcomes will be covered, how this will be delivered, and the ways in which students' performance will be assessed and students given feedback (see requirement for placement agreements under Domain 2).

88. Medical schools should ensure that appropriate arrangements are made for disabled students on placements. Students should be encouraged to feed back to the medical school on their experience, for example in relation to provision of reasonable adjustments, guidance and pastoral support, and the working culture.

89. During the later years of the curriculum, students should have the opportunity to become increasingly competent in their clinical skills and in planning patient care. They should have a defined role in medical teams, subject to considerations of patient safety (see Domain 1), and this should become more central as their education continues.

90. In the final year students must use practical and clinical skills, rehearsing their eventual responsibilities as an FY1 doctor. These must include making recommendations for the prescription of drugs and managing acutely ill patients under the supervision of a qualified doctor. This should take the form of one or more

Student Assistantships, in which a student, assisting a junior doctor and under their supervision, undertakes most of the duties of a FY1 doctor⁷.

91. Students must be properly prepared for their first allocated FY1 post. As part of the general induction provided for FY1 doctors, they must work with the FY1 in the post they will take up when they graduate. Such a period allows students to become familiar with the facilities available, the working environment and the working patterns expected of them, and to get to know their colleagues. It also provides an opportunity to develop working relationships with the clinical and educational supervisors they will work with in the future. This period should normally last at least one week and take place as close to the point of employment as possible. It may be combined with the duties of a Student Assistantship.

Feedback and assessment:

92. Students must receive regular information about their development and progress. This should include both feedback on both formative and summative assessments. Clinical logbooks and personal portfolios, which allow students to identify strengths and weaknesses and to focus their learning, can provide such information. Using these will emphasise the importance of maintaining a portfolio of evidence of achievement, which will be necessary once they have become doctors and their licence to practise is regularly revalidated. All doctors, other health and social care workers and patients/carers who come into contact with the student should have an opportunity to provide constructive feedback about their performance. Feedback about performance in assessments helps to identify strengths and weaknesses, both in students and in the curriculum, that allow changes to be made.

93. Students must be assessed on all the outcomes for graduates set out in this document, in the core curriculum and in SSCs. The medical school must have schemes of assessment that map the outcomes to each assessment event and type, across an appropriate range of disciplines and specialties ('blueprinting'). Students' knowledge, skills and professional behaviour must be assessed. There must be a description of how individual assessments and examinations contribute to the overall assessment of curricular outcomes, which must be communicated to staff and students.

94. Assessments must be designed and delivered so as to provide a valid and reliable judgement of a student's performance. This means that methods of assessment must measure what they set out to measure, and do so in a fair and consistent way. A range of assessment techniques should be used, with medical schools determining those most appropriate for their curriculum.

95. Students must have guidance about what is expected of them in any examination or assessment.

96. Examiners⁸ must be trained to carry out their role and to apply the medical school's assessment criteria consistently. They should have guidelines for marking

⁷ When acting as a Student Assistant, a student must not carry out any procedure or take responsibility for anything which requires provisional registration as a doctor. This responsibility rests with the junior doctor supervising the Assistant.

assessments, which indicates how performance against targeted curricular outcomes should be rewarded.

97. Medical schools should have in place mechanisms to ensure comparability of standards with other institutions and to share good practice, such as the appointment of external examiners. The duties and powers of external examiners must be explicit.

98. Medical schools must have appropriate methods for setting standards in assessments to determine whether students have achieved the 'outcomes for graduates'. There must be no compensatory mechanism which would allow students to graduate without having demonstrated competence in all the outcomes.

99. Those responsible for assessment must comply with relevant legislation and seek to apply good practice relating to the assessment of those with a disability. Medical schools should also take account of the guidance from a partnership led by the GMC, *Gateways to the Profession – Advising medical schools: Encouraging disabled students*.

100. Medical schools should be guided by the QAA Code of Practice for the assurance of academic quality and standards in higher education: Assessment of Students in developing and implementing their assessments.

101. Research into best practice must inform how medical schools plan and organise their assessments, from blueprinting and choice of valid and reliable methods to standard-setting and operational matters. Medical schools must be able to explain clearly their schemes of assessment and demonstrate a wide understanding of them amongst their staff. Medical schools must therefore have staff with expertise in assessment or access to such staff in other institutions to advise on good practice and train staff involved in assessment.

Link to Foundation Programme

102. Undergraduate medical education is part of a continuum of education and training. While it is essential that the outcomes are achieved by all graduates, medical schools should also make arrangements so that graduates' areas of relative weakness are fed into their Foundation Programme portfolios.

⁸ 'Examiners' here comprises all those responsible for marking, assessing or judging students' performance, regardless of the terminology used in any particular medical school.

Domain 6 – Support and development of students, teachers and local faculty

Standard

103. Students must receive both academic and general guidance and support, including when they are not progressing well or otherwise causing concern. All those teaching or supporting students must themselves be supported, trained and appraised.

Criteria

104. Students will have comprehensive guidance about the curriculum, their placements and how they will be assessed.

105. Students will have appropriate support for their academic and general welfare needs and will be given information about these support networks.

106. Students will have access to career advice, and appropriate alternative qualification pathways will be available to those who decide to leave medicine.

107. Students will be encouraged to look after their own health and given information about their responsibilities in this respect as a trainee doctor. They will feel confident in seeking appropriate advice, support and treatment.

108. Medical schools will have robust and fair procedures to deal with students who are causing concern on both academic and non-academic grounds. Fitness to Practise arrangements and procedures will take account of the guidance issued by the GMC and MSC. Students must have clear information about these procedures.

109. All persons involved in educating medical students will be appropriately selected, trained, supported and appraised.

Evidence

110. Evidence for this domain will include medical school documentation about student support arrangements, regulations and procedures, documentation about support and training provided to staff and other education providers, inspection reports and medical school quality management reports.

Detailed requirements and context

Academic and pastoral support and guidance:

111. Medical schools must give students comprehensive guidance about the core curriculum, SSCs and how their performance will be assessed. This must include information about the objectives and assessment of clinical placements, briefing about practical arrangements for assessments and the medical school's policies on cheating, plagiarism and the importance of probity. Students should also be able to get academic advice and guidance from identified members of staff if they need it in a particular subject.

112. Students must have appropriate support for their academic and general welfare needs at all stages. Medical schools must produce information about the support networks available, including named contacts for students with problems. Students taking SSCs that are taught in other departments or by other medical schools, and those on clinical attachments or on elective, must have access to adequate support.

113. Special support and guidance must be provided for medical students whose health, behaviour, skills or knowledge gives cause for concern. Where concern arises because of a student's disability, full consideration must first be given to making reasonable adjustments to enable the student to complete the outcomes for graduates.

114. Support and guidance must be provided for students who raise concerns about colleagues' conduct to protect them from victimisation.

115. Schools must have a careers guidance strategy. This should include generic careers skills resources such as CV writing, an outline of career paths in medicine and specific guidance for students to access for personalised career planning. The careers strategy should be developed and updated with the local postgraduate deanery.

116. A small number of students may discover that they have made a wrong career choice. Medical schools must make sure that these students, whose academic and non-academic performance is not in question, are able to gain an alternative degree at the end of three years, or are able to transfer to another degree course.

117. Students who do not meet the necessary standards in terms of demonstrating appropriate knowledge, skills and behaviour should be advised of alternative careers to follow.

Students' health:

118. Medical schools must stress to students the importance of looking after their own health, and encourage them to register with a general practitioner. They must tell students about the occupational health services, including counselling, that are available to them.

119. Medical students who have problems with physical or mental health, or drug or alcohol misuse, should be encouraged to get appropriate help so that they might receive informed advice and support, including adapted training.

120. *Good Medical Practice* requires doctors to take responsibility for their own health in the interests of public safety and medical students should also follow this guidance. *Students should protect patients, colleagues and themselves by being immunised against serious communicable diseases where vaccines are available.* If a student knows that he or she has a serious condition which could be passed on to patients, or that their judgement or performance could be significantly affected by a condition or illness (or its treatment), they must take and follow advice from a consultant in occupational health or from another suitably qualified doctor on

whether, and in what ways, their clinical contact with patients should be altered. Students should not rely on their own assessment of the risk to patients.

121. Guidance on the responsibilities of students and the medical school is contained in the *Medical School Charter*, produced jointly by the Medical Schools Council and the Medical Students Committee of the British Medical Association.

122. Medical schools and students must also be aware of Health Departments' guidance on exposure prone procedures.

123. Medical students who are ill have the same rights to confidentiality as other patients. Doctors providing medical care for students should follow the guidance in *Confidentiality: protecting and providing information*. Passing on personal information without permission may be justified where failure to do so may result in death or serious harm. Doctors should not pass on information without the student's permission, unless the risk to patients is so serious that it outweighs the student's rights to privacy. They must remember that students will be in close contact with patients from an early stage of their training.

124. Doctors providing medical care for students should consult an experienced colleague or get advice from a professional organisation if they are not sure whether passing on information without a medical student's permission is justified.

Student Progression and Fitness to Practise procedures:

125. In addition to providing appropriate support, advice and adjustments, medical schools must have robust and fair arrangements and procedures, including an appeals process, to deal with students who are causing concern either on academic or on non-academic grounds including ill health or misconduct. Medical schools must tell students about these arrangements and procedures so that they understand their rights and obligations. The most appropriate form of procedures should be determined by the medical school and take account of the medical school's statutes and circumstances.

126. Where a student's fitness to practise is called into question because of their behaviour or their health, the medical school's arrangements must take account of the joint GMC and MSC guidance: *Medical students: professional behaviour and fitness to practise*. The arrangements should cover both informal and formal procedures, and include clear policies on disclosure of information to staff and outside the medical school, such as deaneries and the GMC.

127. The GMC can agree arrangements for disabled graduates not to be disadvantaged unfairly by their disability when participating in FY1 training, under Section 10A(2)(f) of the Medical Act 1983. Medical schools should apply to us should they consider that such arrangements may become necessary for any of their students.

Support for educators:

128. Medical schools must make sure that every person involved in educating medical students (including teachers, trainers, clinical supervisors and assessors in

the medical school or other education providers) has the necessary knowledge and skills for their role. They should also ensure that these people understand *Tomorrow's Doctors* and put it into practice. The medical school must provide appropriate training to these people to carry out their role and staff-development programmes should promote teaching and assessment skills. All staff (including from other education providers) should take part in such programmes.

129. Every doctor who comes into contact with medical students should recognise the importance of role models in developing appropriate behaviours towards patients and colleagues. Doctors with particular responsibility for teaching students must develop the skills and practices of a competent teacher and must make sure that students are properly supervised.

Domain 7 – Management of teaching, learning and assessment

Standard

130. Education must be planned and managed through processes which show who is responsible for each process or stage.

Criteria

131. A management plan at medical school level will show who is responsible for curriculum planning, teaching, learning and assessment at each stage of the undergraduate programme, and how they manage these processes.

132. Teachers from the medical school and other education providers will be closely involved in curriculum management, represented at medical school level and responsible for managing their own areas of the programme.

Evidence

133. Evidence for this domain will include: medical school policies, management plans and agreements with providers of clinical/vocational placements.

Detailed requirements and context

134. Medical schools should have supervisory structures that involve individuals with an appropriate range of expertise and knowledge. Lines of authority and responsibility must be set out. This will allow medical schools to plan curricula and associated assessments, put them into practice and review them. Including educational expertise within a medical education unit can help this process.

135. It must be clear who is responsible for the day-to-day management of parts of the curriculum, such as courses and placements, and how those responsible report to higher management levels. Medical school teachers and other education providers and their staff should be involved in managing their own areas of the curriculum, and should be represented on medical school committees and groups.

136. The medical school must have agreements with other education providers who contribute to the delivery of the curriculum. These should specify the contribution, including teaching, resources and the relevant curriculum outcomes.

137. The four UK Health Departments have the role of ensuring that NHS organisations work with medical schools so that students receive appropriate clinical training.

Domain 8 – Educational resources and capacity

Standard

138. The educational facilities and infrastructure must be adequate to deliver the curriculum.

Criteria

139. Students will have access to appropriate learning resources and facilities including libraries, computers, lecture theatres, seminar rooms and appropriate environments to develop and improve their clinical and practical skills.

140. Facilities will be supported by a facilities management plan which provides for regular review of the fitness for purpose of the facilities with recommendations and improvements made where appropriate.

141. There will be sufficient staff from appropriate disciplines to deliver teaching and support students' learning.

Evidence

142. Evidence for this domain will include medical schools' facilities management plans, data on facilities usage, and internal quality management reports.

Detailed requirements and context

143. Medical schools must have a plan for the management of resources and facilities. This plan should map to the curriculum to ensure that resources and facilities are effectively used. The plan should also provide for the regular review of facilities to ensure they are still appropriate. Facilities should be accessible for students and others with a disability. Students must be able to comment about the facilities and suggest new resources that should be provided.

144. The four UK Health Departments have a duty to make facilities in NHS hospitals and other premises available for students to receive clinical training.

145. Students must have opportunities to develop and improve their clinical and practical skills in an appropriate environment (where they are supported by teachers) before they use these skills in clinical situations. Skills laboratories and centres provide an excellent setting for this training.

146. Learning in an environment that is committed to care based on evidence and research can help medical students to understand the importance of developing research and audit skills to improve their practice. It also helps to make sure that those responsible for their learning are aware of current developments in clinical theory and practice.

Domain 9 - Outcomes

Standards

147. The 'outcomes for graduates' of undergraduate medical education in the UK are set out in this document. All medical students will demonstrate these outcomes before graduating from medical school.

Criteria

148. Undertaking a programme of undergraduate medical education that employs a curriculum which is demonstrated to meet the 'outcomes for graduates' set out in the first part of this document will normally confirm that these outcomes are being delivered.

Evidence

149. Medical school quality data, including data from staff, other education providers and students.

Outcomes for graduates

Overarching outcome:

150. To make the care of patients their first concern in accordance with *Good Medical Practice*, applying their knowledge in a practical and ethical manner and using their ability to provide leadership and to analyse complex and uncertain situations.

Outcomes 1 - The doctor as a scholar and a scientist

151. The graduate will be able to:

152. Apply biomedical⁹ scientific principles, method and knowledge to medical practice.

- a. Explain the scientific bases for common disease presentations.
- b. Justify the selection of appropriate investigations for common clinical cases.
- c. Explain the fundamental principles underlying such investigative techniques.
- d. Select appropriate forms of management for common diseases and explain their modes of action from first principles.
- e. Demonstrate knowledge of drug actions and pharmacokinetics, drug side effects and interactions including effects on the population, such as the spread of antibiotic resistance.

153. Apply psychological and social principles, method and knowledge to medical practice.

- a. Discuss psychological and sociological concepts of health, illness and disease.
- b. Apply theoretical frameworks of psychology and sociology to explain the varied responses of individuals, groups and societies to disease.
- c. Explain psychological and sociological factors that contribute to illness, the course of the disease and the success of treatment, including issues relating to health inequalities, employment issues and the effects of poverty and affluence.
- d. Assess the impact of issues relating to equality and diversity on health behaviours and outcomes.
- e. Discuss psychological and sociological aspects of behavioural change and treatment compliance.
- f. Discuss adaptation to major life change, such as bereavement. Compare and contrast the abnormal adjustments that might occur in these situations.

⁹ Biomedical is understood to include anatomy, biochemistry, cell biology, genetics, immunology, microbiology, molecular biology, nutrition, pathology, pharmacology and physiology.

g. Identify appropriate strategies for managing patients with substance misuse and other forms of self harm.

154. Apply population and improvement science principles, method and knowledge to medical practice.

a. Discuss basic principles of health improvement including the wider determinants of health, health inequalities, the health risks associated with disability, race, gender, sexuality and age, and disease surveillance.

b. Describe methods for measuring to improve clinical effectiveness and demonstrate improvement in care.

c. Discuss the principles underlying the development of health and health service policy including issues relating to health economics and equity and clinical guidelines.

d. Explain and apply the basic principles of communicable disease control in hospital and community settings.

e. Evaluate and apply epidemiological data in managing healthcare for the individual and the community.

f. Recognise the role of environmental hazards in ill-health and discuss ways to mitigate their effects.

g. Discuss the principles and application of primary, secondary and tertiary prevention of disease¹⁰.

155. Apply scientific method and approaches to medical research.

a. Critically appraise the results of relevant qualitative and quantitative studies as reported in the medical and scientific literature and understand the ethical and governance issues involved in medical research.

b. Formulate simple relevant research questions in biomedical science, psychosocial science or population science and design appropriate studies or experiments to address the questions.

c. Apply findings from the literature to answer questions raised by specific clinical problems.

¹⁰ Primary prevention of disease is understood to refer to the prevention of disease onset. Secondary prevention of disease is understood to refer to the detection of disease in symptom free individuals. Tertiary prevention of disease is understood to refer to the prevention of disease progression, palliation or rehabilitation.

Outcomes 2 - The doctor as a practitioner

156. The graduate will be able to:
157. Carry out a consultation with a patient.
- a. Take and record a patient's medical history, including family and social history and talking to relatives or other carers where appropriate.
 - b. Perform a full physical examination.
 - c. Perform a mental state examination.
 - d. Provide explanation, advice, reassurance and support.
158. Diagnose and manage clinical presentations¹¹.
- a. Interpret findings from the history, physical examination and mental state examination, appreciating the importance of clinical, psychological, spiritual, religious, social and cultural factors.
 - b. Make an initial assessment of a patient's problems and a differential diagnosis.
 - c. Formulate a plan of investigation in partnership with the patient, obtaining informed consent as an essential part of this process.
 - d. Interpret the results of investigations.
 - e. Synthesise a full assessment of the patient's problems.
 - f. Make clinical judgements and decisions, based on the available evidence, in conjunction with colleagues and as appropriate for the level of training and experience. This may include situations of uncertainty.
 - g. Formulate a plan for treatment, management and discharge, according to established principles and best evidence, in partnership with the patient, their carers, and other health professionals as appropriate. Respond to patients' concerns and preferences, obtain informed consent, and respect the rights of patients to reach decisions with their doctor about their treatment and care and to refuse or limit treatment.
 - h. Support patients in caring for themselves.
 - i. Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification, and effective communication and teamworking.
159. Communicate effectively with patients and colleagues in a medical context.

¹¹ These outcomes relate to both acute and chronic care scenarios.

- a. Communicate clearly, sensitively and effectively with patients, their relatives or other carers, and colleagues from the medical and other professions, by listening, sharing and responding.
- b. Communicate clearly, sensitively and effectively with individuals and groups regardless of their age, social, cultural or ethnic backgrounds or their disabilities, including when English is not the patient's first language.
- c. Communicate by spoken, written and electronic methods (including medical records), and be aware of other methods of communication used by patients. Appreciate the significance of non-verbal communication in the medical consultation.
- d. Communicate appropriately in difficult circumstances, such as breaking bad news, and when discussing sensitive issues, such as alcohol consumption, smoking or obesity.
- e. Communicate appropriately with difficult or violent patients, people with mental illness and vulnerable patients.
- f. Communicate effectively in various roles, e.g. patient advocate, teacher, manager, improvement leader.

160. Provide immediate care of medical emergencies, including First Aid and resuscitation.

- a. Assess and recognise the severity of a clinical presentation and a need for immediate emergency care.
- b. Diagnose and manage acute medical emergencies.
- c. Provide basic First Aid.
- d. Provide Immediate Life Support and cardio-pulmonary resuscitation equivalent to current UK standards.

161. Prescribe drugs safely, effectively and economically.

- a. Establish an accurate drug history, covering both prescribed and other medication.
- b. Plan appropriate drug therapy for common indications, including pain and distress.
- c. Provide a safe and legal prescription.
- d. Calculate appropriate drug doses and record the outcome accurately.
- e. Provide patients with appropriate information about their medicines.
- f. Access reliable information about medicines.

- g. Detect and report adverse drug reactions.
 - h. Demonstrate awareness that many patients use complementary and alternative therapies, and awareness of the existence and range of these therapies, why patients use them, and how this might affect other types of treatment that patients are receiving.
162. Carry out practical procedures safely and effectively.
- a. Be able to perform a range of diagnostic procedures, as listed in Box 1, and measure and record the findings.
 - b. Be able to perform a range of therapeutic procedures, as listed in Box 1.
 - c. Be able to demonstrate correct practice in general aspects of practical procedures, as listed in Box 1.
163. Use information effectively in a medical context.
- a. Keep accurate, legible and complete clinical records.
 - b. Make effective use of computers and other information systems, including storing and retrieving information.
 - c. Comply with the requirements of confidentiality and data protection legislation and codes of practice in all dealings with information.
 - d. Access information sources and use the information in relation to patient care, health promotion, advice and information to patients, and research and education.

Box 1: Practical procedures for graduates	
Diagnostic procedures	
Measuring body temperature	.. using an appropriate recording device, and including readings from the mouth, armpit, and ear canal
Measuring pulse rate and blood pressure	... using manual techniques or automatic electronic devices.
Measuring Central Venous Pressure (not cannulation)	Measuring the pressure in the central veins of the body, as a guide to the circulating blood volume and the function of the heart. Requires prior insertion of a tube in a central vein (a specialised procedure). The tube is connected to a measuring device.
Transcutaneous monitoring of oxygen saturation	Applying, and taking readings from, an electronic device which measures the amount of oxygen in the patient's blood. Usually applied to the ear lobe. Used in patients who are acutely unwell as a guide to severity of illness and treatment.
Venepuncture	Inserting a needle into a patient's vein in order to take a sample of blood for testing, or to give an injection into the vein.
Sampling arterial blood	Inserting a needle into a patient's artery in order to take a sample of blood for testing. Usually includes measuring oxygen, carbon dioxide and acidity, as a guide to severity of illness and treatment.
Managing blood samples correctly	Making sure that blood samples are placed in the correct containers, and that these are labelled correctly and sent to the laboratory promptly and in the correct way. Taking measures to prevent spilling and contamination.
Taking blood cultures	Taking samples of venous or arterial blood to test for the growth of infectious organisms in the blood. Requires special blood containers and laboratory procedures.

Measuring blood glucose using reagent sticks with and without a glucometer	Measuring the concentration of glucose in the patient's blood at the bedside, using test sticks which change colour according to the glucose level in the blood. The stick can be read by eye, or a device which reads the colour automatically (glucometer) may be used.
Performing and interpreting a 12 lead Electrocardiograph (ECG)	Recording a full, detailed tracing of the electrical activity of the heart, using a machine recorder (electrocardiograph). Interpreting the recording for signs of heart disease.
Managing an Electrocardiograph (ECG) monitor	Setting up a continuous recording of the electrical activity of the heart. Ensuring the recorder is functioning correctly and interpreting the tracing.
Basic respiratory function tests	Carrying out basic tests to see how well the patient's lungs are working (e.g. how much air they can breathe out in 1 second).
Urinalysis using Multistix	Testing a sample of urine for abnormal contents, such as blood or protein. The urine is applied to a plastic strip with chemicals which change colour in response to specific abnormalities.
Collecting a mid-stream urine specimen	Obtaining a sample of urine from a patient, usually to check for the presence of infection, using a method which reduces the risk of contamination by skin bacteria.
Taking nose, throat and skin swabs	Using correct technique to apply sterile swabs to the nose, throat and skin. The swabs are then sent to the laboratory for culture of possible infectious organisms.
Interpreting growth charts	Using charts which plot the height and weight of a patient in comparison with the normal values for their age.

Nutritional assessment	Making an assessment of the patient's state of nutrition. This includes an evaluation of their diet; their general physical condition; measurement of height, weight, body mass index, and measurements such as mid-upper arm circumference and skin fold thickness; and blood testing.
Faecal occult blood testing	Testing a sample of faeces for the presence of blood, using a chemical reagent.
Taking a cervical smear	Obtaining a sample of cells from the cervix of a woman to check for any signs of cervical cancer.
Pregnancy testing	Performing a test of the urine to detect hormones which indicate that the patient is pregnant.

Therapeutic procedures	
Administering oxygen	Allowing the patient to breathe a higher concentration of oxygen than normal, via a face mask or other equipment.
Establishing peripheral intravenous access and setting up an infusion; use of infusion devices	Puncturing a patient's vein in order to insert an indwelling plastic tube, to allow fluids to be infused into the vein (a "drip"). Connecting the tube to a source of fluid. Appropriate choice of fluids. Correct use of electronic devices which drive and regulate the rate of fluid administration.
Making up drugs for parenteral administration	Preparing medicines in a form suitable for injection into the patient's vein. May involve adding the drug to a volume of fluid to make up the correct concentration for injection.
Dosage and administration of insulin and use of sliding scales	Calculating how many units of insulin a patient requires, what strength of insulin solution to use, and how it should be given (e.g. into the skin, or into a vein). Use of a "sliding scale" which links the number of units to the patient's blood glucose measurement at the time.
Subcutaneous, intradermal and intramuscular injection	Giving injections into the upper or lower layers of the skin, and into muscle.
Blood transfusion	Following the correct procedures to give a transfusion of blood into the vein of a patient (including correct identification of the patient and checking blood groups). Observation for possible reactions to the transfusion, and actions if they occur.
Male and female urinary catheterisation	Passing a tube into the urinary bladder to permit drainage of urine, in male or female patients.
Instructing patients in the use of devices for inhaled medication	Providing instructions for patients about how to use inhalers correctly, e.g. for asthma.
Use of local anaesthetics	Using drugs which produce numbness and prevent pain, either applied directly to the skin or injected into skin or body tissues.

Skin suturing	Repairing defects in the skin by inserting stitches (normally includes use of local anaesthetic).
Wound care and basic wound dressing	Providing basic care of surgical or traumatic wounds and applying dressings appropriately.
Using correct techniques for "Moving and handling", including patients	Using approved methods for moving, lifting and handling people or objects, in the context of clinical care, in order to avoid injury to patients, colleagues, or oneself.
Insertion of nasogastric tube	Passing a thin tube from the nose or mouth down into the stomach. Usually for draining the stomach, or providing the patient with a liquid feed.

General aspects of practical procedures	
Giving information about the procedure, obtaining and recording consent, and ensuring appropriate aftercare.	Making sure that the patient is fully informed, agrees to the procedure being performed, and is cared for and watched appropriately after the procedure.
Hand washing (including surgical "scrubbing up")	Following approved processes for cleaning hands before procedures or surgical operations.
Use of personal protective equipment (gloves, gowns, masks etc) in relation to procedures	Making correct use of equipment designed to prevent spread of body fluids or cross-infection between the operator and the patient.
Infection control in relation to procedures	Taking all steps necessary to prevent the spread of infection before, during or after a procedure.
Safe disposal of clinical waste, needles and other "sharps"	Ensuring that these materials are handled carefully and placed in a suitable container for disposal.

Outcomes 3 - The doctor as a professional

164. The graduate will be able to:
165. Behave according to ethical and legal principles.
- a. Know about and comply with the GMC's ethical guidance and standards including *Good Medical Practice*, the 'Duties of a doctor registered with the GMC' and supplementary ethical guidance which describe what is expected of all doctors registered with the GMC.
 - b. Demonstrate awareness of the clinical responsibilities and role of the doctor, making the care of the patient the first concern. Recognise the principles of patient-centred care, including self care, dealing with patients' healthcare needs in consultation with them and, where appropriate, their relatives or carers.
 - c. Be polite, considerate, trustworthy and honest, acting with integrity, maintaining confidentiality and respecting patients' dignity and privacy and the importance of appropriate consent.
 - d. Respect all patients regardless of their age, colour, culture, disability, ethnic or national origin, gender, lifestyle, marital or parental status, race, religion or beliefs, sex, sexual orientation or social or economic status. Respect patients' right to hold religious or other beliefs, and take these into account when relevant to treatment options.
 - e. Recognise the rights and the equal value of all people and how opportunities for some people may be restricted by others' perceptions.
 - f. Understand and accept the legal, moral and ethical responsibilities involved in protecting and promoting the health of individual patients, their dependants and the public including vulnerable groups such as children, older people and people with mental illnesses.
 - g. Demonstrate knowledge of laws, and systems of professional regulation through the GMC and others, relevant to medical practice, including the ability to complete relevant certificates and legal documents and liaise with the coroner or procurator fiscal where appropriate.
166. Reflect, learn and teach others.
- a. Acquire, assess, apply and integrate new knowledge and learn to adapt to changing circumstances.
 - b. Establish the foundations for lifelong learning and continuing professional development, including a professional development portfolio containing reflections, achievements and learning needs.

- c. Continually and systematically reflect on practice and whenever necessary, translate that reflection into action, using improvement techniques and audit appropriately. For example by critically appraising the prescribing of others.
 - d. Manage time and prioritise tasks, and work autonomously when necessary and appropriate.
 - e. Recognise personal and professional limits and seek help from colleagues and supervisors when necessary.
 - f. Function effectively as a mentor and teacher including contributing to the appraisal, assessment and review of colleagues, giving effective feedback, and taking advantage of opportunities to develop these skills.
167. Learn and work effectively within a multi-professional team.
- a. Understand and respect the roles and expertise of health and social care professionals, including doctors, in the context of working and learning as a team, as well as in policy and practice development.
 - b. Work with colleagues in ways that best serve the interests of patients, passing on information and handing over care.
 - c. Demonstrate ability to play various team roles including leadership. Deal effectively with uncertainty and change.
168. Protect patients and improve care.
- a. Place the patients' needs and safety at the centre of the care process.
 - b. Understand the framework in which medicine is practised in the UK, including the organisation, management and regulation of healthcare provision and the structures and functions of the NHS.
 - c. Promote, monitor and maintain health and safety in the clinical setting, understanding how errors can happen in practice and applying the principles of quality assurance, clinical governance and risk management to medical practice.
 - d. Understand and have experience of the principles and methods of improvement including audit, adverse incident reporting and quality improvement, and how to use the results of audit to improve practice.
 - e. Respond constructively to the outcome of appraisal, performance review and assessment.
 - f. Demonstrate awareness of the role of doctors as managers, including seeking ways to continually improve the use and prioritisation of resources.
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- g. Understand the importance of, and the need to adhere to measures to prevent the spread of infection.
- h. Recognise personal health needs, consult and follow the advice of a suitably qualified professional, and protect patients from any risk posed by personal health.
- i. Recognise the duty to take action if a colleague's health, performance or conduct is putting patients at risk.

What the law says about undergraduate education

UK law

169. The powers and duties of the General Medical Council in regulating medical education are set out in the Medical Act 1983.

170. Graduates who hold a UK primary medical qualification (PMQ) are entitled to provisional registration, subject to demonstrating to the GMC that their fitness to practise is not impaired.

171. *The New Doctor* describes the outcomes for the training of provisionally registered doctors, currently typically undertaken in the first year of the Foundation Programme, and standards for the delivery of the Foundation Programme as a whole.

172. UK PMQs include degrees of Bachelor of Medicine and Bachelor of Surgery awarded by bodies or combinations of bodies recognised by the General Medical Council. These are the organisations or combinations that may hold qualifying examinations. (In addition, valid UK PMQs may be held by individuals who were awarded these qualifications by bodies that were previously, but are no longer, empowered to award PMQs.)

European Union law

173. European Council Directive 2005/36/EC allows European Union (EU) nationals who hold an EU PMQ or specialist qualification to practise as doctors anywhere in the EU.

174. Article 24 of the Directive says the period of basic medical training must be at least six years of study or 5,500 hours of theoretical and practical training provided by, or under the supervision of, a university. 'Basic medical training' is the period leading up to full registration.

175. The EU Directive says basic medical training must provide assurance that individuals acquire the following knowledge and skills:

'Adequate knowledge of the sciences on which medicine is based and a good understanding of the scientific methods including the principles of measuring biological functions, the evaluation of scientifically established facts and the analysis of data.

'Sufficient understanding of the structure, functions and behaviour of healthy and sick persons, as well as relations between the state of health and physical and social surroundings of the human being.

'Adequate knowledge of clinical disciplines and practices, providing him with a coherent picture of mental and physical diseases, of medicine from the points of view of prophylaxis, diagnosis and therapy and of human reproduction.

'Suitable clinical experience in hospitals under appropriate supervision.'

176. These quotes have been taken from EU Directive 2005/36, Article 24.

Appendix 1 – Useful reading

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Anne Tynan, *Today's disabled students: Tomorrow's Doctors*, General Medical Council, 2006:

http://www.gmc-uk.org/education/documents/Todays_Disabled_Students_Tomorrows_Doctors.pdf

World Federation for Medical Education, *Basic Medical Education: WFME Global Standards for Quality Improvement*:

<http://www2.sund.ku.dk/wfme/>

Undergraduate medical education: Outcomes

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http://www.icgnutrition.org.uk/forum/messages/725/icgnut_ugcurricuc_final_110908-724.doc

Stephen Cooper, Nisha Dogra, Brian Lunn, Barry Wright, *Core Curriculum in Psychiatry*, 2008: available from:

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Heads of Academic Departments of Public Health in the United Kingdom (HOADs) (original authors D Chappel, G Maudsley, R Bhopal and S Ebrahim and re-edited by Stephen Gillam and Gillian Maudsley), *Public Health Education for Medical Students – A guide for medical schools*, Department of Public Health and Primary Care, University of Cambridge, 2008

<http://www.phpc.cam.ac.uk/PublicHealthEducation.pdf>

International Centre for Drug Policy, *Substance Misuse in the Undergraduate Medical Curriculum*, 2007:

<http://www.sgul.ac.uk/depts/icdp/>

Scottish Deans' Medical Curriculum Group, *The Scottish Doctor. Undergraduate learning outcomes and their assessment: A foundation for competent and reflective practitioners*, 2002

<http://www.scottishdoctor.org/resources/scotdoc2.pdf>

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Appendix 2 - Glossary

Appraisal	A positive process to provide feedback on the student's performance, chart their continuing progress, and to identify their development needs.
Assessment	Assessment is defined as all activity aimed at judging students' attainment of curriculum outcomes, whether for summative (determining progress) purposes or formative (giving feedback) purposes. An 'examination' is an individual assessment test
Clinical tutor or Clinical Supervisor	Any doctor or other healthcare professional responsible for the supervision or assessment of a student on a placement.
Curriculum	A detailed schedule of the teaching and learning opportunities that will be provided. This includes the core curriculum and the student-selected components.
Examiners	All those responsible for marking, assessing or judging students' performance, regardless of the terminology used in any particular medical school.
Integrated teaching	A system where the clinical and basic sciences are taught and learned together. This allows students to see how scientific knowledge and clinical experience are combined to support good medical practice.
Other education providers'	Organisations involved in the delivery of undergraduate medical education outside of the medical school itself, including their staff: GP tutors; clinical tutors; NHS staff; and others in the local health economy or independent sector with specific roles in educational supervision
Placement	A structured period of supervised clinical experience and learning in a health or social care setting (including community health services and non-NHS settings).
Primary medical qualification (PMQ)	A first medical degree awarded by a body or combination of bodies that is recognised by the GMC for this purpose or that was empowered to issue PMQs at the time the degree was awarded.
Revalidation	The regular demonstration by doctors that they are up to date, and fit to practise medicine.

Scheme of assessment	The examinations and assessments that make sure all students have successfully achieved and demonstrated the knowledge, skills and behaviour set out in the curriculum.
Self-directed learning	A process in which students are responsible for organising and managing their own learning activities and needs.
Student Assistantship	A period during which a student acts as assistant to a junior doctor, with defined duties under appropriate supervision.
Student-selected components (SSCs)	Parts of the curriculum that allow students to choose what they want to study. These components may also offer flexibility concerning how, where and when study will take place.