London
Regent's Place, 350 Euston Road, London NW1 3JN

Manchester
St James's Buildings, 79 Oxford Street, Manchester M1 6FQ

Scotland
Napier House, 35 Thistle Street, Edinburgh EH2 1DY

Wales
Regus House, Falcon Drive, Cardiff Bay CF10 4RU

Northern Ireland
20 Adelaide Street, Belfast BT2 8GB

Telephone: 0845 357 3456
Facsimile: 0845 357 8001
Website: www.gmc-uk.org
Outside the UK telephone: +44(0)161 923 6602

Education

Tomorrow's doctors

General
Medical
Council

Regulating doctors
Ensuring good medical practice

Tomorrow's doctors

The duties of a doctor registered with the General Medical Council

Patients must be able to trust doctors with their lives and well-being. To justify that trust, we as a profession have a duty to maintain a good standard of practice and care and to show respect for human life. In particular as a doctor you must:

- make the care of your patient your first concern
- treat every patient politely and considerately
- respect patients' dignity and privacy
- listen to patients and respect their views
- give patients information in a way they can understand
- respect the rights of patients to be fully involved in decisions about their care
- keep your professional knowledge and skills up to date
- recognise the limits of your professional competence
- be honest and trustworthy
- respect and protect confidential information
- make sure that your personal beliefs do not prejudice your patients' care
- act quickly to protect patients from risk if you have good reason to believe that you or a colleague may not be fit to practise
- avoid abusing your position as a doctor
- work with colleagues in the ways that best serve patients' interests.

In all these matters you must never discriminate unfairly against your patients or colleagues. And you must always be prepared to justify your actions to them.

Tomorrow's doctors

Tomorrow's doctors

Approved January 2003
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General Medical Council

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Introduction

The undergraduate curriculum is the first stage of medical education. It provides a foundation for future learning and practice as a pre-registration house officer (PRHO) and beyond. Graduates who have gone through this process must be aware of, and meet, the principles of professional practice set out in our publication *Good medical practice* (published in May 2001). These principles make clear to the public the standards of practice and care they should expect.

We first published *Tomorrow's doctors* in 1993. This signalled a significant change in the form of our guidance. Our emphasis moved from gaining knowledge to a learning process that includes the ability to evaluate data as well as to develop skills to interact with patients and colleagues.

Medical schools welcomed our guidance and introduced new, ground-breaking curricula. We carried out a series of informal visits to UK medical schools to monitor their progress in putting our guidance into practice, highlight and share good practice, and identify areas causing difficulty or concern. A valuable part in the process of developing and delivering undergraduate curricula has been the ongoing and developing partnerships between medical schools and the NHS.

We carried out a second round of informal visits between autumn 1998 and spring 2001. We then reviewed progress, considering the strengths and weaknesses of our guidance. This review took account of developments in educational theory and research, and professional practice.

These recommendations, which replace those published in 1993, identify the knowledge, skills, attitudes and behaviour expected of new graduates. They:

- put the principles set out in *Good medical practice* at the centre of undergraduate education;
- make it clear what students will study and be assessed on during undergraduate education;
- make it necessary for all medical schools to set appropriate standards; and
- make necessary rigorous assessments that lead to the award of a primary medical qualification (PMQ).

Our recommendations provide the framework that UK medical schools use to design detailed curricula and schemes of assessment. They also set out the standards that we will use to judge the quality of undergraduate teaching and assessments when we visit medical schools and ask for written information.

The main recommendations

Attitudes and behaviour that are suitable for a doctor must be developed. Students must develop qualities that are appropriate to their future responsibilities to patients, colleagues and society in general.

The **core curriculum** must set out the essential knowledge, skills and attitudes students must have by the time they graduate.

The core curriculum must be supported by a series of **student-selected components** that allow students to study, in depth, areas of particular interest to them.

The core curriculum must be the responsibility of clinicians, basic scientists and medical educationalists working together to **integrate** their contributions and achieve a common purpose.

Factual information must be kept to the essential minimum that students need at this stage of medical education.

Learning opportunities must help students explore knowledge, and evaluate and integrate (bring together) evidence critically. The curriculum must motivate students and help them develop the skills for self-directed learning.

The **essential skills** that graduates need must be gained under supervision. Medical schools must assess students' competence in these skills.

The curriculum must stress the importance of **communication skills** and the other essential skills of medical practice.

The **health and safety of the public** must be an important part of the curriculum.

Clinical education must reflect the **changing patterns of healthcare** and provide experience in a variety of clinical settings.

Teaching and learning systems must take account of modern educational theory and research, and make use of modern technologies where evidence shows that these are effective.

Schemes of assessment must take account of best practice, support the curriculum, make sure that the intended curricular outcomes are assessed and reward performance appropriately.

When designing a curriculum, putting it into practice and continually reviewing it, medical schools must set up effective **supervisory structures** which use an appropriate range of expertise and knowledge.

Selection, teaching and assessment must be **free from unfair discrimination**.

Curricular outcomes

The principles of professional practice

1 The principles of professional practice set out in *Good medical practice* must form the basis of medical education.

Good clinical care
Doctors must practise good standards of clinical care, practise within the limits of their competence, and make sure that patients are not put at unnecessary risk.

Maintaining good medical practice
Doctors must keep up to date with developments in their field and maintain their skills.

Relationships with patients
Doctors must develop and maintain successful relationships with their patients.

Working with colleagues
Doctors must work effectively with colleagues.

Teaching and training
If doctors have teaching responsibilities, they must develop the skills, attitudes and practices of a competent teacher.

Probity
Doctors must be honest.

Health
Doctors must not allow their own health or condition to put patients and others at risk.

2 The following curricular outcomes are based on these principles. They set out what is expected of graduates. All curricula must include outcomes that are consistent with those set out over the following pages.

Outcomes

3 Graduates must be able to show that they can meet the following outcomes.

4 Good clinical care

- Know about and understand the following:
  - (a) Our guidance on the principles of good medical practice and the standards of competence, care and conduct expected of doctors in the UK.
  - (b) The environment in which medicine is practised in the UK.
  - (c) How errors can happen in practice and the principles of managing risks.
- Know about, understand and be able to apply and integrate the clinical, basic, behavioural and social sciences on which medical practice is based
- Be able to perform clinical and practical skills safely
- Demonstrate the following attitudes and behaviour:
  - (a) Recognise personal and professional limits, and be willing to ask for help when necessary.
  - (b) Recognise the duty to protect patients and others by taking action if a colleague's health, performance or conduct is putting patients at risk.

5 Maintaining good medical practice

- Be able to gain, assess, apply and integrate new knowledge and have the ability to adapt to changing circumstances throughout their professional life
- Be willing to take part in continuing professional development to make sure that they maintain high levels of clinical competence and knowledge
- Understand the principles of audit and the importance of using the results of audit to improve practice
- Be willing to respond constructively to the outcome of appraisal, performance review and assessment.

6 Relationships with patients

- Know about and understand the rights of patients
- Be able to communicate effectively with individuals and groups
- Demonstrate the following attitudes and behaviour:
  - (a) Accept the moral and ethical responsibilities involved in providing care to individual patients and communities.
  - (b) Respect patients regardless of their lifestyle, culture, beliefs, race, colour, gender, sexuality, disability, age, or social or economic status.
  - (c) Respect the right of patients to be fully involved in decisions about their care, including the right to refuse treatment or to refuse to take part in teaching or research.
  - (d) Recognise their obligation to understand and deal with patients' healthcare needs by consulting them and, where appropriate, their relatives or carers.

7 Working with colleagues

- Know about, understand and respect the roles and expertise of other health and social care professionals
- Be able to demonstrate effective teamworking and leadership skills
- Be willing to lead when faced with uncertainty and change.

8 Teaching and training

- Be able to demonstrate appropriate teaching skills
- Be willing to teach colleagues and to develop their own teaching skills.

9 Probity

Graduates must demonstrate honesty.

10 Health

Graduates must be aware of the health hazards of medical practice, the importance of their own health and the effect that their health has on their ability to practise safely and effectively as a doctor.

Curricular content, structure and delivery

Content

11 The curriculum must be intellectually challenging and place greater demand on students as they progress. Students should have time for reflection and personal growth, to catch up on elements they have missed because of illness, or other good reasons, and to deal with difficulties in coming to terms with a particular part of the curriculum.

12 The following curricular themes set out the knowledge, skills, attitudes and behaviour expected of graduates. It is not a complete guide. Medical schools will need to add to them when they design curricula.

The scientific basis of practice

13 Graduates must have a knowledge and understanding of the clinical and basic sciences. They must also understand relevant parts of the behavioural and social sciences, and be able to integrate and critically evaluate evidence from all these sources to provide a firm foundation for medical practice.

14 They must know about and understand normal and abnormal structure and function, including the natural history of human diseases, the body's defence mechanisms, disease presentation and responses to illness. This will include an understanding of the genetic, social and environmental factors that determine disease and the response to treatment.

15 Graduates must know about biological variation, and have an understanding of scientific methods, including both the technical and ethical principles used when designing experiments.

Treatment

16 Graduates must know about and understand the principles of treatment including the following:

- how to evaluate effectiveness against evidence
- how to take account of patients' own views and beliefs when suggesting treatment options
- the effective and safe use of medicines as a basis for prescribing, including side effects, harmful interactions, antibiotic resistance and genetic indicators of the appropriateness of drugs
- providing surgical and perioperative care
- recognising and managing acute illness
- the care of people with recurrent and chronic illnesses and people with mental or physical disabilities
- rehabilitation, and care within institutions and the community
- relieving pain and distress
- palliative care, including care of the terminally ill.

17 They must also know about and understand the role that lifestyle, including diet and nutrition, can play in promoting health and preventing disease.

18 They must be aware that many patients are interested in and choose to use a range of alternative and complementary therapies. Graduates must be aware of the existence and range of such therapies, why some patients use them, and how these might affect other types of treatment that patients are receiving.

Clinical and practical skills

19 Graduates must be able to do the following safely and effectively:

- take and record a patient's history, including their family history
- perform a full physical examination, and a mental-state examination
- interpret the findings from the history, the physical examination, and the mental-state examination
- interpret the results of commonly used investigations
- make clinical decisions based on the evidence they have gathered
- assess a patient's problems and form plans to investigate and manage these, involving patients in the planning process
- work out drug dosage and record the outcome accurately
- write safe prescriptions for different types of drugs
- carry out the following procedures involving veins:
  (a) venepuncture
  (b) inserting a cannula into peripheral veins
  (c) giving intravenous injections.
- give intramuscular and subcutaneous injections
- carry out arterial blood sampling
- perform suturing
- demonstrate competence in cardiopulmonary resuscitation and advanced life-support skills
- carry out basic respiratory function tests
- administer oxygen therapy
- use a nebuliser correctly
- insert a nasogastric tube
- perform bladder catheterisation.

Communication skills

20 Graduates must be able to communicate clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions. Clear communication will help them carry out their various roles, including clinician, team member, team leader and teacher.

21 Graduates must know that some individuals use different methods of communication, for example, Deafblind Manual and British Sign Language.

22 Graduates must be able to do the following:

- communicate effectively with individuals regardless of their social, cultural or ethnic backgrounds, or their disabilities
- communicate with individuals who cannot speak English, including working with interpreters.

23 Students must have opportunities to practise communicating in different ways, including spoken, written and electronic methods. There should also be guidance about how to cope in difficult circumstances. Some examples are listed below:

- breaking bad news
- dealing with difficult and violent patients
- communicating with people with mental illness, including cases where patients have special difficulties in sharing how they feel and think with doctors
- communicating with and treating patients with severe mental or physical disabilities
- helping vulnerable patients.

Teaching skills

24 Graduates must understand the principles of education as they are applied to medicine. They will be familiar with a range of teaching and learning techniques and must recognise their obligation to teach colleagues. They must understand the importance of audit and appraisal in identifying learning needs for themselves and their colleagues.

25 Graduates must be able to do the following:

- identify their own learning needs
- use different techniques to record, organise and present information, including computers and IT resources
- use and evaluate a variety of teaching techniques to communicate information to colleagues.

General skills

26 Graduates must be able to do the following:

- manage their own time and that of others
- prioritise tasks effectively
- reflect on practice, be self-critical and carry out an audit of their own work and that of others
- use research skills to develop greater understanding and to influence their practice
- follow the principles of risk management when they practise
- solve problems
- analyse and use numerical data
- take account of medical ethics when making decisions.

The working environment

27 Graduates must understand the working, organisational and economic framework in which medicine is practised in the UK, including:

- the organisation, management, provision and regulation of healthcare; and
- the structures and functions of the NHS.

28 Graduates must be aware of current developments and guiding principles in the NHS, for example:

- patient-centred care
- systems of quality assurance such as clinical governance
- clinical audit
- the significance of health and safety issues in the healthcare setting
- risk assessment and management strategies for healthcare professionals
- the importance of working as a team within a multi-professional environment.

Medico-legal and ethical issues

29 Graduates must know about and understand the main ethical and legal issues they will come across. For example, how to:

- make sure that patients' rights are protected
- maintain confidentiality
- deal with issues such as withholding or withdrawing life-prolonging treatment
- provide appropriate care for vulnerable patients
- respond to patients' complaints about their care
- deal appropriately, effectively, and in patients' interests, with problems in the performance, conduct or health of colleagues
- consider the practice of medicine within the context of limited financial resources.

30 Graduates must understand the principles of good practice set out in our publication *Seeking patients' consent: the ethical considerations*. These include:

- providing enough information about conditions and possible treatments to allow patients to make informed decisions about their care
- responding to questions
- knowing who is the most appropriate person to ask for consent
- finding out about a patient's ability to make their own decisions and to give their consent; and
- statutory requirements that may need to be taken into account.

Disability and rehabilitation

31 Graduates must know about the following:

- the rights of people with mental or physical disabilities
- how the opportunities available to disabled people can be affected by society's view of them
- the potential strengths and contribution of such individuals.

32 They must also recognise the importance of responses to illness and providing help towards recovery, as well as managing chronic disease and relapse, and reducing or managing impairments, disabilities and handicaps. They must be aware of issues surrounding the needs of parents with children who have mental or physical disabilities.

The health of the public

33 Graduates must understand the issues and techniques involved in studying the effect of diseases on communities and individuals, including:

- assessing community needs in relation to how services are provided
- genetic, environmental and social causes of, and influences on the prevention of, illness and disease
- the principles of promoting health and preventing disease, including surveillance and screening.

The individual in society

34 Graduates must understand the social and cultural environment in which medicine is practised in the UK. They must understand human development and areas of psychology and sociology relevant to medicine, including:

- reproduction
- child, adolescent and adult development
- cultural background
- gender
- disability
- growing old
- occupation.

35 They must understand a range of social and cultural values, and differing views about healthcare and illness. They must be aware of issues such as alcohol and drug abuse, domestic violence and abuse of the vulnerable patient. They must recognise the need to make sure that they are not prejudiced by patients' lifestyle, culture, beliefs, race, colour, gender, sexuality, age, mental or physical disability and social or economic status.

36 Graduates must take account of patients' understanding and experience of their condition, and be aware of the psychological effect that this can have on them and their families. This is particularly important when dealing with vulnerable patients, such as:

- children and older people
- people with learning disabilities or mental-health problems
- patients whose complaints are not easily explained as biological abnormalities or diseases
- patients who are worried about their condition.

37 Exploring patients' fears and concerns can help them to understand their condition and to take an active part in decisions about their treatment.

Structure

38 The curriculum must have a core and student-selected components (SSCs). The core curriculum must take up most curricular time. We expect that in a standard five-year curriculum between 25% and 33% would normally be available for SSCs.

39 Together the core curriculum and SSCs must allow students to meet the curricular outcomes. This will make sure that graduates have the necessary knowledge, skills and attitudes to practise as a PRHO. Medical schools must determine the way in which the curricular outcomes are met.

40 SSCs support the core curriculum and must allow students to do the following:

- learn about and begin to develop and use research skills
- have greater control over their own learning and develop their self-directed learning skills
- study, in depth, topics of particular interest outside the core curriculum
- develop greater confidence in their own skills and abilities
- present the results of their work verbally, visually or in writing
- consider potential career paths.

41 At least two thirds of each student's SSCs must be in subjects related to medicine, whether laboratory-based or clinical, biological or behavioural, research-orientated or in humanities related to medicine.

Delivering the curriculum

Supervisory structures

42 Medical schools must set up supervisory structures that involve individuals with an appropriate range of expertise and knowledge. Clear 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. Combining educational expertise within a medical education unit can help this process.

Teaching and learning

43 Modern educational theory and research must influence teaching and learning. Medical schools should take advantage of new technologies to deliver teaching.

44 Every doctor who comes into contact with medical students should recognise the importance of role models in developing appropriate attitudes and behaviour towards patients and colleagues.

45 Medical schools must make sure that every person involved in educating medical students has the necessary knowledge, skills and attitudes. Staff-development programmes should promote teaching and assessment skills. All staff should take part in such programmes.

46 The quality of teaching must be monitored through a number of different systems, including staff appraisals, student feedback and reviews of teaching by peers.

47 Students must have different teaching and learning opportunities that combine an appropriate balance of teaching in large groups with small groups, practical classes and opportunities for self-directed learning. Medical schools should explore and, where appropriate, 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.

48 The clinical and basic sciences should be taught in an integrated way throughout the curriculum.

49 Clinical education must reflect the changing patterns of healthcare and provide experience in a variety of environments including hospitals, general practices and community medical services.

50 From the start, students must have opportunities to interact with people from a range of social, cultural and ethnic backgrounds. This might involve visiting families expecting a baby, visiting an elderly or disabled person, or taking part in community projects that are not necessarily medically related. 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. During the later years of the curriculum, students should have the opportunity to become increasingly competent in these skills and in planning patient care.

51 Students must be properly prepared for their first day as a PRHO. As well as the induction provided for PRHOs, students should have opportunities to shadow the PRHO in the post that they will take up when they graduate. Such attachments allow students to become familiar with the facilities available, the working environment and to get to know their colleagues. They also provide an opportunity to develop working relationships with the clinical and educational supervisors they will work with in the future.

52 These attachments must include opportunities for students to refresh the practical and clinical skills that they will be expected to carry out on their first day as a PRHO. These include the ability to prescribe drugs under the supervision of a qualified doctor and to carry out procedures involving veins.

53 Such attachments should normally last at least one week. Students should gain this experience as close to the point of employment as possible.

Learning resources and facilities

54 Students must have access to appropriate learning resources and facilities including libraries, computers, lecture theatres and seminar rooms. The quality of facilities should be regularly reviewed to make sure they are still appropriate. Students must be able to comment about the facilities and suggest new resources that should be provided.

55 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 such training.

Student selection

56 Although student selection is not our direct responsibility, we are interested in making sure that only those who are fit to become doctors are allowed to enter medical school.

57 Medical schools should put in place valid, open, objective and fair selection procedures. They should also publish information about the admission system, including guidance about the basis on which places at the medical school will be offered and the selection process. The staff responsible for selecting students should include individuals with a range of expertise and knowledge. All those involved in selecting students should be trained to apply guidelines about entry requirements consistently and fairly. They must also follow current equal opportunities legislation.

Student support, guidance and feedback

58 Students must have appropriate support for their academic and general welfare needs at all stages. Medical schools must produce clear 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 at sites that are not close to the medical school, must have access to adequate support.

59 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.

60 Medical schools must give students guidance about the core curriculum, SSCs and how their performance will be assessed. This should include information about practical arrangements for assessments and the medical school's policy on students who cheat in examinations. Students must be able to get academic advice and guidance from identified members of staff if they need it in a particular subject.

61 Students must receive regular and consistent information about their development and progress. Clinical logbooks and personal portfolios, which allow students to identify strengths and weaknesses and to focus their learning appropriately, 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. Feedback about performance in assessments helps to identify strengths and weaknesses, both in students and in the curriculum, that allow changes to be made.

Assessing student performance and competence

The principles of assessment

62 Schemes of assessment must support the curriculum and allow students to prove that they have achieved the curricular outcomes. This means assessments must allow students to demonstrate the breadth and depth of their knowledge, and to show what they can do. Professional attitudes and behaviour must also be assessed.

63 Student performance in both the core and SSC parts of the curriculum must be assessed and must contribute to their overall result. Students who have not satisfied the examiners in both parts of the curriculum must not be allowed to graduate.

64 Medical schools should use a range of assessment techniques that are appropriate for testing the curricular outcomes. Medical schools should determine the most appropriate scheme of assessment for their curriculum. However, schemes must meet best practice in assessment, and medical schools must be able to provide evidence that the schemes are valid and reliable, and that they have processes for setting standards and making decisions about student performance.

65 When students get close to graduating, their knowledge, skills, attitudes and behaviour must be thoroughly assessed to determine their fitness to practise as PRHOs.

Assessment procedures

66 Schemes of assessment must be open, fair and meet appropriate standards. Medical schools must make sure that:

- there is a clear indication of how the scheme of assessment deals with all the curricular outcomes
- there is a clear indication of how individual assessments and examinations contribute to the overall assessment of the curricular outcomes
- when they design individual examinations and assessments, there is a clear indication of how the targeted curricular outcomes have been met
- students have clear guidance about what is expected of them in any examination or assessment
- examiners are trained to carry out their role and to apply the medical school's assessment criteria consistently
- examiners have clear guidelines for marking assessments, which indicate how performance against targeted curricular outcomes should be rewarded
- systems are in place to determine the pass mark
- external examiners are employed to make sure that standards are met.

Appraisal

67 Students must receive regular, structured and constructive appraisal from their teachers during the mainly clinical years of the curriculum. This allows the medical school to judge their clinical knowledge and competence against the principles set out in *Good medical practice*.

68 It provides students with information about their progress and performance, allowing them to deal with any areas of concern. This will also help students prepare for the regular appraisal of their performance that will take place once they are qualified.

Student progress

69 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.

70 Only those students who are fit to practise as doctors should be allowed to complete the curriculum and gain provisional registration. Students who do not meet the necessary standards in terms of demonstrating appropriate knowledge, skills, attitudes and behaviour must be advised of alternative careers to follow.

71 Medical schools must have robust and fair procedures, including an appeals process, to deal with students who are causing concern on academic and non-academic grounds, such as ill health or poor conduct. The arrangements for dealing with students and PRHOs must be consistent. This will help to manage the transition from student to PRHO.

72 These procedures will vary depending on each medical school's statutes and individual circumstances. Medical schools themselves will have to determine the most appropriate form of these procedures. However, Universities UK and the Council of Heads of Medical Schools have produced helpful guidance about setting up fitness to practise procedures that may be useful for medical schools.

73 Medical schools should tell students about these procedures so that they understand their rights and obligations.

Student health and conduct

General principles

74 We, the universities and the NHS all have different roles in medical education. We have statutory responsibility for setting standards for protecting the public. Universities are responsible for selecting students into their medical schools and for providing a curriculum that will deliver the learning outcomes that we set. NHS acute trusts and primary care organisations are responsible for making available the facilities and practical support necessary for delivering the clinical parts of the curriculum.

75 We have no direct statutory role in matters of student health and conduct. However, the award of a medical degree automatically entitles the graduate to be provisionally registered by us and to practise under supervision as a doctor. As a result, we have a strong interest. The purpose of this guidance is to provide help to universities and medical students in dealing with matters of health or conduct.

76 As long as they meet a university's regulations, anyone can graduate provided that they meet all the outcomes and curriculum requirements in these recommendations. Our view is that students with a wide range of disabilities or health conditions can achieve the set standards of knowledge, skills, attitudes and behaviour. Each case is different and has to be viewed on its merits. The safety of the public must always take priority.

Confidentiality for medical students

77 It is important that medical students who have problems with physical or mental health, or drug or alcohol misuse, are encouraged to get appropriate help so that they might receive informed advice and support, including adapted training. Medical students who are ill have the same right to confidentiality as other patients.

78 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.

79 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.

The responsibility of medical students to protect patients

80 *Good medical practice* requires doctors to take responsibility for their own health in the interests of public safety. Medical students should also follow this guidance. 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.

81 Guidance on infectious risk is set out in more detail in our document *Serious communicable diseases*, which medical students and universities should also follow.

The responsibility of other doctors to protect patients

82 All those who teach, supervise, counsel, employ or work with medical students have a responsibility to protect patients if they have concerns about a student. Where there are serious concerns about a medical student's performance, health or conduct, it is essential that steps are taken without delay to investigate the concerns to identify whether they are well-founded and to protect patients.

The responsibility of universities to protect patients

83 Universities have a duty to make sure that no member of the public is harmed as a result of taking part in the training of their medical students. Medical students cannot complete the undergraduate curriculum without coming into close, and sometimes intimate, contact with members of the public who may be vulnerable or distressed. The vocational part of their training, which prepares them for clinical practice when they become registered doctors, is such that they may not be directly observed or supervised during all contact with the public, whether in hospitals, in general practice or in the community.

84 By awarding a medical degree, a university is confirming that the graduate is fit to practise as a PRHO to the high standards that we have set in our guidance to the medical profession, *Good medical practice*.

85 Universities must have procedures to:

- identify (as early as possible) medical students whose conduct gives serious cause for concern or whose health is affected to such a degree that it could harm the public
- provide those students with appropriate support
- make sure that if students are still a risk to patients they are not allowed to graduate with a medical degree.

Putting the recommendations into practice

86 The Education Committee is responsible for making sure that UK medical schools put these recommendations into practice when designing curricula and associated assessments. It will do so within the statutory framework and responsibilities set out in the following pages.

What the law says about undergraduate education

UK law

87 The powers and duties of our Education Committee under Part II of the *Medical Act 1983* (as amended) are set out below.

88 Graduates who hold a UK PMQ are entitled to provisional registration. We have no say in this matter.

89 Provisional registration allows graduates to work under supervision as a PRHO. Our guidance in *The new doctor* (published 1997) describes the requirements for this period of training, as well as the experience needed for full registration.

90 UK PMQs include degrees of Bachelor of Medicine and Bachelor of Surgery awarded by the universities listed in Section 4 of the *Medical Act 1983*, and the Licentiates in Medicine and Surgery awarded by the Royal Colleges of Physicians and Surgeons in the UK, and the Society of Apothecaries. These are the organisations that may hold qualifying examinations, either alone or in combinations set out in the Act, or as otherwise approved by the Education Committee.

European Union law

91 European Council Directive 93/16 allows European Union (EU) nationals who hold an EU PMQ or specialist qualification to practise as doctors anywhere in the EU.

92 Article 23 of the Directive says the period of basic medical training must be at least a six-year course or 5,500 hours of theoretical and practical instruction given in a university or under the supervision of a university. 'Basic medical training' is the period leading up to full registration.

93 Before being awarded a PMQ that allows them to practise, the EU Medical Directive says a student must have the following:

- '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 the student with a coherent picture of mental and physical diseases, of medicine from the points of view of prophylaxis, diagnosis and therapy and human reproduction.'
- 'Suitable clinical experience in hospitals under appropriate supervision.'

These quotes have been taken from EU Council Directive 93/16 of April 1993, article 23, paragraph 1.

Responsibility for undergraduate education in the UK

The GMC

94 We are responsible for the following:

- deciding the knowledge, skills and attitudes graduates need
- making sure (through written enquiries and on-site visits) that the teaching and learning opportunities provided allow students to meet our requirements
- setting the standard of expertise that students need to achieve at qualifying examinations or assessments
- making sure (through written enquiries and on-site inspections) that the standard of expertise we have set is maintained by the medical schools at qualifying examinations
- appointing inspectors of qualifying examinations and assessments, and visitors to medical schools and possible 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 visits and inspections, recommending to the Privy Council to recognise, continue to recognise or no longer recognise individual UK PMQs
- giving EU nationals with appropriate medical degrees provisional registration. This allows them to work as a PRHO in the UK and to gain the clinical experience needed for an EU PMQ
- considering applications under *Section 10 (4)* of the *Medical Act 1983* (see paragraph 97).

The medical schools

95 Medical schools must follow these recommendations, and the requirements of the EU Medical Directive, when designing and putting into practice curricula and associated assessments.

96 Medical schools have a responsibility to the public, to employers and to the profession to make sure that graduates are fit to practise. When a medical school awards a PMQ, it is confirming to us that each graduate has completed, in full, a curriculum that meets our guidance and the requirements of the *Medical Act* and of the Directive.

97 The particular duties of medical schools include the following:

- selecting students, taking account of the qualities needed in a doctor, as set out in *Good medical practice*, and getting advice from the UK Health Departments on matters that may affect a doctor's eligibility for professional practice
- giving us information that we have asked for on their arrangements for educating and assessing students, and any other matters broadly relating to the curriculum or the qualifying examinations (or both)
- assisting the work of Education Committee inspectors or visitors appointed under *Sections 6* and *7* of the *Medical Act 1983*
- making sure that (under the European Primary Medical Qualifications Regulations) degree certificates or other evidence of award of a UK PMQ make it clear whether students have spent more than 12 months of their training outside the EU
- making sure that teachers, trainers and clinical supervisors, as well as those who assess student performance, understand and put into practice the guidance contained in these recommendations and in our publication *The doctor as teacher*, and are provided with the training necessary to carry out their role
- setting up appropriate systems to plan, put into practice and continually review curricular changes
- applying to us under *Section 10 (4)* of the *Medical Act 1983* for approval of an alternative pattern of PRHO experience for any doctor who is prevented (by a lasting physical disability) from starting on, or completing, some of the experience needed for full registration.

The UK Health Departments

98 The Health Departments should make sure that NHS organisations work with medical schools so that students receive appropriate clinical training.

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

100 The Health Departments are also responsible for deciding how students may have access to patients on NHS premises.

The responsibilities of doctors

101 All doctors must follow the principles of professional practice that are set out in *Good medical practice*.

102 All doctors should be willing to contribute to the education of students.

103 Doctors with particular responsibility for teaching students must develop the skills, attitudes and practices of a competent teacher. They must also make sure that students are properly supervised.

104 Doctors must be honest and objective when appraising or assessing the performance of students, including those they have supervised or trained. Patients may be put at risk if a doctor describes as competent any student who has not reached or maintained a satisfactory standard of practice.

The responsibilities of students

105 Students must accept responsibility for their own learning, including achieving the curricular outcomes in this guidance.

106 As future doctors, students should 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.

107 Students must follow the guidance issued by the UK Health Departments and other organisations about their access to patients in NHS hospitals and community settings. They should also be aware of any departmental guidance for healthcare workers, which may have an affect on their practice once they have gained registration.

108 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.

Glossary

Appraisal
A positive process to provide feedback on the student's performance, chart their continuing progress, and to identify their development needs.

Biological variation
Any difference between cells, individuals or groups of individuals of any species.

Curriculum
A detailed schedule of the teaching and learning opportunities that will be provided. This includes the core curriculum and the student-selected components.

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.

Medical school
The universities and non-university organisations that are legally entitled to hold an examination for the purpose of granting a PMQ. Universities also run degree courses.

Perioperative care
The care given to a patient in preparation for, during, and while recovering from, surgery.

Primary medical qualification (PMQ)
A first medical degree awarded by a UK medical school.

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, attitudes and behaviour set out in the curriculum.

Scientific method
A rational approach to explain natural events and processes by formulating, testing and modifying a hypothesis.

Self-directed learning
A process in which students are responsible for organising and managing their own learning activities and needs.

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.

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Useful GMC contacts

Checking a doctor's registration
Phone 0845 357 3456
+44(0)161 923 6602 (if calling from outside the UK)
E-mail registrationhelp@gmc-uk.org

GMC publications
Phone +44(0)161 923 6315
Fax 0845 357 9001
E-mail publications@gmc-uk.org

The GMC and medical education
E-mail education@gmc-uk.org

Fitness to practise enquiries
Phone 0845 357 0022
+44(0)161 923 6402 (if calling from outside the UK)
E-mail practise@gmc-uk.org

Inquiries about standards and ethics
Phone +44(0)20 7189 5404
Fax +44(0)20 7189 5401
E-mail standards@gmc-uk.org

Main switchboard and fax
Phone 0845 357 8001
+44(0)161 923 6602 (if calling from outside the UK)
E-mail gmc@gmc-uk.org

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