

EDUCATION COMMITTEE

**REPORT OF THE VISIT TO UNIVERSITY OF EDINBURGH
FACULTY OF MEDICINE**

25-26 OCTOBER 2000

We should like to express our thanks to the Dean of the Faculty of Medicine, the Postgraduate Dean and all those who spent time organising the visit programme and discussing the undergraduate curriculum and the pre-registration year with us.

Contents

	Page
Foreword	i-ii
Introduction.	1
Part 1: The undergraduate curriculum.	1
<i>Background information.</i>	1
<i>Form of the visit relating to undergraduate medicine.</i>	1
<i>The Edinburgh undergraduate curriculum.</i>	2
Curricular development	2
The new curriculum	2
<i>The management of change (Principal Recommendation 13)</i>	3
Supervisory structures	3
The contribution of students	4
Staff development	4
The promotion of teaching as a valuable activity	4
<i>Aspects of the core curriculum (Principal Recommendations 1,2,5 and 7)</i>	5
Defining the core curriculum	5
Reducing the factual burden on students.....	5
Integration.....	6
Learning through curiosity.....	7
<i>Special study modules (Principal Recommendation 6)</i>	7
<i>Delivery of the curriculum (Principal Recommendation 11)</i>	8
Teaching methods	8
Learning resources	9

<i>Changing patterns of health care (Principal Recommendation 10)</i>	10
<i>The goals of undergraduate education –attitudes, skills and knowledge</i>	10
Attitudes (Principal Recommendation 3)	10
Essential skills (Principal Recommendations 4 and 8)	12
IT skills	12
Communication skills	12
Clinical skills	13
Basic and advanced life support	13
<i>Aspects of the knowledge base</i>	14
Public health medicine (Principal Recommendation 9)	14
Legal and ethical issues	15
Medicine in a multicultural society	15
Complementary medicine	16
Infectious diseases and antibiotics	16
<i>Assessment of the process and the product (Principal Recommendation 12)</i>	16
The outcome of the course	16
The scheme of assessment	16
Fitness to practise	18
Preparation for the pre-registration year	18
<i>Other issues</i>	19
Student support	19
Feedback to students	21
Quality control	21
<i>Areas of good practice</i>	22
<i>Areas for further consideration</i>	24
<i>Conclusion</i>	25
Part 2: General clinical training	26
<i>Background information</i>	26
<i>Form of the visit relating to general clinical training</i>	26
<i>Organisation and management of the PRHO year</i>	26
Supervisory structures	26
The approval of posts	27
Communicating the aims and objectives of the PRHO year	27
The selection of PRHOs	28
Monitoring the quality of PRHO posts	28
Linking the PRHO year to the undergraduate course	29
<i>Components of a high quality PRHO post</i>	30
Induction	30

Educational opportunities	30
Educational supervision	31
Clinical training and supervision	32
Monitoring the progress of PRHOs	32
<i>Professional development and personal well-being</i>	33
Careers advice	33
Support for PRHOs	33
Accommodation, catering and personal safety	33
Contractual matters	34
<i>New PRHO rotations</i>	34
<i>Areas of good practice</i>	35
<i>Areas for further consideration</i>	35
<i>Conclusion</i>	36
Annexes	
Diagrams representing the structure and content of the new curriculum, including its assessment format A	Annex
Administrative and committee structure for teaching in the Faculty B	Annex
Staff development opportunities 1999-2000 C	Annex
SSM programme and its assessment structure D	Annex
List of SSM options available to students E	Annex
Guidelines on peer marking for staff and students F	Annex
Ethical Code of Conduct for Students G	Annex
List of core competencies and skills H	Annex
Definition of course objectives I	Annex
Standard assessment forms	Annex

J

Induction programme for students

Annex

K

Summary of general clinical training provision

Annex

L

PRHO evaluation questionnaire

Annex

M

Equal Opportunities Monitoring Form

Annex

N

Foreword to the visit reports 1998-2001

The Education Committee is accountable for ensuring that its recommendations on basic medical education are implemented by every medical school in the UK.

When our latest guidance on undergraduate education, *Tomorrow's Doctors*, was published in December 1993 we made it clear that we intended to monitor the progress of curricular change, through both written enquiries and on-site visits. We are taking a similar approach towards implementation of our recommendations about the pre-registration year, published in *The New Doctor* in April 1997.

The first round of visits, to 25 medical schools, took place between 1995 and the spring of 1998. A second round of visits began in the autumn of 1998. These are focusing on the rolling out of the 13 principal recommendations in *Tomorrow's Doctors* during the primarily clinical years of the undergraduate course, as well as the introduction of improved arrangements for the training of pre-registration house officers.

The Quality Assurance Agency also began its review of medicine in the autumn of 1998 and at the request of the medical schools concerned a number of our visits have been synchronised with those of the QAA. This has enabled both bodies to minimise the burden which would otherwise have been imposed on the schools as a result of two separate visits within a relatively short space of time. We have, for example, been able to share documentation, and hold some joint meetings with medical school staff, students and recent graduates. Where collaborative working with the QAA has taken place, we state this in our reports.

The purpose of the QAA reviews is described in detail in their own documentation, including the reports of visits their teams have undertaken. The visits we ourselves are presently making are informal and are designed to be facilitative and supportive of curricular change, rather than judgmental. For this reason they contain no graded assessments of the quality of the provision available, or the quality of the student experience. They do, however, point up areas which we believe to be in need of further consideration. We will be pursuing progress with regard to these issues through written enquiries of the medical schools 12 months

after each report has been published.

As well as informing us in some detail about the extent to which each school has succeeded in introducing a curriculum consonant with our guidance, and in enhancing the clinical experience of its new graduates along the lines advocated in *The New Doctor*, the visits provide us with opportunities to identify examples of good practice which we can share with other medical schools. These too are detailed in our reports.

The reports of individual visits will normally be available on our website (www.gmc-uk.org) one month after these have been sent to the schools concerned. In addition, we will be publishing a summary of our findings at the conclusion of the current round of visits in 2001.

Introduction

1. Our visit had two purposes:

To review progress made by the Faculty towards implementing the recommendations in *Tomorrow's Doctors* since our last visit in 1997, with a focus on the predominantly clinical years of the course.

To monitor progress towards implementing our guidance on the pre-registration year, as set out in *The New Doctor*.

2. Our team was led by Professor Graeme Catto, the Chairman of the Education Committee. The other members were Mr Sola Oni, a member of the Education Committee and Professor Roger Green, a member of Council and a former member of the Committee at the time of the visit.

3. Our visit lasted two days, with the first day devoted to the undergraduate curriculum and the second day to the arrangements for general clinical training.

4. Our report is in two parts, reflecting the nature of our visit. In part one we look at the further progress made towards implementing the recommendations in *Tomorrow's Doctors* and discuss the Faculty's plans for future development. In part two of our report we consider the arrangements for general clinical training in the light of our guidance in *The New Doctor*.

5. In both parts of our report we have identified areas of good practice and issues where further progress is required.

Part I: The undergraduate curriculum

Background information

6. Prior to the visit the School provided us with helpful background material.

Form of the visit relating to undergraduate medicine

7. Following an initial meeting with the Dean and other senior staff we met

members of the Medical Teaching Committee to discuss curricular development and progress since our last visit. Later we had discussions with key personnel responsible for co-ordinating the delivery of teaching in the predominantly clinical years of the course. In the afternoon we talked with a group of students drawn from each year of the programme before viewing some of the excellent clinical skills teaching facilities and learning resources available to students.

The Edinburgh undergraduate curriculum

Curricular development

8. When we last visited in October 1997 we noted that the Faculty had established a framework for curricular change, announcing its intention to move from a traditional discipline and department-based course to an integrated learning programme. The Faculty has now successfully implemented the first two years of its new curriculum, introduced in October 1998. The first cohort of students to follow the new programme in its entirety will graduate in summer 2003.

The new curriculum

9. Diagrams describing the structure and content of the new curriculum, including its assessment format, are at **Annex A**.

10. The programme begins with an emphasis on health and progresses to an appreciation of illness and its consequences with the ultimate aim of developing an understanding of the management of illness in a variety of contexts. A number of vertically integrated themes allow students to interrelate their learning experience throughout each year of the curriculum. These vertical strands comprise:

Clinical Skills, Personal and Professional Development (CSPPD)

Public health medicine

Pharmacology and therapeutics

the psychological aspects of medicine

Options (or Special Study Modules)

Key clinical topics.

11. Year 1 is entitled 'Molecules to Society', during which students learn about the essentials of biomedical science in conjunction with relevant psychological, social and public health topics. A number of 'Integrative Clinical Topics' are addressed in the context of small group problem-based learning tutorials facilitated by clinical staff. During the first two terms students undertake a group project, based in a clinical department, the outcome of which they present at a First Year Conference. As part of the CPSSD theme, students receive early exposure to clinical skills training in the Clinical Teaching Resource Centres (Skills Laboratories) in the Royal Infirmary, Edinburgh and the Western General Hospital and undertake two community-based programmes in general practice which focus on the development of their communication skills. The principles of medical decision-making are introduced in the 'Evidence-based Medicine' course.

12. In Year 2 students concentrate on the 'Biology of Disease', its causes,

mechanisms and consequences. This is delivered through self-directed learning, problem-based learning tutorials known as 'Clinical Case Conferences', practical demonstrations, tutorials, lectures and computer-based learning programmes. Students also undertake two Special Study Modules (SSMs) or 'Options', each of four weeks' duration. The 'Introduction to Clinical Practice' course runs throughout the year and aims to develop the basic skills of clinical method (history-taking, examination, communication and consulting skills). It is taught in a general practice setting, with the collaboration of hospital specialists, and integrated with parallel learning in other modules. Students' skills are assessed by an Objective Structured Clinical Examination (OSCE) at the end of the year.

13. Years 3 and 4, entitled the 'Process of Care', will comprise a series of systems-based modules, covering all the body systems. Core knowledge from Year 1 will be revisited, as will learning about disease mechanisms (infection, inflammation and immunopathology, genetics, thrombosis, neoplasia) from Year 2. These integrated modules will bring together basic scientists and clinicians to help students learn about the presentation, diagnosis and management of the diseases affecting the different body systems. Most of this learning will take place within teaching hospitals, though community aspects will be represented through a four-week attachment in general practice in Year 4. The strand of problem-based learning developed in Years 1 and 2 will be maintained in the form of case-based learning tutorials. More advanced clinical skills training appropriate to the different organ systems, will be delivered. During Year 4 students will complete a fourteen-week SSM.

14. In Year 5, 'Preparation for Practice', students will be attached to general practices, district general hospitals and specialist units within teaching hospitals, providing the opportunity for learning through apprenticeship. Specific periods of 'house officer shadowing' will be identified throughout the year, culminating in a preparation period centred on the knowledge and skills required for pre-registration house officer service. Students will undertake a traditional elective at the start of the final year. They will also have the opportunity to study a chosen subject in greater depth as the Faculty intends to designate the general medicine attachment as an 'Option' or SSM.

The management of change (Principal Recommendation 13)

Supervisory structures

15. The administrative and committee structure for teaching in the Faculty is described in the documentation at **Annex B**.

16. The Medical Teaching Organisation (MTO) was established five years ago and, through its executive arm (the Medical Teaching Committee), it was charged with the responsibility for the design, planning and implementation of the new curriculum. Much of the MTO's initial work was curricular planning but recently we learned that there had been a progressive shift, as the new course is implemented, towards organisation and delivery of teaching. It was therefore unclear to us whether the MTO would continue to have the influence and power either to effect or to direct curricular change.

17. As the new programme now enters its third year, the decision has been taken to review the current organisational system within the Faculty and in relation to the University as a whole. This will involve clarification of the role of the MTO in the management of curricular change. We believe that it is essential for one body to have this overarching responsibility. We therefore lend our full support to this review, which should lead to lines of accountability being more clearly defined. We hope that the resulting changes can be introduced in time for the next academic session.

The contribution of students

18. We were pleased to learn that students play a full and active part in the development and management of the new curriculum. Student representatives from Edinburgh's Medical Student Council (MSC) are members of each Year planning group; the Year 5 planning group (Preparation for Practice) also includes a pre-registration house officer (PRHO). These representatives meet regularly with course organisers to discuss the content and administration of the curriculum.

19. Students spoke enthusiastically of the rapid and positive response of the Faculty to their requests for curricular modification. We were told that changes had been made to some of the clinical attachments and to the neuroscience and public health medicine courses after the Faculty had learned of student concerns.

Staff development

20. The Faculty is committed to promoting the professional development and training of all its teachers. Within the University the Centre for Teaching, Learning and Assessment offers a range of activities for both academic and NHS staff involved in teaching. Its Annual Course on Teaching and Learning is aimed at new academic staff, for whom attendance is a contractual requirement, and is made freely available to all other teaching staff.

21. The Faculty itself has been proactive in organising a number of training programmes to prepare its teachers for the demands of the new curriculum. We were told that in September 2000 six three-hour training sessions were offered, four on communication skills teaching and two on problem-based learning. In October 2000 a 'Training the Teachers' course will be held in the Royal College of Physicians of Edinburgh and the following month will feature a Faculty of Medicine Teaching Symposium, focusing on a discussion of curriculum outcomes.

22. At **Annex C** is a list of staff development opportunities provided by the Faculty in the year leading up to our visit.

The promotion of teaching as a valuable activity

23. The importance of encouraging teaching excellence is well appreciated by the Faculty. Positive feedback on teaching, identified by the Feedback and Evaluation Committee (whose functions are described in paragraph 108 of our report), is formally acknowledged throughout the year. Letters of commendation are sent to the teachers concerned and details are circulated on the University intranet. We were told that a competition to discover the Teacher of the Year had been held

for the first time in June 2000. The award was based on votes from students of the Faculty. We were also interested to learn that a joint appraisal system is being developed between the University and the local trusts which recognises and rewards commitment to high quality teaching.

Aspects of the core curriculum (Principal Recommendations 1, 2, 5, and 7)

Defining the core curriculum

24. The new core curriculum evolved from an extensive consultation exercise in which teachers, including specialists, general practitioners and junior doctors, were invited to define what they considered to be the core knowledge, skills and attitudes required of the doctor on graduation. A “curriculum room” was created for this purpose and contributions from staff were included in wall displays. We were told that the MTO was responsible for monitoring this process and for agreeing what the definitive form of the new core curriculum should be following further dialogue with the various Year planning groups, teachers and students.

25. The core curriculum is now defined in the form of a series of learning objectives for each element of the course as this is implemented. Students and teachers can access these learning objectives through study guides or via the electronic curriculum (EEMeC). We noted that the core had been defined for Years 1-3 of the new curriculum; Years 4 and 5 are still under development.

26. The MTO, together with the Year heads and module leaders, has been monitoring and reviewing Years 1 and 2 of the new programme. The Faculty believes that this will result in significant alterations being made to subsequent years of the course, culminating in a more sharply defined core curriculum.

27. We welcome this review but believe it would now be helpful to reassess the philosophy and framework of the core curriculum to be delivered over the entire five years of the course, recognising the need to ensure appropriate linkage with the PRHO year. For example, the concept of a shadowing attachment towards the end of Year 5 in the PRHO post which they will be taking up after graduation was favourably received by students and was fully supported by teachers. We return to this issue later, in paragraphs 94 and 150 of our report.

Reducing the factual burden on students

28. The Faculty believes that recent curricular innovations, such as the introduction of integrated systems-based modules and self-directed, problem-based and team-based learning, have resulted in a progressive and significant reduction in the demands on students. Certainly the students with whom we spoke did not regard themselves as overburdened, though some remarked that the lecture programme in Year 1 Term 1 was particularly intensive.

29. Although evaluation and assessment outcomes suggest that formal learning has been rationalised in the new curriculum, the Faculty was unable to provide any comparative data, explaining that the degree of structural reorganisation in the new programme made direct contrasts with the previous curriculum too difficult. We were, however, given a detailed breakdown in percentage terms of the various

types of learning opportunities provided for students in each year of the new course. This information is shown in the following table:

Year	Independent study/ CAL	Problem-based learning	Group project work	Small group/ bedside teaching	Practical classes	Clinical skills teaching	Led tutorials	Lectures/ clinical demonstrations
1 23	5	9	4	11	3	8	37	
2 22	15	23	8	5	12	5	10	
3 24	9	-	22	5	12	13	15	
4 35 [#] 10	-	22	5	10	5	13		
5 48 [#] 8	-	16	-	10	10	8		

projected for new curriculum based on draft timetables
includes time on individual SSM projects and on elective

30. The MTO, in conjunction with module and theme leaders, is continuing to monitor the level of didactic learning in the curriculum. We fully support this initiative, taking the view that the need to constrain factual overload and to allow sufficient time for reflective practice should be essential components of curricular review.

Integration

31. The Faculty regards vertical integration of clinical teaching and basic medical sciences as a key element of its new curriculum. It has adopted a number of strategies to narrow the traditional 'pre-clinical/clinical divide', including:

The increasing involvement of clinicians in the development and the delivery of teaching in the early years of the programme. For example, the Faculty calculates that the number of practising clinicians teaching in the new Year 1 has risen from 38 to 62.

The introduction of problem-based learning (PBL) which has acted as a powerful integrating influence in the new Years 1-3.

The prevalence of strong vertical themes, such as Clinical Skills, Personal and Professional Development, throughout each year of the new curriculum. For example, in Years 1 and 2 students are currently taught practical clinical skills, such as venepuncture and urinalysis, in a way which links directly with

parallel learning in the modules.

The option of taking clinically based SSMs in Years 1 and 2, co-ordinated by clinical academics.

32. Although its plans for Years 4 and 5 of the new programme have not yet been finalised, the Faculty is confident that students will be able to continue their studies in the sciences basic to medicine during that phase. We were told that anatomical, pharmacological and other basic science teaching will feature in the systems-based modules in Years 4 and 5, while the PBL strand will provide students with further opportunities to review basic science issues as these relate to clinical cases. Students will also have the option of completing a scientifically-based SSM in Year 4.

33. We acknowledge the work undertaken by the Faculty following our last report to address the level of vertical integration in the curriculum. Nevertheless, we noted many references in the documentation prepared for our visit to teaching being delivered in terms of specific disciplines. Though we recognise the considerable logistical difficulties involved, we encourage the Faculty to continue its work to strengthen integration, both horizontally and vertically, throughout all five years of the course.

Learning through curiosity

34. As well as the SSM programme, which is described in the next section of our report, students have a number of opportunities to explore areas which particularly interest them and are encouraged to take responsibility for directing their own learning.

35. The excellent learning resources, described in paragraphs 45 to 49, afford ample scope for students to develop their skills in self-directed learning.

36. The strand of problem-based learning, introduced in each year of the new curriculum, allows students to deepen their learning by exploring key clinical cases and presentations. The Faculty hopes that these small group tutorials will enable students to integrate knowledge and understanding obtained from different sources within the context of patient care. The students whom we consulted regarded these sessions as a valuable learning experience.

Special Study Modules (Principal Recommendation 6)

37. Special study modules (SSMs) or Options feature in Years 1, 2, 4 and 5 of the undergraduate curriculum. A brief description of the programme and its scheme of assessment is at **Annex D**, and the list of topics currently available to students at **Annex E**.

38. The amount of student time allocated to SSMs in each year of the course is as follows:

Year 1	5%
Year 2	26%

Year 4	30%
Year 5	29%

39. We were told that the programme is designed to ensure that students:

Have experience of studying some self-chosen subjects in depth.

Can develop and demonstrate group working skills.

Can develop and demonstrate the ability to retrieve literature using electronic and printed media and to read papers critically.

Can plan and produce a satisfactory output (poster, website or paper).

40. Students in Years 1 and 2 are invited to choose their options from lists of available topics and to rank these in order of preference. They are then matched with a tutor. We were told that students can propose topics for the Year 2 SSMS themselves provided that an appropriate tutor can be found and a group of students who wish to undertake the project can be identified. Choice of options in Years 4 and 5 is entirely student-driven. Students identify a tutor and agree a topic. Details of previous Year 4 projects and final year electives are made available to students in the Faculty Office.

41. The students with whom we spoke found the SSM programme educationally rewarding, were content with the range of options available to them and welcomed in particular the flexibility to propose their own topics. We noted with interest the use of peer assessment in the Years 1 and 2 SSMS and commend the clear guidelines on this system which have been circulated to both staff and students. These are reproduced at **Annex F**. We were also pleased to learn that more stringent arrangements are being introduced for assessment of the Year 5 elective. In the new curriculum students will be required to submit a written report on their attachment. This will be included in their portfolio and assessed in common with the other portfolio entries. We consider the arrangements for portfolio assessment in paragraph 87 of our report.

Delivery of the curriculum (Principal Recommendation 11)

Teaching methods

42. Teaching is delivered and learning encouraged through a variety of methods, including:

- lectures
- clinical demonstrations
- staff-led tutorials
- practical sessions
- small group teaching
- group project work
- self-directed learning
- computer-assisted learning
- problem-based learning sessions

clinical skills training
clinical attachments in hospital and community settings.

43. The Faculty believes that the introduction of a problem-based learning (PBL) strand in the first three years of the new curriculum provides students with the opportunity to integrate their learning within the context of clinical case scenarios. These PBL programmes have different titles in each year in order to reflect the various levels of student development. In the first year the outcome of the Integrative Clinical Topics course is an individual student case report and a patient information leaflet produced by the group. Students submit individual case reports in their Year 2 Clinical Case Conferences which contribute to their end of term assessment and are included in their portfolio. The format in Year 3 will involve case information being fed to small groups of students in stages over two weeks. After three PBL sessions students will meet with an expert tutor for a case conference as the culmination of the cycle. Each module in the year will include three such exercises. We were informed that the Faculty plans to introduce this approach in Years 4 and 5, provided that the evaluation from Year 3 is satisfactory.

Learning resources

44. The Faculty has invested heavily in ensuring that its students have access to a range of high quality resources designed to assist their learning.

45. Following the recent appointment of a Director of Learning Technology, computing facilities have expanded rapidly. Network links have been established with peripheral hospitals and two new computing laboratories have been opened at the Western General Hospital.

46. We noted that an extensive range of computer-assisted learning (CAL) packages and videos have been developed for student use, many of which were created in-house. These are accessible across the network. The Clinical Teaching Resource Centres (CTRCs) at the Royal Infirmary and the Medical Education Centre at the Western General Hospital house those CAL materials relating to clinical skills teaching.

47. We visited the Medical Education Centre at the Western General Hospital. This is an excellent facility which enables students to practise and develop their communication, clinical and practical skills with support from full-time educational facilitators.

48. We also had the opportunity to see the Edinburgh Electronic Medical Curriculum, which includes study guide material, lecture notes and handouts, links to reference sources, self-assessment exercises and personal timetable information. Accessible from any location via the world-wide web, we were told it registers 8,000 'hits' each day.

49. The Faculty is to be congratulated on its commitment to clinical skills training in general and to the development of communication skills in particular. We believe that the electronic curriculum is an innovation which has considerable potential to become a powerful educational resource for both student and staff. We view these developments as a useful introduction to patient contact, which remains at the heart

of undergraduate medical education.

Changing patterns of health care (Principal Recommendation 10)

50. Acknowledging the need to adapt to the changing face of health care, the Faculty has plans to provide its students with more opportunities to learn in a community context.

51. Teaching in primary care will be extended so that it occurs in four of the five years of the new undergraduate curriculum. Students following the new programme will undertake a four-week general practice attachment in both Years 4 and 5. These attachments and the eight-week Child Life and Health module in new Year 5 (comprising integrated teaching in clinical (including community) paediatrics, medicine, surgery and psychiatry) will enable students to gain experience of a wide range of community medical services. We were interested to learn of the introduction of community-oriented programmes, such as the 'Talking with Families' course in Year 2, since our last visit. On this course students, on attachment to a GP tutor, conduct interviews in pairs with the parents of a young child to elicit their experience of health and illness in the family. Two dedicated sessions with their tutor help to prepare students for each interview. Afterwards they meet again to discuss their performance in a review tutorial.

52. In some areas of clinical training such as ophthalmology, ENT and dermatology, the Faculty intends to enhance the learning experience for its students by introducing them to day case procedures and arranging for them to attend planned teaching clinics. We understand that these approaches will feature for the first time in Year 4, starting in September 2001.

The goals of undergraduate education – attitudes, skills and knowledge

Attitudes (Principal Recommendation 3)

53. The desirability of developing a patient-centred approach to the practice of medicine is a key theme of the Edinburgh undergraduate curriculum.

54. Work on this strand begins early in Year 1, as new students are introduced to the principles of *Duties of a Doctor* and *Good Medical Practice* during 'Fresher's Week' at a special session with the Dean, the Associate Dean for Teaching and the Associate Dean for Student Affairs. These principles underpin the Ethical Code of Conduct for Students, implemented by the Faculty in 1999. A copy of this Code, signed by all medical students at the beginning of Year 1, is reproduced at **Annex G**. Its message is regularly reinforced in the Year handbooks and in the teaching and learning sessions delivered primarily during the Clinical Skills, Personal and Professional Development (CSPPD) programme which spans all five years of the new curriculum. One element of the CSPPD is the 'Ethics, Legal and Professional Responsibilities' courses in Years 1 and 3, which give students the opportunity to explore the ethical basis of decision-making in a medical context, using the tenets of *Good Medical Practice*. Another strand of CSPPD is the Personal Development theme which encourages students to reflect on and to document aspects of their personal and professional development. Its key aims are to enable students to:

'Appreciate the personal attributes required of the medical practitioner
Map the wide range of opportunities open to them for personal development
Develop a reflective approach to their work and to monitor their progress
Develop competence in relevant personal skills and attributes through
experiential learning
Maintain a comprehensive personal record of their achievements
Increase their self awareness and recognise the limits of their abilities, while
maintaining a positive attitude towards themselves, their colleagues,
fellow students and patients
Develop a better understanding of their career options'.

55. Students with attitudinal problems are quickly identified by their teachers and peers. Teachers are required to monitor student attitudes during clinical attachments. In Years 2, 3 and 4 the Faculty uses Objective Structured Clinical Examinations (OSCEs) to assess attitudes and behaviour.

56. The students we met were fully aware of the importance of having good role models as teachers and clinicians and were easily able to identify those whom they considered were not adequately fulfilling this role. The Faculty is confident that it is able to detect poor role models through feedback from:

the Clinical Sub-Deans appointed at the two major teaching hospitals. They provide strong communication links between students on attachments, clinical teachers and the Faculty.

the Clinical Attachment Monitoring Scheme (CAMS). This is a comprehensive, automated evaluation process applied to all clinical attachments, central and peripheral, in both the old and new curricula. It is described in more detail in paragraph 108 of our report.

57. We were impressed by the explicit way that the Faculty had used the tenets of *Good Medical Practice* to inform so much of its teaching and learning, particularly in the early years of the course.

Essential skills (Principal Recommendations 4 and 8)

58. The document at **Annex H** outlines the competencies and skills in which students must be proficient prior to graduation. The CSPPD programme has been introduced to help students attain these learning objectives, providing structured teaching in communication and consultation skills, practical skills and procedures, resuscitation and IT skills. The Faculty uses a combination of techniques to record acquisition of these skills, including:

self appraisal
certification of competency by teachers in student clinical workbooks
submission of completed assignments, (including portfolio entries)
continuous assessment by tutors
integrated assessment within modules
OSCEs at the end of Years 2, 3 and 4.

IT skills

59. The development of effective IT skills is the core business of the Computing Skills and Medical Informatics component of the CSPPD programme. After a general introduction, student competence in completing assignments involving email, word processing, spreadsheet use and website design is assessed. Additional tuition in IT skills can be arranged if necessary.

Communication skills

60. Communication skills teaching features strongly in each year of the Edinburgh curriculum.

61. The 'Talking with Families' course in Year 1 provides students with a basic introduction to communication skills and early experience in interviewing patients. In Year 2 students can develop their general consultation skills during the 'Introduction to Clinical Practice' module based in general practice.

62. The learning context is widened in Year 3, and includes:

- ward-based teaching
- communication skills tutorials organised by experienced clinicians from various disciplines. Students are video-taped whilst they interview simulated patients to enable them to review their performance
- oral and written presentations of a patient's history
- case-based learning.

63. In Years 4 and 5 the Faculty intends to focus teaching on specific issues, including:

- breaking bad news
- requesting an autopsy
- seeking consent
- dealing with aggression
- communicating with children and their relatives.

64. Students spoke appreciatively of the communication skills training which was provided for them, and valued in particular the constructive feedback they received when reviewing their videotaped interviews with simulated patients. We were impressed by the range and breadth of the programme. We believe that the Faculty has acted with great wisdom in appointing a director of communication skills training who is able to co-ordinate and monitor its delivery throughout all five years of the curriculum.

Clinical skills

65. The basic practical clinical skills and procedures which are taught incrementally throughout the year of the course can be found in the list at **Annex H**. This list is also included into the clinical workbook given to all students, so that acquisition of essential skills can be formally logged.

66. Clinical skills training is delivered primarily at the Clinical Teaching

Resource Centre at the Royal Infirmary and the Medical Education Centre, Western General Hospital. Full-time educational facilitators, clinicians, MTO staff and nurse-educators are involved in this process, which is highly regarded by the student body. Training may also take place during some of the clinical attachments; for example venepuncture is taught during the general practice attachment in Year 2.

67. Students must demonstrate proficiency in key skills in order to progress to the next phase of the course. The clinical workbook referred to above is used for this purpose, combined with assessment of clinical competence by OSCE examination at the end of Years 2, 3, and 4. The students we spoke to were satisfied with the teaching and learning opportunities available to them in the new curriculum to develop their practical skills.

Basic and advanced life support

68. We were impressed by the Faculty's commitment to teaching basic and advanced life support skills. Training in basic life support and airway management is given during Years 1 and 2. Resuscitation teaching in Year 3 takes place during the cardiovascular module when students are able to revise how to take an ECG and to learn about ECG diagnosis and recognition of arrhythmias. Students also have the opportunity to practise defibrillation methods before their skills in this area are assessed. The Faculty has not finalised its plans for Years 4 and 5 but we understand that further resuscitation training is likely to feature in the accident and emergency attachment in the last year of the course.

69. Students set great store by the high quality teaching they received in cardiopulmonary resuscitation (CPR) skills, perceiving this to be significant to their professional development.

70. We asked the Faculty if it had any plans to introduce an accredited advanced life support (ALS) course in either the undergraduate curriculum or the PRHO year. The Faculty considered that it was currently providing teaching consonant with ALS guidelines. It had not reached a decision as to whether a formal ALS course should be established but, if so, this was likely to be located at some point late in the PRHO year.

Aspects of the knowledge base

Public health medicine (Principal Recommendation 9)

71. We were pleased to learn that the Faculty has accorded this important subject the high profile it merits. This is evident in the number of timetabled hours allocated for its teaching (twice the national average, we were told) and the innovative way that public health medicine teaching is delivered as a vertical theme, integrated with clinical and community aspects of medicine, throughout the curriculum.

72. Specific learning is focussed at two points – the 'Health and Society' course in Year 1 where it links into learning on the community-based practical sessions, 'Talking with Families' and 'Health Needs Assessment of Elderly People' and at the start of

Year 3 in the Public Health component of the Review Course. At each of these points, key information about health promotion, illness prevention, targeting of population needs and awareness of environmental and social factors in health and disease is emphasised. The aim of public health teaching in Year 3 is to enable students to identify and to apply relevant public health knowledge, attitudes and skills to practice across a range of clinical settings. This sets the tone for Years 3-5 where public health issues (for example, cervical screening) will be revisited within modules and attachments. It is the Faculty's intention to include questions on public health medicine in the end-of-module assessments and the end-of-year OSCE examinations.

73. Public health medicine is also one of the vertical themes of the student portfolio. Students will be required to include pertinent public health issues in their portfolio case studies and reports. These will be assessed within each module or attachment, and will count towards the student's overall performance in the revised Final examination.

74. We were interested to learn that discussions are taking place between the new Professor of Public Health Medicine and the new Director of Public Health at the Lothian Health Board with the object of creating the opportunity for students to undertake an attachment in public health medicine at Lothian Health Board during Year 5.

75. We welcome the commitment to the development of public health as a vertical strand within the curriculum. Its inclusion in the student portfolio, in assessments and in the proposed links with the Lothian Health Board is an inventive way of ensuring that students recognise its significance throughout all five years of the undergraduate course.

Legal and ethical issues

76. Consideration of legal and ethical issues forms a vertical strand through the Edinburgh curriculum.

77. At the very start of Year 1 students are encouraged to reflect on the qualities which contribute to becoming a 'good doctor' using the principles set out in *Good Medical Practice*. Key ethical issues relating to consent and confidentiality are discussed in the 'Ethics, Legal and Professional Responsibilities' course later that year.

78. The two days of ethical issues during the two-week Review Course at the beginning of Year 3 enable students to consolidate and update the ethical knowledge and experience they have accumulated during the previous two years. Professional responsibilities related to consent and the duty of care are examined with reference to assessing decision-making capacity, acute medical admissions, mental health law, prescribing, therapeutic and non-therapeutic research, and the ethics of resource allocation and rationing. Ethical issues linked to the practice of medicine in multiprofessional and in multicultural contexts are also discussed.

79. A series of teaching sessions covering a range of ethical topics is being organised for the modules and attachments in Years 3 to 5 by the Director of Ethics.

Teaching will be shared with clinicians, though we understand that nurses will also be invited to contribute to teaching in some of the sessions. As with public health medicine, students will be required to include ethical issues in their portfolio case studies and reports for assessment. Questions on the ethical aspects of medicine will also feature in the end-of-module assessments and the end-of-year OSCE examinations.

Medicine in a multicultural society

80. The recently appointed Director of Public Health Medicine has specific research interests in ethnic influences on health and health care provision, which has resulted in a more marked emphasis being placed on this aspect of the curriculum. Issues of race, ethnicity and the pattern of disease are addressed during the 'Health and Society' course in Year 1, and in the ethics component of the Review Course at the start of Year 3. Within these sessions students are invited to consider how to counteract bias in practice which might arise from lack of understanding of cultural habits or from poor communication due to language barriers.

81. We understand that it is the Faculty's intention to include ethnic and cultural issues in medicine as an assessment topic in the Final examination.

Complementary medicine

82. The Faculty acknowledges that opportunities for students to learn about complementary medicine are limited, though the topic is addressed in the 'Health and Society' course in Year 1 and in the public health medicine component of the Review Course in Year 3 in terms of general awareness of the types of alternative therapies available. We learned that the Year 2 Option on complementary medicine has been withdrawn due to lack of demand, though students could continue their studies in this subject if they so wished by devising their own SSMs in Years 2 and 4.

83. We would encourage the Faculty to review its approach to complementary medicine and to explore ways of providing its students with more opportunity to learn about treatments that do not conform to conventional practice, so that they are as well informed about these as their future patients.

Infectious diseases and antibiotics

84. It seemed to us that students had ample opportunity within the curriculum to learn about antibiotic resistance and infectious diseases. These areas are addressed during the teaching of clinical pharmacology and therapeutics, which extends vertically through the undergraduate programme, and in the Year 2 'Biology of Disease' course, most notably in the module 'Infection, Inflammation and Immunopathology'.

Assessment of the process and the product (Principal Recommendation 12)

The outcome of the course

85. The Faculty has defined, in terms of knowledge, skills and attitudes, the core goals of its curriculum. Reproduced at **Annex I**, these draw on objectives identified in *Tomorrow's Doctors* and *Good Medical Practice* and learning outcomes formulated in *The Scottish Doctor – a foundation for competent and reflective practitioners*. This latter report, produced by the Scottish Deans' Medical Curriculum Group, aims to describe the outcomes of education at Scottish medical schools.

86. The standard of graduation in medicine at Edinburgh is satisfactory attainment of the defined objectives of the course, as tested through a robust programme of in-course and end-of-year summative assessment.

The scheme of assessment

87. The current assessment scheme, outlined in **Annex A**, includes the following methods of measuring student performance:

Essays and case reports marked using assessment templates.

End-of-module examinations using MCQ, extended matching and short essay and other question formats.

Continuous assessment during group projects, problem-based learning and work on clinical attachments. Copies of the standard assessment forms which we understand have just been introduced can be found at **Annex J**.

Objective Structured Clinical Examinations (OSCEs) held at the end of Years 2, 3 and 4.

Vivas. 50% of marks in the revised Final examination will be allocated to vivas to determine pass/fail and distinction candidates. Students will be expected to discuss the portfolio of case reports, assignments and project outcomes which they have accumulated over the entire course.

An observed Long Case examination will account for the remaining 50% of marks in the Final examination.

Portfolio assessment. A total of 21 portfolio entries will be evaluated using assessment templates, will generate feedback to the student and will form the basis of the viva in the Final examination. These entries will be case studies and other reports, based particularly on themes such as disability, ethics, communication, therapeutics or evidence-based medicine, completed by students in each year of the course.

88. The Faculty told us that increased emphasis on competency and the focus on core curriculum material has required it to obtain exemption from the standard University marking scheme, which imposed a pass-mark of 40%. The new marking scheme is shown below:

90 – 100%	A	Excellent
80 – 89%	B	Very Good
70 – 79%	C	Good
60 – 69%	D	Pass
50 – 59%	E	Marginal fail (can be compensated where appropriate)
00 – 49%	F	Fail

89. Assessment criteria are disseminated widely to both students and teachers, featuring in each course description booklet, workbook and study guide as well as the electronic curriculum. Despite these measures, some of the students we spoke to did not fully understand the assessment arrangements. Others expressed concerns about the variability in approach to assessment taken by teachers during the clinical attachments. We hope that the recently introduced standard assessment forms, which must be signed by both tutor and student, will help to alleviate some of these difficulties but we would ask the Faculty to clarify, as soon as possible, its assessment arrangements for the benefit of both students and staff.

90. We were interested to learn of the educational concepts behind the student portfolio and shall watch its further development with interest. In view of the contribution which it will make to the Final examination, it will be important for assessment of the portfolio to be consistent and rigorous. We anticipate that ongoing curricular review will lead to further changes being made to the assessment system. For example, from the papers made available to us during the visit, it would appear that considerable reliance was being placed on the viva in the arrangements proposed for the Final examination. Given the wealth of information which the Faculty will have amassed about its students just prior to their graduation, it would be unfortunate if undue influence were to be allocated to their performance in the viva. We invite the Faculty to review its approach.

Fitness to practise

91. The Faculty is aware of its responsibility to promote high standards of conduct and appropriate attitudes in its students. With this in mind it has recently established a Fitness to Practise Committee. This Committee, chaired by the Vice Dean, will assess whether any candidate for the degrees of MB Ch B referred to it 'does or does not constitute a risk to patients and is or is not a suitable person to become a registered medical practitioner, in respect of health, conduct and other like matters'. Students have been informed that failure to observe the Ethical Code of Conduct (reproduced at **Annex G**) which they sign before commencing their studies may result in referral to this Committee, with a view to possible expulsion from the course. They may lodge an appeal against the decision of the Committee on procedural grounds to the University's Fitness to Practise Appeals Committee. We understand that the Faculty's Fitness to Practise Committee has met once so far, in order to determine its strategy.

92. The Faculty is confident that the close links established between the Associate Dean for Student Affairs and clinical teachers enables the early identification of students in difficulty.

93. We were pleased to hear that effective channels of communication were in operation between the Faculty and the Deanery, facilitating rapid exchange of information about students and trainees who were experiencing problems.

Preparation for the pre-registration year

94. Currently students informally 'shadow' PRHOs and SHOs during their Year 5 attachments. The Faculty is keen to formalise this process and told us that the introduction of a discrete 'shadowing' period is an agreed objective for the new Year 5. The students we consulted strongly favoured this approach and indicated that they would particularly welcome the opportunity to 'shadow' the PRHO in the post in which they would be employed following graduation. Our views on this matter are offered in paragraph 150 of our report.

Other issues

Student support

95. Since our last visit the Faculty has increased the level of support for students by making the following new appointments:

an Associate Dean for Student Affairs and
Clinical Sub-Deans in each of the two major teaching hospitals.

This means that the following sources of academic and personal support are now available to students:

- The Directors of Studies (DOS) system
- The Associate Dean for Student Affairs
- The Faculty Office
- University support services
- Clinical Sub-Deans
- Teaching staff who may be contacted at any time for advice.

96. The students themselves have also been proactive in creating a network of mutual support. The Medical Students Council has organised an "academic family" system whereby first-year students are befriended and mentored by senior students. This scheme is valued by new students as is the extensive induction programme (reproduced in the document at **Annex K**) arranged by the Faculty. We were pleased to hear that students considered the induction programme an excellent introduction to the study of medicine in the Faculty.

97. All students are allocated to a Director of Studies (DOS) on entry to the University. The role of the DOS is to serve as both an academic and personal guide, enabling students to review their academic strengths and weaknesses and their ideas for career progression and providing help with problems of a personal and confidential nature. However, the student perception of the DOS system is that it is capable of improvement. Though some were fortunate in having a DOS who was approachable, supportive and whom they met regularly, others told us that the level of support provided was variable; some had not yet met their DOS. The Faculty is aware of these problems and reform of the DOS system is underway. We

understand that from the academic year 2000/2001:

the number of DOS will be increased from its current total of 19

the number of students in the care of a DOS will be reduced from 50/60
to 30

students will be allocated the same DOS for all five years of the course
(rather than changing to another DOS at the start of the predominantly
clinical years)

compulsory meetings between DOS and students will be timetabled in Years
1-4.

98. The recently-appointed Associate Dean for Student Affairs is a key figure in the delivery of student support services. Aside from being a DOS, she is on hand to provide advice and guidance on a full range of academic and personal issues, including those referred direct to her from other DOS, administrative staff or the Faculty Office. She chairs the Examination Board for every examination in the curriculum (apart from Finals) and sees individually each student who fails a major assessment. Students on electives are able to contact her via a hotmail link. She has also been instrumental in making remedial arrangements for treating and caring for depressed or psychiatrically disturbed students, having established a network of physicians and psychiatrists for this purpose in hospitals throughout the region. We were told that a report from an 'independent' psychiatrist as well as from the treating psychiatrist is sought in order to determine whether the student is fit to continue on the course. The students we consulted were unanimous in their appreciation of the high level of support provided by the Associate Dean for Student Affairs.

99. Students in Edinburgh are also fortunate to have access to a wide range of support services within the University which offer help with financial problems, accommodation, personal and health issues and advice on the use of computers, study skills and careers. They also have the options of seeking support via the Student Counselling Service or attending the University Health Service, which is staffed by general practitioners with considerable experience of health problems among the student population.

100. To minimise any stress students may experience when transferring to primarily clinical work the Associate Dean for Teaching leads an interactive 'question and answer' session with students at the start of Year 3. Issues covered include communication with patients and teachers, strategies to gain maximum benefit from clinical training, possible stress factors and study skills.

101. Any student considering leaving medicine is interviewed by the Associate Dean for Student Affairs and offered counselling and assistance from the University Careers Service about alternative career paths. We were told that the Faculty has occasionally arranged special short attachments with medical practitioners for such students, so that they can clarify their feelings about a career in medicine.

102. We have noted at paragraph 56 of our report the role played by Clinical Sub-Deans at the two major teaching hospitals in providing communication links between students, clinical teachers and the Faculty. A similar system has been put in place for students undertaking attachments in peripheral hospitals. On each site there is an Adviser to the Dean, a nominated representative who can be contacted by individual students. The Dean and Faculty staff meet annually with these Advisers to share information and to review progress.

103. We congratulate the Faculty on the changes to the student support system introduced since our last visit. These are welcomed by students. We note, however, the variability in practice amongst the different Directors of Studies and the considerable workload that now falls on a single individual, the Associate Dean for Student Affairs. We hope the Faculty will consider how best to distribute the burden more equitably.

Feedback to students

104. When we last visited in 1997 we noted the concerns expressed by students about the level and frequency of feedback during the later years of the course. The Faculty told us that the recently introduced standard forms for assessment of group projects, problem-based learning and work on clinical attachments (reproduced at **Annex J**) will alleviate these concerns by providing more structured feedback on student performance at the end of each module.

105. Students are actively encouraged to discuss their academic progress with their Directors of Studies, who, with course tutors, are prepared to arrange additional informal feedback sessions on request. We understand that Directors of Studies, the Associate Dean for Student Affairs and members of the Medical Teaching Organisation meet annually to co-ordinate and strengthen this process.

106. The students we spoke to were content with the quality of appraisal and feedback they received during most elements of the course but remarked on the variability of feedback on their performance in the different clinical attachments. They welcomed the introduction of structured assessment and feedback forms for the clinical modules, and looked forward eagerly to improvements in the calibre and consistency of feedback once these forms were in widespread use.

Quality control

107. The administrative and committee structure of the curriculum is described in the documentation at **Annex B**.

108. It seemed to us that the Faculty had established sound mechanisms for ensuring the quality of teaching and learning. These included:

- the appointment of Clinical Sub-Deans in the two major teaching hospitals to supervise the quality of teaching and learning activities available to students during their clinical attachments.

- Staff/student liaison groups which meet regularly.

The Clinical Attachment Monitoring Scheme (CAMS). Evaluation forms on all clinical attachments are analysed in the MTO/ACT Evaluation office. The outcomes are made available to attachment organisers, and are reviewed during meetings with teachers and with Trust Teaching Committees (see below). They are also circulated on the University intranet, with comments from students, responses from attachment organisers and details of subsequent action taken.

The Feedback and Evaluation Committee. This is a sub-committee of the Medical Teaching Committee which meets once or twice each term to review systematically all feedback and evaluation data from the undergraduate curriculum, including the CAMS scheme. Problem issues are identified; action plans are defined, minuted and outcomes reviewed in subsequent meetings. As indicated in paragraph 23 of our report, positive feedback for groups or individuals is identified and formally acknowledged.

Trust Teaching Committees. Staff from the three NHS trusts in the Lothian Region meet two to three times a year with senior medical and managerial staff from the Faculty to discuss the scope and quality of clinical teaching.

Annual Course Monitoring. All course or attachment organisers are required by the University to complete a detailed questionnaire each year regarding the organisation, management and evaluation of their courses. The returns are analysed by the Faculty Quality Assurance Officer before a summary report is submitted to the Faculty Quality Assurance Committee and the University Senate.

Areas of good practice

109. *Supervisory structures:* We welcome the decision to review the current organisational system within the Faculty, including a clarification of the role of the MTO in the management of curricular change. We believe that it is essential for one body to have this overarching responsibility. We therefore lend our full support to this review, which should lead to lines of accountability being more clearly defined. We hope that the resulting changes can be introduced in time for the next academic session.

110. *The contribution of students:* We were pleased to learn that students play a full and active part in the development and management of the new curriculum. They spoke enthusiastically of the rapid and positive response of the Faculty to their requests for curricular modification.

111. *Learning resources:* The Faculty has invested heavily in ensuring that its students have access to a range of high quality resources designed to assist their learning. The Medical Education Centre at Western General Hospital is undeniably a substantial asset and we believe that the electronic curriculum is an innovation which has considerable potential to become a powerful educational resource for both student and staff.

112. *Good Medical Practice*: We were impressed by the explicit way that the Faculty had used the tenets of *Good Medical Practice* to inform so much of its teaching and student learning, particularly in the early years of the course.

113. *Communication skills training*: Students spoke appreciatively of the communication skills training which was provided for them. We too were impressed by the range and breadth of the programme. We believe that the Faculty has acted with great wisdom in appointing a director of communication skills training, who is able to co-ordinate and monitor its delivery throughout all five years of the curriculum.

114. *Cardiopulmonary resuscitation*: Students valued the high quality teaching they received in cardiopulmonary resuscitation (CPR) skills, perceiving this to be significant to their professional development.

115. *Public health medicine*: We welcome the commitment to the development of public health as a vertical strand within the curriculum. Its inclusion in the student portfolio, in assessments and in the proposed links with the Lothian Health Board is an innovative way of ensuring that students recognise its significance throughout all five years of the undergraduate course.

116. *The student portfolio*: We were interested to learn of the educational concepts behind the student portfolio and shall watch its further development with interest. In view of the contribution which it will make to the Final examination, it will be important for assessment of the portfolio to be consistent and rigorous.

117. *Induction arrangements*: We share the view of students that the induction programme provides an excellent introduction to the study of medicine in the Faculty.

118. *Student support*: We congratulate the Faculty on the changes to the student support system introduced since our last visit. These are welcomed by students. We noted, however, the variability in practice amongst the different Directors of Studies and the considerable workload that now falls on a single individual, the Associate Dean for Student Affairs. We hope the Faculty will consider how best to distribute the burden more equitably.

Areas for further consideration

119. *Core curriculum*: We believe it would now be helpful to reassess the philosophy and framework of the core curriculum to be delivered over the entire five years of the course, recognising the need to ensure appropriate linkage with the PRHO year.

120. *Preparation for the PRHO year*: The concept of a 'shadowing' attachment undertaken in the post which they will be taking up after graduation was enthusiastically received by students and commanded the full support of teachers.

We encourage the Faculty to press ahead with its plans to introduce a distinct period of PRHO 'shadowing' as soon as possible.

121. *Integration:* We acknowledge the work undertaken by the Faculty following our last report to address the level of vertical integration in the curriculum. Nevertheless, we noted many references in the documentation prepared for our visit to teaching being delivered in terms of specific disciplines. Though we recognise the considerable logistical difficulties involved, we encourage the Faculty to continue its work to strengthen integration, both horizontally and vertically, throughout all five years of the course.

122. *Complementary medicine:* We would encourage the Faculty to review its approach to complementary medicine and to explore ways of providing its students with more opportunity to learn about treatments that do not conform to conventional practice, so that they are as well informed about these as their future patients.

123. *Assessment:* Some students we spoke to did not fully understand the assessment arrangements. Others expressed concerns about the inconsistent approach to assessment taken by teachers during the clinical attachments. We would ask the Faculty to clarify, as soon as possible, its assessment arrangements for the benefit of both students and staff.

124. It appeared to us that considerable reliance was being placed on the viva in the arrangements proposed for the Final examination. Given the wealth of information which the Faculty will have amassed about its students just prior to their graduation, it would be unfortunate if undue influence were to be allocated to their performance in the viva. We invite the Faculty to review its approach.

125. *Feedback to students:* Students were content with the quality of appraisal and feedback they received during most elements of the course but remarked on the variability of feedback on their performance in the different clinical attachments. They welcomed the introduction of structured assessment and feedback forms for the clinical modules. We hope that once these are in widespread use the quality and consistency of feedback will improve.

Conclusion

126. On our return to Edinburgh we were pleased to see that the first two years of the new curriculum had been successfully 'rolled out'. In our view this could not have been managed so effectively without the active involvement of staff and students alike, for which the Faculty deserves praise.

127. We hope that the Faculty will press ahead with its plans for curricular development in the light of the comments we have made and we look forward to receiving a report on progress in a year's time.

Part 2: General Clinical Training

Background information

128. Prior to the visit we were given helpful background information about the arrangements for general clinical training in the region. This included a summary, reproduced at **Annex L**, showing the extent to which the recommendations in *The New Doctor* have been implemented to date.

Form of the visit relating to general clinical training

129. The day began with an overview of general clinical training provision by senior staff from the Faculty of Medicine and the Deanery. We then had discussions with the Pre-Registration Year Committee before meeting chief executives and medical directors from various Trusts in South-Eastern Scotland. After lunch we talked with a group of postgraduate tutors and educational supervisors drawn from different hospitals throughout the region and met a number of PRHOs from a variety of locations and specialties. We concluded by reporting back to the Deanery on our impressions of the day.

Organisation and management of the PRHO year

130. We were told that the region is a net exporter of PRHOs. There are currently 7 NHS Trusts in the region involved in the training of PRHOs.

Supervisory structures

131. Overall responsibility for general clinical training lies with the Faculty of Medicine, but the Postgraduate Dean, assisted by the Pre-Registration Year Committee, takes control of the daily management of the PRHO year. The primary duties of the Postgraduate Dean and the main functions of the Pre-Registration Year Committee are described below:

Postgraduate Dean, Associate Deans and Administrative Officer

Undertake post inspections and prepare reports

Supervise the implementation of the PRHO Posts Matching Scheme

Arrange appraisal and assessment of PRHOs

Collate and scrutinise PRHO assessment of posts

Pre-Registration Year Committee

Approves and re-approves pre-registration house officer posts

Encourages educational developments in the PRHO year

Advises the Deans of all educational matters concerning pre-registration house officers and posts.

132. The Pre-Registration Year Committee meets twice a year under the chairmanship of its convenor, the Postgraduate Dean, and includes among its membership:

the Associate Postgraduate Deans
specialty advisers in medicine and surgery
representatives of hospitals outwith Edinburgh
PRHO representation
student representation.

133. The work of the Deanery is co-ordinated with that of other regions within Scotland through regular meetings of the Scottish postgraduate deans and via the Scottish Council for Postgraduate Medical and Dental Education (SCPMDE).

The approval of posts

134. It falls to the Pre-Registration Year Committee to approve PRHO training posts within the region. The criteria for approval of new posts are based on those set out in *The New Doctor*.

135. The opinions of PRHOs are canvassed by means of confidential questionnaires completed at the end of each post and through enquiries made by the Deanery team on each inspection visit. A copy of the questionnaire recently introduced in the Deanery is at **Annex M**. We look forward to seeing how the PRHOs view their posts once an analysis of the results of the new questionnaires is published.

Communicating the aims and objectives of the PRHO year

136. The Deanery has striven to raise awareness and understanding of the aims and objectives of general clinical training amongst PRHOs, educational supervisors, postgraduate tutors and NHS Trust managers. We were told that:

Two meetings are held at the end of Year 4 of the undergraduate course at which students are given information about the form and content of the PRHO year.

All PRHOs are issued with copies of *The New Doctor* and its recommendations are drawn to the attention of all staff involved in PRHO training.

The aims and objectives of the PRHO year, as defined in *The New Doctor*, are reiterated in the SCPMDE Record of Progress and Assessment booklet, given to PRHOs at the start of their training.

Postgraduate tutors meet regularly with the Postgraduate Dean to discuss and review their responsibilities to PRHOs.

137. However, the majority of trainees to whom we spoke had little knowledge of *Good Medical Practice* and *The New Doctor*. They were thus not fully aware of their professional obligations and had only a partial understanding of the requirements of the PRHO year. We wondered if these were major contributory factors to the negative way in which many PRHOs appeared to regard their relationship with their employing Trust.

138. While we were encouraged that all members of staff we met supported the aims of *The New Doctor*, we noted that few, outwith the Deanery, seemed to have a clear strategy for implementing its recommendations.

The selection of PRHOs

139. In August 2000 the Scottish PRHO Allocation Scheme (SPA) was introduced in the Deanery. This SCPMDE computer matching system enables prospective PRHOs to apply for either:

a single 12 month rotational appointment, or

a pair of 6 month surgical and medical posts, or

a single 6 month medical or surgical post

in Scotland.

140. We understand that the SPA scheme, which was originally designed with UK graduates in mind, is to be opened up to graduates from EEA member states.

141. The Deanery told us that the scheme had run smoothly with 80% of applicants receiving one of their three choices of post. This view was confirmed by the PRHOs with whom we spoke; most had been allocated their first choice of post.

142. Students who are unable to find a post within the region are given support and information to help them identify a post elsewhere.

143. Recent changes to the SPA scheme have enabled young doctors from outwith Scotland to apply for PRHO posts. Local appointment procedures will, no doubt, have to be reviewed to ensure that these comply with equal opportunities legislation. Each applicant to the scheme is currently invited to complete an Equal Opportunities Monitoring Form (reproduced at **Annex N**).

Monitoring the quality of PRHO posts

144. The Deanery assesses the quality of general clinical training through:

confidential questionnaires completed by PRHOs at the end of each post

formal inspection visits by the Deanery team

routine monitoring of posts by postgraduate tutors.

145. We were told that the Deanery makes monitoring visits to inspect PRHO posts in each Trust every one to two years. Educational supervisors and trainees are interviewed during each visit. Where deficiencies in a particular post are identified, these are immediately drawn to the attention of those responsible (including the Trust Chief Executive) and recommendations and a timescale for their resolution agreed. In cases of severe difficulty, an early revisit is arranged by the Deanery team.

146. We were told that in the past approval had been withdrawn from posts in plastic surgery and orthopaedics. We learned that very recently a post in urology at Western General Hospital had been under threat of having its approval withdrawn. However, urgent action by the local Trust had resulted in immediate improvements being made and it had proved unnecessary to remove the post in question.

Linking the PRHO year to the undergraduate course

147. The Deanery is keenly aware of the need to ease the transition from medical student to new doctor. In this respect we noted:

student representation on the Pre-Registration Year Committee

that the Postgraduate Dean is a member of the policy group charged with the task of developing Year 5 of the new undergraduate curriculum. This group also includes a PRHO

the existence of effective channels of communication between the Faculty and the Deanery for exchange of information about students and trainees who are experiencing problems (paragraph 93 of our report). Furthermore, we were told that around the time of graduation the Postgraduate Dean meets the Associate Dean for Student Affairs to identify and to discuss the needs of students who might require additional support in their PRHO year. Further details of this process can be found at paragraph 169 of our report.

148. The pre-registration year is the last year of basic medical education and we support the concept of linking it more closely to the final year of the undergraduate course. In this respect, we were surprised there was little relationship between the assessment scheme proposed for Year 5 and the appraisal systems now being implemented for PRHOs. We invite the Faculty to give further thought to this matter.

Components of a high quality PRHO post

Induction

149. Each Trust offers PRHOs at least one full day's induction and many hospitals have extended the programme to two full days. The content and format of these programmes are discussed during inspection visits and at meetings of postgraduate tutors.

150. In paragraph 94 of our report we describe the current arrangements for PRHO 'shadowing' and the form this might take in future. The concept of a shadowing attachment undertaken in the post which they will be taking up after graduation was enthusiastically received by trainees and commanded the full support of the teachers, supervisors and managers we met in the course of the day. We encourage the Faculty to press ahead with its plans to introduce a distinct period of PRHO 'shadowing' as soon as possible.

Educational opportunities

151. All centres involved in general clinical training offer educational programmes specifically designed for PRHOs. These are organised by postgraduate tutors and, whilst teachers generally decide their content, trainees are able to influence the choice of topic for presentation and discussion. Although the format varies across different hospitals, most sessions take place at lunchtime (with food included) and

comprise a tutorial, symposium or short lecture.

152. Although PRHOs are informed that their attendance at educational sessions is compulsory, uptake is variable at different centres. Many educational supervisors keep a register and we were told that one supervisor had threatened to refuse to 'sign up' as suitable for full registration those PRHOs who failed to attend at least 60% of scheduled sessions. However, this threat had proved unenforceable. One supervisor we spoke to suggested that one reason for the poor uptake was because trainees did not see these sessions as a priority. However, the PRHOs we consulted indicated that they were unable to comply with the requirement to attend the training sessions due to pressure of work. The sessions themselves were perceived to be of high quality and relevant to their professional development but few trainees were given genuine 'bleep-free' time in order to attend these. Many were deterred from attending these sessions by the unacceptable increase in their workload as tasks accumulated in their absence. We recommend that the Deanery addresses this matter without delay.

153. We were disappointed to learn from the PRHOs we spoke to that most were still routinely being asked to undertake too many tasks with little or no educational value. A limited number of nurse practitioners had been appointed in some hospitals to monitor night bleeps and to help in taking blood but this was by no means a common phenomenon. The PRHO perception was that the level of support available to them was poor at most centres, with Dunfermline attracting fewest complaints. Trainees continued to experience particular difficulty in obtaining the results of radiological investigations. The PRHOs conveyed to us a sense of hopelessness about their prospects of effecting change unless they were to disadvantage their patients – which they were clearly reluctant to contemplate.

Educational supervision

154. Each approved PRHO post in the region is allocated an educational supervisor, whose main responsibilities are to oversee the education and training of PRHOs and to act as their mentors. The trainees with whom we spoke all knew and had met their educational supervisors.

155. There is no formal selection process for educational supervisors. Their suitability is assessed by their consultant colleagues who pass their nomination to the postgraduate office for endorsement.

156. The SCPMDE Record of Progress and Assessment requires supervisors to meet 'their' trainees on at least three occasions – at the start of the post, at the mid-point and at the end of placement – to provide advice and feedback on performance. The PRHOs confirmed that these meetings were taking place. Although a few trainees expressed some reservations about the quality of the appraisal they received, most appreciated the regular feedback on their progress which, we learned, often included the views of nursing staff as well as other members of the medical team.

157. Unsatisfactory performance by educational supervisors may be identified through:

enquiries made on the formal inspection visits
comments made on the PRHO questionnaires
routine monitoring by postgraduate tutors.

In such cases, individuals are interviewed and offered advice and training. They face the possibility of being replaced as educational supervisors if no improvement in their performance is forthcoming.

158. The Deanery attempts to meet the training needs of its educational supervisors by running both a series of professional development courses covering a range of educational and managerial skills and discrete programmes in assessment and appraisal techniques. Some of the supervisors we spoke to had attended external programmes such as the training course on assessment and appraisal skills organised by the Royal College of Physicians of Edinburgh.

159. The Postgraduate Dean recognises the importance of ensuring that educational supervisors are trained to a consistently high standard so that they are fully equipped to carry out the key tasks which they have been allocated. He told us that the Deanery is moving to a position whereby all educational supervisors will be required to attend an approved training programme as a condition of their appointment.

Clinical training and supervision

160. The Deanery uses its inspection programme and feedback from the PRHO questionnaires to satisfy itself that core generic clinical training, as defined in the SCPMDE Record of Progress Assessment, is being delivered. Trainees were generally appreciative of their clinical training but considered that their learning experience would be enriched if they had more opportunity to follow through the treatment of patients they had admitted.

161. PRHOs spoke positively about the level of clinical supervision and support they received from their consultants, trainers and the majority of other doctors with whom they worked. None of those we asked had ever been placed in a position where they were unable to seek direct support or guidance from a senior colleague.

Monitoring the progress of PRHOs

162. PRHO performance is monitored using the protocols set down in the SCPMDE Record of Progress and Assessment. The educational supervisor takes the lead in this process but all members of the clinical team informally assess trainees' progress on a daily basis. As we have mentioned earlier in our report, the educational supervisor is required to meet formally with PRHOs three times during their post in order to provide feedback on their performance. At the final interview of the placement the overall progress of the trainee is discussed and measured against the list of skills and competencies recorded in the Record of Progress and Assessment. The categories include general professional, clinical, communication, procedural and practical skills.

163. The Deanery believes that the three-stage appraisal process facilitates early

identification of unsatisfactory PRHO performance. Any deficiencies are initially discussed with the trainee by the educational supervisor and other consultants in the unit and remedial action is agreed. If no improvement is noted or more serious problems, such as unsatisfactory clinical performance, are identified, the trainee is interviewed by the postgraduate tutor and/or the Postgraduate Dean and warned that unless these deficiencies are addressed the Deanery will refuse to 'sign up' the PRHO as being suitable for full registration. In cases of short-term absence on sick leave the Deanery adheres to the GMC guidance circulated to medical schools in January 2000. In the event of a PRHO missing a substantial amount of training through ill health, the trainee is counselled and an appropriate action plan agreed which takes account of the nature of the health problem and the performance of the PRHO thus far.

164. We were pleased to learn that the fitness to practise arrangements recently introduced by the Faculty at undergraduate level (referred to at paragraph 91 of our report) will be extended to cover the PRHO year. This approach will include the establishment of a common appeals mechanism for students and PRHOs and will, we believe, strengthen the existing links between the undergraduate course and the PRHO year.

Professional development and personal well-being

Careers advice

165. Early careers advice is offered to fourth year students at an annual Careers Fair organised jointly by staff and students. Following a series of introductory talks, students have the opportunity to discuss, on an individual basis, possible career paths with specialty advisers in medicine. Representatives from the Royal Colleges and the Armed Forces are also invited to attend.

166. During the PRHO year, educational supervisors are encouraged to discuss career development with trainees at both the mid-point and end-of-placement appraisal interviews.

Support for PRHOs

167. For advice on the practical and educational aspects of the PRHO year, trainees are invited to approach their educational supervisor, other members of the clinical team or the postgraduate tutor. The Postgraduate Dean is also regarded as a source of help and advice and makes himself available to PRHOs in this connection. One trainee told us that she had been to consult him as her first port of call when she needed guidance over a particular issue. However, the general perception among the PRHOs we met was that they had successfully developed a strong network of peer support which served them well.

168. Each Trust provides occupational health services for its PRHOs and we were interested to learn that within the Deanery there is a support group which meets, we understand, every two months.

169. Earlier in our report we alluded to the meeting which takes place around the time of graduation between the Postgraduate Dean and the Associate Dean for

Student Affairs. Its purpose is to identify students who might require additional support in their PRHO year. We learned that this year two individuals had been detected through this process. The Postgraduate Dean had interviewed both, obtaining their consent to speak to their prospective educational supervisors to explain the background history in each case and to alert them to the possible need for increased levels of care and support. We commend this practice.

Accommodation, catering and personal safety

170. The Deanery monitors the standard of accommodation and catering and ensures the safety of its PRHOs through:

formal inspection visits

feedback from PRHO questionnaires.

171. Any unsatisfactory comments or findings are immediately brought to the notice of the Trust management in question and swift remedial action is sought. We were told that if trainees were placed persistently at risk because of the failure of a Trust to address the matter of security effectively, the Deanery would regard this as a serious breach of guidelines which could lead it to withdraw approval from posts at that Trust.

172. PRHOs were generally satisfied with the arrangements made for their accommodation, catering and personal safety, though one trainee told us that one of her clinics was located outwith hospital grounds and no escort was provided for her at night. Although Trust managers and chief executives told us that 'out of hours' catering was at best variable across the region, this did not appear to be a live issue for trainees.

173. PRHOs are able to raise issues affecting their working conditions at liaison committees established within each Trust.

Contractual matters

174. The Postgraduate Dean told us that 95% of PRHOs in the region were working in excess of their contracted hours, though this figure was disputed by some Trust chief executives. Certainly the vast majority of PRHOs with whom we spoke considered that they were working longer hours than those for which they had been contracted under the requirements of the New Deal. Whilst we are sensitive to the difficulty of balancing service commitments with the educational needs of trainees, PRHOs are doctors in training whose educational needs should be met. We hope that the Deanery will continue to work closely with Trusts to secure swift implementation of New Deal targets on junior doctors' hours.

175. We were concerned to learn that trainees in many different Trusts were continuing to seek consent from patients to carry out major procedures about which they had little or no prior knowledge. They were therefore unable to inform the patient about any potential risks involved in the treatment. The Faculty and the Deanery will wish to take appropriate action to ensure that all medical staff are fully informed about issues of consent, and conform with GMC guidance on this matter.

New PRHO rotations

176. The new rotations in general practice, and in other disciplines such as anaesthetics, paediatrics and liaison psychiatry, have proved extremely popular with PRHOs who spoke enthusiastically to us of the high quality teaching, feedback and support available to them. Indeed these trainees had difficulty in identifying with the concerns expressed by their peers in the more established PRHO posts.

Areas of good practice

177. *Linking the PRHO year to the undergraduate course:* We fully support the concept of linking the PRHO year more closely to the final year of the undergraduate course and applaud the steps taken by both the Faculty and the Deanery towards this end. For example, we were pleased to learn that the fitness to practise arrangements recently introduced by the Faculty at undergraduate level will be extended to cover the PRHO year. This approach will include the establishment of a common appeals mechanism for students and PRHOs and will, we believe, strengthen the existing links between the undergraduate course and the PRHO year.

178. The pre-registration year is the last year of basic medical education and we support the concept of linking it more closely to the final year of the undergraduate course. In this respect, we were surprised there was little relationship between the assessment scheme proposed for Year 5 and the appraisal systems now being implemented for PRHOs. We invite the Faculty to give further thought to this matter.

179. *Educational supervision:* We support the aim of changing the culture from that in which all consultants have a house officer to one in which some consultants are recognised as PRHO trainers. All the trainees we spoke to knew and had met their educational supervisor.

180. *Clinical supervision:* We were encouraged by the positive way in which PRHOs spoke about the level of clinical supervision and support they received from their consultants, trainers and the majority of other doctors with whom they worked. None of those we asked had ever been placed in a position where they were unable to seek direct support or guidance from a senior colleague.

181. *Support for PRHOS:* We commend the robust links which have been established between Faculty and Deanery to identify students who might require additional support in their PRHO year (paragraph 169).

182. *New PRHO rotations:* The indications are that the new rotations in general practice, and in other disciplines such as anaesthetics, paediatrics and liaison psychiatry, are proving successful. We were particularly impressed by the enthusiasm these posts had engendered in trainees.

Areas for further consideration

183. *Communication:* The majority of the trainees we met had little knowledge of *Good Medical Practice* and *The New Doctor*. They were thus not fully aware of their

professional obligations and had only a partial understanding of the requirements of the PRHO year. We recommend that the Deanery addresses this matter urgently.

184. *Implementation of The New Doctor:* While we were encouraged that all members of staff we spoke to supported the aims of *The New Doctor*, we noted that few, outwith the Deanery, seemed to have a clear strategy for implementing its recommendations. It appeared to us that most of the major recommendations had yet to be implemented. For example, tasks of no educational value were still being undertaken by most PRHOs to whom we spoke. Requests for radiological investigations remained a common problem and only a minority of trainees had benefited from improved links with support staff.

185. *Selection of PRHOs:* Recent changes to the SPA scheme have enabled young doctors from outwith Scotland to apply for PRHO posts. Local appointment procedures will, no doubt, have to be reviewed to ensure that these comply with equal opportunities legislation.

186. *Educational sessions:* The Deanery is to be congratulated for ensuring that all centres offer formal educational programmes which are perceived by PRHOs to be of high quality and relevant to their professional development. Attendance has been variable, largely, we were told, due to pressure of work and the lack of genuine 'bleep-free' time accorded to most trainees. We ask the Deanery and Trusts to take swift action to ensure that PRHOs can attend scheduled educational sessions without an appreciable increase in their workload.

187. *Inappropriate tasks:* We were disappointed to learn from the PRHOs we spoke to that most were still routinely being asked to undertake too many tasks with little or no educational value. The trainees conveyed to us a sense of hopelessness about their prospects of effecting change unless they were to disadvantage their patients – which they were clearly reluctant to contemplate. We recommend that the Deanery seeks rapid solutions to this problem by working closely with PRHOs and Trust managers.

188. *Contractual matters:* The vast majority of PRHOs we met considered that they were working longer hours than those for which they had been contracted under the requirements of the New Deal. Whilst we are sensitive to the difficulty of balancing service commitments with the educational needs of trainees, PRHOs are doctors in training whose educational needs should be met. We hope that the Deanery will continue to press for swift implementation of New Deal targets on junior doctors' hours.

189. We were concerned to learn that trainees in many different trusts were continuing to seek consent from patients to carry out major procedures about which they had little or no prior knowledge. They were therefore unable to inform the patient about any potential risks involved in the treatment. We urge the Faculty and the Deanery to take appropriate action to ensure that all medical staff are fully informed about issues of consent, and conform with GMC guidance on this matter.

Conclusion

190. We were impressed by the strategic direction and commitment shown by the

newly-appointed Postgraduate Dean and by the staff of the Deanery. We hope that they will continue to secure the support of clinical colleagues during this time of considerable change in South-Eastern Scotland.

191. We look forward to hearing in due course how the Deanery intends to resolve the issues identified in our report and how its other initiatives are progressing.