

# **Quality Assurance of Basic Medical Education**

Report on Imperial College London,  
School of Medicine

December 2008

**General  
Medical  
Council**

Regulating doctors  
Ensuring good medical practice

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## The GMC's role in medical education

1. The Education Committee of the General Medical Council (GMC) sets and monitors standards in medical education. The standards for undergraduate medical education are set out in the publication *Tomorrow's Doctors*.
2. In order to ensure that UK medical schools maintain these standards the GMC runs a quality assurance programme, which involves regular assessments and visits to schools. This programme is called Quality Assurance of Basic Medical Education (QABME) and is carried out on behalf of the GMC Education Committee by a team of medical and educational professionals, student representatives and lay members.
3. The team makes determinations as to whether these schools are meeting the standards in *Tomorrow's Doctors* after analysing extensive school documentation and completing a range of quality assurance activities at the School and partner institutions. The determinations in this report have been endorsed by the GMC Education Committee.

## Introduction

4. This is the final report to the Education Committee of the General Medical Council on the quality assurance programme for Imperial College London, School of Medicine for 2007/08. In the main, this report refers to Imperial College London, School of Medicine as 'the School'.
5. The School was established in 1995 when the medical school at St Mary's Hospital, Imperial College School of Science, Technology and Medicine and the National Heart and Lung Institute joined. Charing Cross and Westminster Medical School and the Royal Postgraduate Medical School merged into the college in 1997 to form the current School of Medicine.
6. Imperial College Healthcare NHS Trust and the UK's first Academic Health Science Centre (AHSC) were formed on 1 October 2007. The AHSC aims to formally integrate the management of healthcare services with teaching and research.
7. The School offers a six year undergraduate course with an integrated BSc during Year 4, awarding a Bachelor of Medicine and Bachelor of Surgery (MBBS) and a Bachelor of Science (BSc). A number of students who have successfully completed pre-clinical training at Oxford or Cambridge enter directly into Year 3 and some medical students from other Institutions complete an intercalated BSc where there is capacity. The School is introducing a Graduate Entry Programme (GEP) taking its first cohort of 50 students in 2008/09, in which students will complete Years 1 and 2 over one year and are exempt from the BSc year, in order to be awarded an MBBS after four years. The proposal for the GEP was approved by the Education Committee in March 2007.
8. The School has around 2000 undergraduate students and teaching is delivered across a number of sites, including more than 12 hospital sites across North West London, further peripheral hospitals and over 400 associated general practices.
9. The Privy Council agreed to add the School to the Medical Act 1983 on 9 April 2008 and from 14 May 2008 it can award UK Primary Medical Qualifications independently of the University of London.
10. The GMC's last visit was a follow-up visit in 2001 to consider the progress made in implementing recommendations from the GMC's report in 2000. Areas of review at that time included integration of clinical and basic sciences, development of a policy on student selected components (SSCs), inconsistencies in assessment procedures and variability in the standard of clinical teaching.
11. The School's curriculum has four themes running over Year 1: foundations of clinical practice; life cycle and regulatory systems; life support systems; and molecules, cells and disease. These themes continue into Year 2 in addition to the integrated body function and dysfunction theme. The patient contact course in Year 1 involves contact with a general practitioner and there is a four week introductory hospital placement in Year 2. The majority of the first two years is lecture based.

12. In Year 3, there is a six week clinical attachment, two ten week clinical attachments and a series of e-lectures and problem based learning. There is also a six week introductory course to each student's chosen BSc.
13. Year 4 of the course is a modular BSc year with three taught modules and either a specialist course comprising a taught element and mini project, or a double module, comprising a BSc project.
14. Year 5 consists of a four week pathology block and five nine week rotations in the following specialties: obstetrics and gynaecology; paediatrics; psychiatry and oncology; musculoskeletal and dermatology; and genitourinary medicine, general practice and neurology.
15. Year 6 of the course consists of an eight week elective period and seven three week clinical attachments in emergency medicine; general practice; cardiology; radiology; ear, nose and throat; ophthalmology; and renal. There are two professional work experience attachments in medicine and in surgery, a practical medicine course, and a specialty choice module.
16. The curriculum has been reviewed twice since the School's inception in 1997 and is under review again this year. The recommendations from the curriculum review are still being implemented.

### **The QABME team**

17. The visiting team members appointed by the GMC Education Committee to undertake the quality assurance visits were:

Professor Sam Leinster (Team Leader)  
Dr Martin Talbot (Deputy Team Leader)  
Professor John Ashton  
Dr Susan Burge  
Professor Richard Hays  
Mr James Read  
Ms Suzanne Shale  
Ms Maria Slade  
Dr Chris Stephens  
Dr Niten Vig  
Professor Olwyn Westwood

18. Louise Wheaton (GMC Education Quality Officer) and Kirsty White (QA Programme Manager) supported the team.

## **Our programme of visits in 2007/08**

19. The visiting team conducted nine quality assurance visits on: 13 November 2007, 10 December 2007, 30-31 January 2008, 20-21 May 2008, 3 June 2008, 11 June 2008, 13 June 2008, 4 July 2008 and 11 July 2008.

20. The findings of the visiting team have been reached by reviewing documentary evidence provided by the School and undertaking the following activities:

- a. Meetings with assessment and curriculum management, internal quality assurance, public health, student support, student selection and student conduct staff, from the School.
- b. Observation of teaching sessions and site visits to central and peripheral GP practices and to a range of NHS Trusts.
- c. Discussions with students.
- d. Discussions with teachers, including general practitioners and clinical consultants.
- e. Discussions with Foundation Year 1 (F1) doctors and their supervisors.
- f. Observation of Practical Assessment of Clinical Skills (PACES) examinations.
- g. Observation of the Year 6 Examination Board.

## The report

### Summary of key findings

21. Subject to the requirements in paragraph 23, the School's MBBS programme meets the standards of *Tomorrow's Doctors* in accordance with Section 5(3) of the Medical Act 1983.

22. Where there are requirements, the School is requested to respond to the requirements with timelines for action within the 28 day right of reply to the report.

### Requirements

23. The School is required to:

- a. Implement the Graduate Entry Programme (GEP) in accordance with proposals approved by the GMC's Education Committee<sup>1</sup>.
- b. Ensure all students demonstrate competence in life support skills beyond basic life support (see paragraph 36).
- c. Complete the current curriculum review and provide a clear programme of implementation thereafter. The School must ensure that the revised curriculum meets the requirements set by *Tomorrow's Doctors* and the needs of F1 doctors, while decreasing the overall burden of the curriculum and prioritising the recommendations in paragraph 25.
- d. Revise the assessment strategy in order to provide a framework of both summative and formative assessment congruent with the outcomes of the curriculum review. The new assessment strategy must test the breadth and depth of knowledge, skills and behaviour identified in the curriculum review (see paragraphs 35, 86-89, 93, 97).
- e. Improve the reliability and validity of the clinical assessment including both the in-course assessment and the clinical examinations as a matter of urgency (see paragraphs 89, 91-92, 97).

24. The School is required to demonstrate that they have met the requirements in paragraph 23b to 23e by providing documentation in July 2009 and will be subject to a follow up visit from the QABME team thereafter.

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<sup>1</sup> The Schools proposal for the GEP was approved by the Education Committee of the GMC in March 2007. As it had not yet commenced it was not considered within this QABME visit cycle (see paragraph 10).

## Recommendations

25. To enhance the quality of the School's MBBS programme, we have identified the following recommendations. With regard to the curriculum review the School should:

- a. Continue its efforts to identify more protected time for reflection and consolidation of learning within the formal timetable (see paragraph 31).
- b. Develop strategies to ensure further integration of basic and clinical sciences within the curriculum, including appointing theme heads (see paragraphs 33, 65).
- c. Give further consideration to the learning and assessment of ethics and law, with particular attention given to application of ethical competencies (see paragraphs 45-46).
- d. Give further consideration to improving the integration of social and behavioural sciences within the course (see paragraph 49).
- e. Review the content of teaching sessions to ensure learning outcomes are being delivered at a level appropriate for undergraduate medical students (see paragraph 62).
- f. Make greater use of opportunities to involve students in team-working with professions allied to healthcare (see paragraph 64).

26. With regard to the assessment strategy the School should:

- a. Review the assessment of prescribing skills and life support competencies (see paragraphs 35-36).
- b. Review the provisions for formative assessment or other feedback mechanisms in clinical years (see paragraphs 84 and 102-104).
- c. Enhance the clinical relevance of basic sciences written examinations in Years 1 and 2 (see paragraphs 86, 90).
- d. Rationalise and reduce the burden of written examinations in favour of testing practical skills and clinical application of knowledge (see paragraph 87).
- e. Provide ongoing, formal examiner training for the clinical examinations, including PACES and the in-course assessments to ensure consistency of marking (see paragraphs 92, 96, 98).

27. We recommend that the School invests in educational and assessment expertise to enable it to meet the requirements in paragraph 23 (see paragraphs 53, 74).

## Areas of innovation and good practice

28. We commend the School on the following areas of innovation and good practice:

- a. The involvement of practising NHS clinicians in ongoing curriculum development and in the teaching of basic sciences in Years 1 and 2 (see paragraphs 33, 55, 65).
- b. The use of peer teaching in communication skills training (see paragraph 38).
- c. The BSc in management as an opportunity for some students to study the management of the NHS in detail (see paragraph 42).
- d. The focus groups organised by Directors of Clinical Studies (DCS) for students to evaluate their experiences at the end of each attachment and the resulting action (see paragraph 61).
- e. The provision of some excellent physical learning resources, including lecture theatres, tutorial rooms, libraries, laboratories, social and IT facilities (see paragraph 69).
- f. Development of e-learning resources, especially the provision of online lectures and podcasts (see paragraph 70).
- g. The strong relationship between the School and the Student Union (see paragraph 80).

## **Curricular Outcomes**

The principles of professional practice

29. We noted the professionalism of senior students and F1 doctors during the course of our visits. The Foundations of Clinical Practice theme runs through the first two years of the course addressing professionalism and patient safety. We are pleased with the involvement of primary care clinicians from an early stage in the course.

Outcomes

30. We are satisfied that the School's outcomes are based on the outcomes set in *Tomorrow's Doctors*. We found that Imperial graduates felt prepared for F1 and their educational supervisors confirmed this.

## **Curricular content, structure and delivery**

Content

31. We are satisfied that the curriculum is intellectually challenging and places a greater demand on students as they progress. However, we found the curriculum to be overcrowded, particularly in Years 1 and 2 of the course, and identified a lack of time for reflection. This was confirmed by students and F1 doctors. We recommend the School continue its efforts to identify more protected time for reflection and consolidation of learning.

32. We support the School's plans to use the learning outcomes project, which identified where particular themes were covered through the course, as part of the curriculum review.

*The scientific basis of practice*

33. We found that the content in Years 1 and 2 provided students with a high level of knowledge of basic sciences. This was confirmed by students, who appreciated the grounding in basic sciences before progressing to the clinical years, despite the intensity of teaching. We commend the use of clinicians to teach basic science and encourage the School with its plans to further integrate basic and clinical sciences throughout the course.

34. However, we have some concerns about the limited amount of social and behavioural science within the curriculum (see paragraph 49).

## *Treatment*

35. The School recognise that prescribing training could be strengthened within the undergraduate curriculum. This was confirmed in interviews with F1 doctors and their educational supervisors. We are concerned that students are not assessed on prescribing. However, the School has already identified this need and plans to introduce prescribing to examinations in Years 5 and 6. As part of the revision of the assessment strategy, we require the School to implement these plans for its 2008/09 examinations.

36. All students have the opportunity to use the critical illness simulator with a timetabled session at Chelsea and Westminster Hospital as part of the emergency medicine attachment. We are concerned, however, that not all students receive training in managing resuscitation beyond basic life support and F1 doctors reported that not all Year 6 students had this signed off. We require the School to review the delivery of such teaching to ensure all students demonstrate competence in life support skills beyond basic life support skills.

## *Clinical and practical skills*

37. We are satisfied that the necessary clinical and practical skills are taught, despite some variability in the clinical teaching received by students across sites. The majority of skills are assessed using logbooks, however we have concerns about inappropriate signing off of some logbooks (see paragraph 91) and the reliability and validity of clinical examinations (see paragraph 88). We note that the School plans to introduce prescribing into final examinations.

## *Communication skills*

38. We are satisfied that communication skills are taught and assessed appropriately throughout the course. We observed a communication skills session for Year 1 and 2 students which we commended. F1 doctors and educational supervisors confirmed our findings, reporting that graduates were well prepared for F1 and able to communicate clearly and effectively with patients, relatives and colleagues.

## *Teaching skills*

39. We found that students recognise their obligation to teach colleagues, with peer teaching in Year 3 of the course. An SSC in teaching skills is available to a small number of students.

40. We found that students can identify their own learning needs and are proactive in their approach to learning. Interviews with students and F1 doctors confirmed this.

### *General skills*

41. We are satisfied that graduates are able to perform general tasks such as time management and problem solving. This was confirmed by educational supervisors. F1 doctors considered the professional work experience and BSc year particularly useful in preparation for practice.

### *The working environment*

42. The recent introduction of joint teaching with the Tanaka Business School gives students an introduction into health service management and its drivers. We commend the BSc in management as a good opportunity for a few students to study the management of the NHS in detail.

43. During the observation of the Year 6 PACES we found that the majority of students took a patient centred approach.

44. All students have the opportunity to practice clinical audit during their Year 6 general practice attachment. The importance of audit is taught in the Year 6 practical medicine course. This was confirmed by interviews with students and general practitioners associated with the School.

### *Medico-legal and ethical issues*

45. We support the School in its plans to integrate ethics and law within the curriculum. The School found engaging students with ethics to be a challenge and recently introduced small group tutorials in response to student evaluation. We found the Year 2 course to be dense and built around complex problems involving both legal and ethical difficulties, at the expense of the opportunity to reflect on ethical problems more common to undergraduate and F1 experiences. This could make it difficult for students to transfer their learning into clinical practice. However, students spoke positively about the revised delivery of ethics and law teaching.

46. We note the commitment of the lead on ethics teaching, the desire to engage clinicians and the enthusiasm of clinicians who have volunteered. However, the School had no academic medico-legal posts and is wholly reliant upon clinical post holders to develop, plan and deliver the medico-legal curriculum. We recommend that further consideration be given to the ethics and law course, with particular attention given to the basic application of knowledge.

### *Disability and rehabilitation*

47. We found that disability and rehabilitation was addressed within medical sociology and the patient contact course in Years 1 and 2. However, as we have concerns about the levels of social and behavioural sciences (see paragraph 49) this area could be strengthened.

### *The health of the public*

48. We found that the core elements of public health teaching include clinical epidemiology and academic public health. There was evidence of students being exposed to public health practice, with teaching on the delivery of public health in terms of modern practice. This was confirmed by speaking to public health staff and students.

### *The individual in society*

49. We have some concerns about the low levels of social and behavioural sciences within the curriculum, with five sociology sessions in Year 1 and some aspects of psychology covered in the neurosciences systems course. Students confirmed this as an issue. We recommend the School to further develop this and place a greater emphasis on the underlying principles of sociology and psychology on the practice of medicine.

50. The diverse nature of patients involved in the School's teaching is noticeable and students spoke positively of the exposure to a wide range of patients and conditions. However, a theoretical framework to inform practice would be useful.

### Structure

51. The School has the appropriate balance of core curriculum and SSCs as required by *Tomorrow's Doctors*. The bulk of teaching in Years 1, 2, 3, 5 and 6 is core with some SSCs found in the Year 3 foundation course and the Year 6 elective and specialty choice module, but the majority is concentrated in the Year 4 BSc.

52. We found that the BSc year develops a critical facility and eagerness in students to evaluate their medical practice in years to come. Clinical teachers recognised the benefit of the BSc year and noticed the maturity students gained in the transition from Year 3 to Year 5.

### Delivering the curriculum

#### *Supervisory structures*

53. We found the supervisory structures to involve clear lines of authority and responsibility. The individuals involved have an appropriate range of expertise and knowledge. However, this could be enhanced with further medical education expertise embedded in the curriculum and assessment management structures of the School. We are not confident that this can be provided by the Centre for Educational Development as this services all disciplines associated with the College. Clear governance structures are in place to manage the GEP with appropriate links back to the six year course, and a final common pathway through the School's Education Committee.

54. We are pleased with the leadership in the central academic management team and are confident that the School's quality management structures are robust. The School is self-aware and already has plans in place to address many of the issues identified during the review. The School positively engaged with the review, taking an open and reflective approach.

55. We commend the involvement of practising NHS clinicians in ongoing curriculum development, with regular meetings between the School and DCS and annual workshops for general practitioners associated with the School.

56. Students are represented appropriately on Undergraduate Medicine Committees and through the Student Union President.

### *Teaching and learning*

57. We met with many committed and able teachers who provide excellent role models for students.

58. The communication channels between the School and those involved in the delivery of teaching work well. This was confirmed by interviews with peripheral GPs and clinical teachers associated with the School.

59. Imperial College has a Centre for Educational Development which provides free training opportunities for its staff and NHS tutors who teach medical students. In addition to these opportunities, general practitioners new to teaching attend a compulsory 2-day elementary teaching course.

60. We found variability in student clinical learning experience owing to the large number of sites used to deliver teaching. This was confirmed by students and clinical teachers. However, we found that overall, students receive core teaching and equivalent experience across sites.

61. The School provides regular opportunities for student evaluation and monitoring through student online evaluation but the response rate from students is low. There are also two staff-student liaison groups for Years 1, 2 and 4 and Years 3, 5 and 6 respectively, which have meetings every term chaired by the Student Union President. This is supplemented by annual governance and educational monitoring visits (GEMV) to all teaching sites, except peripheral GP placements. We commend the focus groups arranged by DCS for students to evaluate their experiences directly at the end of each attachment. The School demonstrated the effective use of these mechanisms to monitor the quality of teaching and address any issues arising.

62. We are satisfied with the range of teaching and learning opportunities available, although note that the balance of teaching was in favour of large groups, with some opportunities for small group sessions and problem based learning. Students spoke positively about the lecture base as a good grounding for clinical years. However, students reported that academic lecturers sometimes targeted their lectures at a higher level than required. The School should ensure that learning

outcomes are being delivered at a level appropriate to undergraduate medical students.

63. The standard of teaching in the sessions observed across a number of teaching sites was satisfactory. The introductory clinical course in Year 2 was well received by students and useful in preparation for their transition to clinical teaching in Year 3.

64. We recognise the challenges the School faces in providing opportunities for students to work and learn with other health and social care professionals. F1 doctors interviewed confirmed that inter-professional learning could be improved and noted missed opportunities to learn with other professionals, one example being working with physiotherapists during the orthopaedics rotation. The School should continue its efforts to make greater use of opportunities where students can learn with qualified practitioners and students in professions allied to healthcare.

65. We commend the involvement of clinicians who are invited to teach basic sciences in Years 1 and 2. However there is scope for increased collaboration between basic scientists and clinicians to ensure further integration of basic and clinical sciences throughout the curriculum. We welcome the School's plans to appoint vertical theme heads.

66. We found the School's clinical education to reflect adequately the changing patterns of healthcare and all students receive experience in central hospitals, district general hospitals, general practices and community medical services.

67. We are satisfied that students have the opportunity to interact with people from a range of social, cultural and ethnic backgrounds. These opportunities stem from the variety of placements available and the diversity of people in London. However, this could be improved with further exposure to the relevant underlying behavioural and social science theory.

68. Students have the opportunity to complete professional work experience in Year 6 with one attachment in medicine and one in surgery. We identified a conflict between the timing of the professional work experience placements and preparation for final examinations. F1 doctors and their educational supervisors confirmed that further shadowing would be useful. The School is considering options to improve the transition from Year 6 to F1.

#### *Learning resources and facilities*

69. Overall, we found the following facilities to be excellent: lecture theatres, tutorial rooms, libraries, laboratories, social and IT facilities. The provision of clinical skills laboratories could be improved. The School monitors the effectiveness of its resources during the annual GEMV visits and via student evaluation.

70. The School's website is a good resource for providing information and guidance to students. We commend the developments of e-learning resources, in

particular the online lectures and podcasts. Students spoke positively about the e-learning resources and confirmed our findings.

71. We note the need for continued evaluation of the utility of these e-learning tools which should complement rather than replace contact with tutors, patients and peers. Care should be taken to ensure that e-learning does not lead to a greater overload of curricular content.

72. We found the high fidelity simulation suites to work well. Interviews with F1 doctors indicated that not all students took up the opportunity to use these facilities and we encourage the School to continue to monitor student attendance closely.

73. We identified variability in the allocation of teaching in NHS job plans for clinical teachers. This was confirmed as an ongoing issue by DCS due to the pressures on service delivery and focus on patient care in Trusts. Specific time for undergraduate teaching should be recognised in the job plans of clinical teachers.

74. The leadership of the School has made significant progress in reviewing and revising the existing curriculum in challenging circumstances and within the scope of the human academic resources available to it. We recommend that further consideration be given to expanding the quantity and range of learning and teaching expertise available.

75. We noted the Academic Health Science Centre as an exciting new development and we look forward to seeing medical education develop in parallel with research.

#### *Student selection*

76. The School follows identified selection procedures and the information provided to applicants in relation to these was adequate. Appropriate measures are in place for disabled candidates. However, variability exists in the composition of panel membership which could be addressed.

77. We acknowledge that the School's widening participation programme, a premedical foundation course in association with Thames Valley University, is in its infancy and encourage the School to identify its vision and plans for the future.

#### *Student support, guidance and feedback*

78. Students have appropriate support for their academic and general welfare needs, with clear information provided to students. Students have a personal tutor for the first two years of the course and transfer to a clinical tutor for the remainder. Our findings were confirmed by students and the School reviewed the personal tutor system and found it to work well overall with challenges being appropriately addressed.

79. The 'mums and dads' scheme for Year 1 students and the 'brothers and sisters' scheme for students entering directly into Year 3 are both effective mechanisms for peer support.

80. We commend the strong channels of communication between the School and the Student Union, with regular meetings between the Student Union President and senior members of the school management team to discuss student welfare issues. We encourage the School to be aware of the potential for perceived breach of confidentiality.

81. The School identified possible challenges providing support to GEP students due to the different nature of problems they may face and the additional support they may require. The School may wish to consider providing specific training to personal tutors involved with graduate entry students.

82. The School gives advanced consideration to placement allocation for students with difficulties and informs their allocated site of the nature of their problem. We found this to be an effective method to ensure students are adequately supported and the DCS and teaching coordinators appreciated the advanced warning.

83. We are satisfied that students receive a sufficient level of guidance in year and course guides and students were aware of how their performance would be assessed. Students confirmed that the School's policy on cheating and plagiarism was accessible.

84. We found feedback on student progress to be variable. This was confirmed by students. The School is aware of this and working to improve feedback. We identified a lack of formative assessment in the later years of the course and the School should continue to look at ways to improve feedback to students.

85. Students have clinical logbooks and personal portfolios to record their clinical learning. The utility of the logbooks was reported to be dependent on the consultant teachers.

## **Assessing student performance and competence**

### The principles of assessment

86. The assessment load in the first two years is very heavy and more could be done to integrate a clinical relevance into the mainly biomedical science assessments during the first two years of the course. The School is aware that integration of clinical and basic sciences could be improved and we support the School's plans to use the learning outcomes project within its curriculum review to facilitate assessment blueprinting.

87. We note the high burden of summative assessment for students, with a heavy written examination schedule and comparatively little formative assessment. We found the assessment of practical skills to be limited across all years of the course.

We require the School to revise its assessment strategy to test the breadth and depth of knowledge, skills and behaviour identified in the curriculum review. This should include rationalising and reducing the burden of written examinations in favour of longitudinal testing of practical and clinical skills.

88. The School has appropriate mechanisms in place to set standards for the written examination papers. We encourage the School to develop more robust standard setting procedures for clinical assessment.

89. Overall, we are satisfied that the summative, written assessments cover the curriculum and are reliable. We have concerns about the reliability of the Practical Assessment of Clinical Examination Skills (PACES) with variability in the approaches taken by examiners (see paragraph 96), generous compensation procedures across stations (see paragraph 97), the low number of stations, with only four stations in Year 5 and 12 stations (six in medicine and six in surgery) in Year 6, and total testing time. The School has self-identified the low reliability of the Year 5 PACES. We require the School to address these issues.

#### Assessment procedures

90. The School identified variation in assessment blueprinting methods between different years of the course. We recognise that the learning outcomes project will facilitate assessment blueprinting and further integration of clinical and basic sciences in assessment.

91. We found the marking of in-course assessments to be variable. This was confirmed by students, DCS and educational supervisors. The School identified this as an issue and DCS, with good reason, now have the power to override decisions made by consultants. The logbook sign off is now completed after students have evaluated the attachment to avoid marks received by students influencing the evaluation of the attachment.

92. Educational supervisors, students and F1 doctors confirmed that logbooks were sometimes signed off without the skills being assessed. There was also variability in the checking of logbooks. The School must take action to improve the reliability and validity of in-course assessments. As part of this, the School should re-evaluate the guidance provided to teachers signing off logbooks.

93. We support the intention of using PACES to assess integration of skills rather than component skills. However, after observing the examinations we suggest that a more systematic approach to this assessment is needed to ensure that all students are assessed on the core clinical skills required to become F1 doctors.

94. We found the examinations to be well organised and efficiently run. The stations provided realistic scenarios. The simulated patients used in Year 5 were well trained and delivered a consistent performance.

95. The guidance provided to students in the Year 5 and 6 PACES was appropriate and effective.

96. We found the anchor statements provided to examiners to be an effective method to indicate how performance should be rewarded. However, we identified variability in the way these were applied by individual examiners. The School should ensure that a systematic approach is taken by all examiners.

97. We noted that the compensation rules for PACES were such that a student could pass the exam without having demonstrated competence in a sufficient range of cases. For example in Year 5 students could achieve a borderline fail in three stations, achieve a good pass in one station and still pass overall.

98. Examiners were appropriately trained for the Year 3 OSCE and we noted the CD-ROM provided for the Year 5 PACES. We are concerned that there has been no formal examiner training for the Year 6 PACES since the examination format was introduced two to three years ago. Examiners reported that new examiners were trained by shadowing an existing examiner and each student's performance double marked. The School should consider providing specific training for new examiners and ongoing refresher training to existing examiners.

99. External examiners are employed and involved in all stages of the assessment process, from setting the examination paper to the final examination board to make sure that standards are met. We observed the external examiners at the PACES examinations and noted their input to examiner meetings and the final Examination Board.

100. We found the examiner meetings at the end of each examination session to be a useful mechanism for reviewing student performance. During the meetings, borderline candidates were discussed and examiners had appropriate input into decisions.

101. We found the final Examination Board to be well chaired and conducted and were satisfied that the School and University procedures were followed appropriately.

## Appraisal

102. The School is actively seeking ways to improve feedback. We found variability in the effectiveness of the structured and constructive feedback provided to students by their clinical teachers. Students confirmed that the quality of feedback received was often dependent on their consultant.

103. The School has introduced online self-assessments in most years for students to monitor their own progress and identify strengths and weaknesses. The portfolio produced in Year 3 provides opportunities for feedback. Logbooks are provided in the clinical years and students should receive feedback when signed off for a competency, although this does not always happen. The School utilises mini-CEXs in Year 5 to provide students with one-to-one feedback from their consultant. We found this to be an excellent idea but encourage the School to monitor these closely as the delivery could be variable. We found that although formative assessment is

lacking in other clinical years, students are provided with marks for written examinations and these can be discussed with the appropriate tutor.

104. The School should review the provisions for formative assessment or other feedback mechanisms in the clinical years of the course. This is to ensure students have sufficient information about their progress and performance, allowing them to deal with any areas of concern.

#### Student progress

105. We are satisfied with the provisions in place for students who have made the wrong study choice, with a BSc (Hons) available as an exit degree. The School may wish to consider early exit routes for students on the GEP.

106. The careers advice provided by the School is variable and could be strengthened in the final year. We encourage the School to pursue its plans to provide mentors in each specialty in association with the Student Union.

107. The procedures to deal with students who are causing concerns are robust and fair, with appropriate transfer of information between the School and the deanery.

#### Student health and conduct

108. We found the raising concerns policy for students to be appropriate and information is available from several sources. However, not all students knew about the reporting routes to raise concerns about a colleague.

109. The School's procedures to identify students whose conduct gives serious cause for concern are satisfactory and the School provides appropriate support for those students. The way in which the School deals with fitness to practise issues is effective. We are content that students would not be eligible to graduate unless fit to practise.

110. The Occupational Health Service is adequate and utilised as an independent body.

#### Acknowledgement

111. The GMC and the team would like to thank Imperial College London, School of Medicine and all those they came into contact during the course of the review for their co-operation.

Professor Peter Rubin  
Chairman, Education Committee  
c/o Ms Kirsty White  
Education Section  
General Medical Council  
350 Euston Road  
Regents Place  
London  
NW1 3JN

21 November 2008

### **Quality Assurance of Basic Medical Education – Response to Final Report**

Dear Professor Rubin,

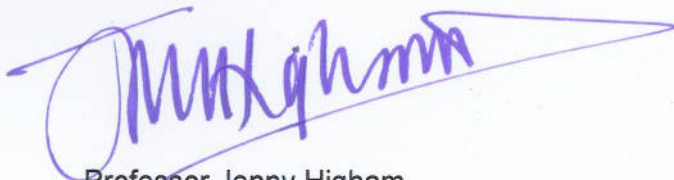
Thank you for your final report outlining the findings of the QABME visit to the School of Medicine at Imperial College London.

We found the QABME process to be an engaging and useful mechanism of self-evaluation and we welcome the identification of the areas of good practice and innovation noted in the report.

We also acknowledge the requirements and recommendations that the visitors have identified in order for us to develop and improve our provision. We have responded to each of these points in the attached action plan.

If you require any additional information, or wish to discuss this further, then please do not hesitate to contact either me or Mr Paul Ratcliffe, Quality Assurance and Enhancement Manager, by telephone on 020 7594 9819, or alternatively by email on: [p.ratcliffe@imperial.ac.uk](mailto:p.ratcliffe@imperial.ac.uk).

Yours sincerely,



Professor Jenny Higham,  
Head of Undergraduate Medicine