Quality Assurance of Basic Medical Education

Report on King's 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 King's College London, School of Medicine for 2007/08. In the main, this report refers to King's College London, School of Medicine as 'the School'.

5. The School was formed in 1998 after the merger of the United Medical and Dental Schools of Guy's and St Thomas' and King's College School of Medicine and Dentistry.

6. The School is one of the largest in the country with approximately 2500 undergraduate and graduate students. Teaching is delivered across a number of sites to accommodate the number of students, including seven campus-based hospitals, 19 partner district general hospitals and over 200 associated GP practices in over 30 Primary Care Trusts.

7. There are five entry routes to the MB BS programme:

   a. The MB BS programme is a standard five year course for school leavers with science A-levels. A number of students from Oxford and Cambridge enter directly into Phase 3. Some students also complete a BSc as an intercalated degree extending this to a six year programme.

   b. The Medicine Graduate and Professional Entry Programme (GPEP) is a four year course introduced in 2004 for Arts or Science graduates with honours degrees and healthcare professionals with equivalent academic qualifications.

   c. The 'Maxfax' entry programme is a four year course for UK qualified dentists wishing to pursue a career in oral and maxillo-facial surgery. Students admitted through this route follow the GPEP.

   d. The Medicine conversion entry programme is a six year programme, including a foundation course in natural sciences, for non-science graduates and those with non-science A-levels.

   e. The Extended Medical Degree Programme (EMDP) is a six year course introduced in 2001. It is open to students from non-selective schools in 15 inner London boroughs in the vicinity of the Guy's campus.

8. Unless the report refers to a specific cohort of students, our findings are based on all entry routes into the MB BS programme.

9. The General Medical Council's (GMC) last visit was in 2000 and areas identified for further consideration at that time included simplifying supervisory structures, reducing the factual and assessment burden on students, promoting vertical integration of clinical teaching and basic sciences, taking a more uniform

approach to the assessment of student selected components (SSCs), and reviewing support systems and feedback mechanisms for students.

10. Historically, the School's curriculum was developed from the previous systems-based curriculum featuring clinical exposure in later years. The first term of the five year course (Phase 1) provides an introduction to medical science and the remainder of the first two years (Phase 2) is based around a weekly clinical scenario. There is some clinical contact in Phases 1 and 2, and the remainder of teaching includes lectures, tutorials, problem solving workshops and practical classes. GPEP students complete Phases 1 and 2 over an extended first year and EMDP students complete them over three years.

11. Students from all entry routes and other institutions students join the main cohort for Phase 3. Phase 3 is made up of three rotations of 13 weeks each. One half of each rotation is spent on clinical apprenticeship and the other half is spent on clinical science, with two days allocated to special study modules (SSMs) during the clinical science phase. Phase 3 covers basic adult medicine and surgery including gastroenterology, urology, nephrology, endocrinology, cardiovascular and respiratory diseases and neurology, ophthalmology and psychiatry.

12. Phase 4 consists of three 12 week rotations in child health, development and ageing; emergency medicine, trauma and locomotion; and reproductive and sexual health with one day per week allocated to SSMs.

13. Phase 5 is made up of three eight-week clinical placements in medicine, surgery and general practice and community medicine and an elective period.

14. The School started a rolling revision of the curriculum in 2003/04 and introduced an Incremental Clinical Examination (ICE) into Phase 3 to validate skills learnt throughout the year. The locations of clinical placements are now more widely spread with the introduction of Phase 3 attachments in Medway and East Kent Trusts and Phase 4 attachments at Queen Elizabeth Hospital, Woolwich Hospital and Princess Royal University Hospital to accommodate the number of students.

The QABME visiting team

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

Professor Tony Weetman (Team Leader)
Professor Stewart Petersen (Deputy Team Leader)
Dr Roger Bloor
Ms Roisin Finn
Dr Jennie Johnston
Ms Sue Leggate
Professor Alison MacLeod
Mr Alexander McNeil
Dr Gina Radford
Dr Mairi Scott

16. Louise Wheaton and Alison Lightbourne (GMC Education Quality Officers) supported the team.

Our programme of visits in 2007/08

17. The visiting team conducted seven quality assurance visits on: 22 November 2007, 13 December 2007, 6-7 February 2008, 23-24 April 2008, 29 May 2008, 25 June 2008 and 17 July 2008.

18. 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 a variety of representatives from the School, including academic management staff, staff involved with curricular development and assessment, internal quality assurance, public health and student support staff.

b. Observation of teaching sessions and site visits to central and peripheral GP practices and at both the central teaching hospitals and at a selection of peripheral district general hospitals.

c. Discussions with students.

d. Discussions with teachers, including general practitioners and clinical consultants.

e. Discussions with Foundation Year 1 (F1) doctors and their educational supervisors.

f. Observation of the following examinations:

i. Phase 3 Incremental Clinical Examination (ICE).

ii. Phase 5 elective poster presentations.

iii. Phase 5 Objective Structured Clinical Examination (OSCE).

g. Observation of the Part 5 Examination Board.

The report

Summary of key findings

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

20. 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

21. The School is required to:

a. Review the supervisory structures and quality management processes of the curricula, and establish systems to monitor and act on the changes recommended in this report. As part of this, the School must put in place a quality improvement strategy which will:

i. Ensure effective monitoring of student evaluation across all phases in order to identify and respond to issues and monitor trends (see paragraphs 53, 61).

ii. Improve the consistency of student experience, especially during clinical attachments (see paragraphs 60, 62).

b. Revise the overall assessment strategy in order to:

i. Improve the consistency of assessment of student selected components (see paragraphs 48, 91).

ii. Improve the feedback provided to students on their development to ensure they can identify their individual strengths and weaknesses (see paragraphs 87, 106-108).

iii. Improve the reliability of the Incremental Clinical Examination in Phase 3 (see paragraph 93).

iv. Ensure consistent marking, and reconsider the purpose and complexity of in-course assessments (see paragraphs 95, 108).

Recommendations

22. To enhance the quality of the School's MB BS programme, we have identified the following recommendations. With regard to the quality improvement strategy the school should:

a. Ensure all staff, in particular those leading in different phases, understand the course in its entirety and how each phase is related to the others (see paragraphs 26, 49).

b. Review and improve the provision of administrative support for the courses (see paragraph 47).

c. Consider the remit of the existing staff-student liaison committees in Phases 1 and 2, ensure that there are effective mechanisms in Phases 3 to 5 to allow appropriate evaluation, and ensure that students are advised of any resulting changes to the content and delivery of the curriculum in response to their evaluation (see paragraphs 51-53).

d. Ensure all clinicians involved in delivering the curriculum and providing support understand what is expected of them and the degree of acceptable variability in these areas (see paragraphs 57-58, 80).

23. The School should improve the introduction into Phase 3, particularly for students joining from other institutions and those returning after a BSc year (see paragraph 84).

Areas of innovation and good practice

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

a. The integration of public health teaching in Phase 4, where students undertake a pregnancy study looking at longitudinal health aspects (see paragraph 42).

b. The structure of Phase 5 which provides students with an opportunity to consolidate their previous learning in a clinical environment and prepares them well for final examinations and Foundation Year 1 (see paragraph 69).

c. The Gordon Museum and the Dissecting Room, which provide excellent resources and prioritise clinical relevance (see paragraphs 73-74).

d. The virtual campus, which provides excellent resources for support of teaching and learning for both staff and students (see paragraph 75).

e. The Extended Medical Degree Programme (EMDP) as a mechanism for widening participation and the additional support available to EMDP students over their first two years (see paragraphs 79, 81).

f. The academic support provided to Graduate and Professional Entry Programme (GPEP) students and teaching for the first year of the GPEP (see paragraph 81).

g. The support provided to students repeating Phase 5, including tailored programmes for re-sit students and additional academic support (see paragraph 83).

h. The arrangements for the Phase 5 OSCE and the introduction of the extended OSCE which gave borderline candidates the opportunity to recover (see paragraphs 94, 97-98).

Curricular Outcomes

The principles of professional practice

25. We found that the principles of professional practice set out in *Good Medical Practice* form the basis of medical education and the School's curricular outcomes for all entry routes are based on these principles.

Outcomes

26. The School's learning outcomes for all phases of the courses are based on the outcomes set in *Tomorrow's Doctors.* We found that KCL graduates felt prepared for Foundation Year 1 and this was confirmed by educational supervisors and Sub-Deans. However the links between the outcomes of phases and the overall curricula could be better defined in order to better inform both students and teachers of the educational opportunities within each phase.

Curricular content, structure and delivery

Content

27. The curriculum is intellectually challenging and places greater demand on students as they progress. However, students reported that there was a lack of time for reflection within the curriculum, particularly in Phases 1 and 2, and the School should consider how to address this.

28. We found some clinical areas, such as ear, nose and throat (ENT) and ophthalmology to be underrepresented within the curriculum. This was confirmed by students and the School recognise this as an issue. The School has introduced an ENT day as part of the cardiovascular and respiratory rotation and we consider this to be an appropriate response. The School may wish to consider reviewing the delivery of ophthalmology teaching.

The scientific basis of practice

29. Basic sciences are adequately covered within the curriculum during Phases 1 to 3, both in lectures and as part of the clinical scenarios. We encourage the School with its plans to develop scenarios into Phases 4 and 5 to further integrate basic sciences into the clinical years of the course.

30. We found that behavioural and social sciences are being taught and recognise the progress the School has made since the last GMC visit. We encourage further integration of behavioural and social sciences within the curriculum.

Treatment

31. We are satisfied that the introduction of a new clinical pharmacology course and pathology course in Phase 3 appropriately addresses concerns raised by F1 doctors and their educational supervisors regarding a need for more practical therapeutics. We found prescribing skills to be assessed appropriately in logbooks and as part of the Phase 5 OSCE.

Clinical and practical skills

32. We found clinical and practical skills to be taught and assessed appropriately. This was confirmed by the review of logbooks and observation of the Phase 5 OSCE.

Communication skills

33. Communication skills are taught as part of the spiral curriculum using simulated patients and through the Inter-Professional Education (IPE) programme. Students displayed a high level of competence and F1 doctors were well prepared for practice.

34. Students are appropriately assessed on communication skills as part of the Phase 5 OSCE.

Teaching skills

35. The School organises peer teaching as part of the IPE programme in the first year and as part of the GPEP. Phase 3 and 4 students also have sessions teaching students in the years below. Students spoke positively of peer teaching and often organised additional sessions independently of the School. This included a mock Incremental Clinical Examination (ICE) organised for Phase 3 students by Phase 4 students and a mock OSCE organised by F1s for Phase 5 students.

36. We found that graduates are able to identify their own learning needs. The students we interviewed were proactive in their approach to learning, particularly during their clinical attachments where students seek relevant patient experience.

General skills

37. We found that graduates are able to perform general skills including time management, prioritising tasks and problem solving. Sub-Deans and F1 doctors confirmed this and reported the Phase 5 shadowing period to be a useful opportunity to practise these skills.

The working environment

38. Students learn about the working, organisational and economic framework in which medicine is practised in the U.K. in the public health stream of the course.

Medico-legal and ethical issues

39. Medico-legal and ethical issues are addressed appropriately in a strand of the course. During Phase 2 the teaching is mostly lecture based and students appreciated the opportunity to debate issues in smaller groups through breakout sessions and tutorials.

Disability and rehabilitation

40. We are satisfied that disability and rehabilitation is adequately covered through the primary care and clinical strand of the course.

The health of the public

41. The School adequately addresses issues and techniques involved in studying the effect of diseases on communities and individuals in a strand of the course.

42. The School is making good progress in integrating public health into the curriculum in Phases 1 and 2. We commend their approach to integrating public health in Phase 4 in which students undertake a Community Pregnancy Study looking at longitudinal health aspects, including antenatal screening, ethical dilemmas and decision making.

43. We noted that the School is undertaking an international longitudinal joint study, with links to Monash University in Australia, on the impact of health promotion in the curriculum. We encourage the School to disseminate any findings from this work to help further inform medical education.

The individual in society

44. We are satisfied that areas of psychology and sociology relevant to medicine are adequately addressed during the course. Teaching is delivered by lectures and linked to relevant scenarios in Phases 1 and 2. In later phases the teaching is delivered on clinical placements.

45. We found diversity to be adequately covered in a variety of placements, as part of public health teaching and communication skills sessions. The diverse nature of patients involved in the School's teaching is noticeable and students appreciated the range of patients and conditions they gain exposure to during the course.

Structure

46. The SSCs of the course are appropriate to the requirements of *Tomorrow's Doctors* with a wide range of 970 Special Study Module (SSM) titles on offer. The School demonstrated how they monitor student choice to ensure the appropriate balance of SSMs.

47. Students reported some problems with allocation of SSMs, including administrative issues which resulted in some students not being allocated any SSMs initially. Some students had a very late choice of a limited selection of SSMs and some students did not receive any of their choices. We noted that this was due to a system failure but we advise the School to review the administrative support provided for the courses and ensure students are kept informed of any issues.

48. We have concerns about the quality management of the assessment of SSMs due to the high number of staff involved in their delivery and assessment (see paragraph 91). Students and teachers confirmed some discrepancy in the content, level of difficulty, assessment and weighting of SSMs.

Delivering the curriculum

Supervisory structures

49. We note the complexity of the supervisory structures and the challenge of monitoring the quality of courses across a large number of students and local education providers. We found the supervisory structures to work well in parts, such as the authority and responsibility set out in each phase. However, we found the links from one phase to another to be less effective. Staff were knowledgeable of the content in the phase they were directly involved with but we identified a lack of understanding of the course as a whole and content covered in other phases. The School should ensure that all staff, in particular those leading in different phases, have an understanding of the course in its entirety and how each phase is related to the others in order to facilitate overall coherence and to allow their own teaching to be set in context.

50. The supervisory structures involve individuals with an appropriate range of expertise and knowledge.

51. The School considers the Student Medical Education Committee (SMEC) to be the forum for students and SMEC representatives attend other committee meetings. We are concerned that the number of students involved in SMEC is limited and the representation across the phases is not representative of the student body. Following a review of SMEC minutes we found that its remit does not sufficiently address academic issues and therefore does not provide an effective staff-student liaison function.

52. After reviewing minutes from the Staff-Student Liaison Committee in Phases 1 and 2 we found this to function effectively as a forum for raising concerns but the

dissemination of the outcomes to the students could be improved. There is no evidence of staff-student liaison committees for the later phases.

53. Interviews with staff and students identified a dissonance between the School and student perspective of the learning experience, particularly in Phases 3 and 4. We recommend that the School reviews the input and mechanisms for evaluation from students in all phases. We require that this evaluation is monitored and acted on appropriately and students are informed of any resulting changes to the content and delivery of the curriculum.

54. The involvement of clinicians and basic scientists in developing the scenarios as part of the curriculum review of Phases 1 and 2 worked well. We found the horizontal structure in management of curriculum development to be effective. The management staff from each programme are involved in curriculum development and a common line of reporting exists through the Medical Education Committee Executive.

Teaching and learning

55. The School takes advantage of new technologies to deliver teaching, including e-learning resources and the virtual campus.

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

57. The School provides staff development programmes to promote teaching and assessment skills. However we noted that training programmes are not compulsory for non-School staff and given the large number of teachers involved in the delivery of clinical teaching, we have concerns about staff development programmes reaching all clinical teaching staff on the ground. The School should ensure that all teachers receive guidance on the core teaching and the acceptable level of variation in teaching.

58. We support the School's plans to develop e-learning resources for staff in collaboration with King's Institute for Learning and Teaching to provide guidance that will reach a greater number of clinical teachers. We noted that there is a question regarding training in the Sub-Dean questionnaire to monitor the level of training at each site and we recommend that this is followed through.

59. Due to the high student numbers, the School utilises a range of sites, both centrally and peripherally, to deliver teaching. We observed teaching at a number of sites and were satisfied with the standard of the sessions observed. We found the communication channels between the School and each site through the Sub-Dean to be effective.

60. However, students reported considerable variability in the organisation and content of clinical teaching, particularly in the central teaching hospitals. For example, during the Phase 3 clinical science attachment some students were reportedly discouraged from attending wards and clinics due to the high student

numbers already present. Again, we identified a dissonance between student experience and the School's view of the learning experience in these hospitals. From the evidence provided on quality management, we identified a need for more robust supervisory and communication structures between staff and students and among staff to ensure variability is kept to an acceptable level. We require the School to put in place a quality improvement strategy which will decrease variation in the organisation and content of clinical teaching.

61. The School has introduced an online evaluation system for students to complete at the end of each attachment. We noted that different scales were used for student evaluations of attachments. For example in Phase 3, a score of five was excellent, three was good and one was not good at all and in Phase 4 a score of five was strongly agree and one was strongly disagree. We require the School to use methods which are consistent so that evaluation results can be effectively monitored and compared.

62. The School reported that any problems were addressed directly with the relevant teacher and each curriculum phase runs its own quality management. However, more must be done to ensure greater consistency in addressing problems across the course.

63. The School has introduced questionnaires to collect information from Sub-Deans and we encourage the School to utilise this information to monitor consistency via the Quality Group. We also support the School's plans to visit all teaching sites once every two years.

64. Students have different teaching and learning opportunities but we noted that large group teaching was more prominent than small group teaching. Students confirmed that they would like more opportunities to learn in facilitated small groups, particularly in Phases 1 and 2 when lectures dominate. Small group teaching in the GPEP and EMDP is well received and we encourage the School to roll this out to the main MB BS programme.

65. Students receive some experience of inter-professional learning with sessions in the first year with nursing, midwifery, pharmacy, dietetics and physiotherapy students and we encourage the School to continue with their planned developments.

66. We are satisfied with the integration of basic and clinical sciences in Phases 1 and 2 through the clinical scenarios. Lectures and tutorials in Phases 1 and 2 are related to a patient case each week and 36 scenarios run over the first two years of the course. The School plans to develop branching scenarios into later years of the course so that the content from Phases 1 and 2 is revisited and basic science is better integrated into the clinical years of the course. We support these plans and the development of scenarios into the clinical years should help to address issues around consistency and variability in clinical teaching.

67. The clinical education received by students reflects the changing patterns of healthcare and we are content that students gain experience in a variety of environments, including central teaching hospitals, peripheral district general hospitals and general practices.

68. Students have opportunities to interact with people from a range of social, cultural and ethnic backgrounds. Students spoke positively of the variety of patients, diseases and conditions they are exposed to due to the diverse nature of the London population.

69. Phase 5 provides three periods of 8-weeks duration for shadowing rotations in medicine, surgery and general practice. Students are able to refresh practical and clinical skills and shadow current F1 doctors. Phase 5 is well managed and well received by students, F1s and educational supervisors. It provides an excellent opportunity for students to consolidate their learning and prepare well for final examinations and F1. We commend the structure of Phase 5.

70. During Phase 5, students can organise their own GP placements independently of the School. After reviewing the School's evaluation to compare student experience in practices associated with the School and independent practices we are satisfied that students have consistent experiences. We encourage the School to regularly monitor this to ensure student experience remains consistent.

71. F1 doctors reported that the formal one week shadowing period is optional for students with F1 posts within the London Deanery and dependent on the Trust elsewhere. Current F1 doctors did not report this as an issue because Phase 5 gave them sufficient exposure to practise clinical and practical skills in preparation for F1.

Learning resources and facilities

72. We recognise the challenge of providing resources for a large number of students across a number of sites. We found variation in the facilities at different sites following visits to a number of NHS Trusts, GP surgeries and a tour of the Guy's campus of the School. Students reported difficulties accessing some facilities at peak times, including libraries and clinical skills laboratories, and a lack of internet access out of hours at some peripheral sites.

73. We commend the Gordon Museum, a collection of 8000 pathological specimens with associated teaching resources and interactive IT systems linked to each specimen, as an excellent learning resource.

74. We also commend the Dissecting Room as an excellent learning resource.

75. We commend the virtual campus, an on-line environment providing resources for support of teaching and learning. It has received positive feedback from staff and students, who particularly appreciate the 'Frequently Asked Questions' tool where students can ask questions to tutors and all the responses are posted online.

76. We noted that not all sites have clinical skills laboratories and students confirmed difficulties accessing clinical skills facilities at peak times. The School hopes to alleviate pressure on the Chantler Clinical Skills Centre having received funding for a new clinical skills centre at St Thomas' Hospital.

77. The School regularly reviews its facilities by means of a facilities questionnaire completed by teaching sites.

Student selection

78. The selection procedures in place are valid, open, objective and fair. The measures in place for disabled applicants are adequate.

79. We commend the Extended Medical Degree Programme (EMDP) as a good mechanism for widening participation. The EMDP is open to students from non-selective schools in 15 London boroughs close to the School.

Student support, guidance and feedback

80. We are satisfied that student support structures are in place. Personal tutors from the School of Biomedicine and Health Sciences and School of Medicine are allocated to students in Phases 1 and 2 and a clinical adviser system exists in Phases 3 to 5. The majority of students felt able to access support from a variety of sources, however students reported variability in the effectiveness of support provided by each personal tutor or clinical adviser and reported some difficulties accessing them. We recognise the challenge of providing support for a large number of students and the School should ensure that staff involved in providing support understand what is expected of them and the degree of acceptable variability.

81. We commend the specialist advisers provided for students on the EMDP and the additional academic support for GPEP students during the intensive first year of the course. GPEP and EMDP students felt very well supported in the early years of the course. We encourage the School to draw on the successes of the support provided on these programmes to improve support across the courses.

82. Students showed an awareness of where to find student support contact details and reported receiving emails about services available, such as counselling.

83. We found the additional support available for students repeating Phase 5 to be excellent, with individual feedback on examination results and discussions around the reasons for failure. During the repeat year students have a revision period in August before being integrated into the main cohort in October. Students repeating the year remain in their re-sit group on placements to enable peer support.

84. We have concerns about the transition phase from the highly structured Phases 1 and 2 to the self-directed Phase 3, especially for those joining from other institutions, including students who have completed their pre-clinical training at Oxford or Cambridge, and those returning from an intercalated year. Interviews with students from these groups confirmed this. These students wanted further opportunities to refresh clinical and communication skills and be appropriately inducted into the School before joining the main cohort of students. We recommend that the School improves the introduction to Phase 3, particularly for these groups of students. The development of more robust supervisory and communication

structures (see paragraph 60) should also improve overall student experience in Phase 3.

85. The School informs students about the importance of looking after their own health. All students go to the Occupational Health Service at the start of the course and are encouraged to register with a local General Practitioner.

86. Students receive guidance on the curriculum and assessments via the virtual campus. Guidance on plagiarism and cheating is accessible to students in logbooks and on the virtual campus. Interviews with students confirmed our findings.

87. We found feedback to students on their development and progress to be variable and sometimes limited dependent on the personal tutor, clinical adviser or supervisor. This was confirmed by students and Sub-Deans. We require the School to consider ways of improving student feedback to ensure students can identify their own strengths and weaknesses and focus their learning appropriately.

88. Students maintain a record of their learning via logbooks in the clinical years of the course. Students and F1 doctors found the core topics contained in the logbooks useful. Following a review of logbooks, we found evidence of the achievement of appropriate skills.

Assessing student performance and competence

The principles of assessment

89. We found the schemes of assessment to support the curriculum and allow students to prove that they have achieved curricular outcomes. We are satisfied that the main summative assessments are integrated for all phases.

90. Professional attitudes are appropriately assessed in the Phase 5 OSCE and form part of logbook sign offs during the clinical years of the course.

91. Students are assessed in both the core and student selected parts of the curriculum. The School acknowledge that the assessment of SSMs could be variable and the School attributed this to the element of free choice. We noted the introduction of anchor statements to provide guidelines to examiners, double marking of SSMs and a feedback process for examiners to show average marks against the spread of the programme as a whole. In order to improve the consistency of assessment of SSMs, we require the School to annually monitor the effectiveness of these measures to determine their effect on reducing variability.

92. The range of assessment techniques is appropriate for testing the curricular outcomes. The School uses acceptable methods for standard setting and we are satisfied that most of the main, summative assessments were valid and reliable.

93. However, we have some concerns about the in-course assessments and the low reliability of the Incremental Clinical Examination (ICE) in Phase 3, with students

completing only three stations after each rotation. Students expressed concerns that there was sometimes a very narrow range of topics tested in the ICE. As part of the revision of the assessment strategy, we require the School to address this.

94. Standard setting in the Phase 5 OSCE is satisfactory. Examiners and simulated patients on each circuit meet before the examination starts to set the standards for the stations. The OSCE mark sheets are scanned during the examination to provide real time information on station and student performance.

95. We noted the complexity of the in-course assessment system, which contributes to a large proportion of the marks accumulated across phases. We found marking of in-course assessment to be variable and students, F1 trainees and teachers confirmed this. The School is aware of issues around in-course assessment and looking at ways to deal with it. As part of the revision of the assessment strategy, we require the School to ensure consistent marking of in-course assessments and we recommend that the School provides further guidance to clinical teachers on signing off logbooks.

96. Student knowledge, skills, attitudes and behaviour are appropriately assessed close to graduation during the Phase 5 OSCE and written examinations. This was confirmed by observing the Phase 5 OSCE and reviewing external examiner reports.

97. The Phase 5 OSCE was well organised and managed, particularly given the number of students and examiners involved. The OSCE was well blueprinted with a good range of stations and enough stations in the question bank to run seven different examination days.

98. We commend the School for the introduction of the extended OSCE, in which students are given the opportunity to recover by completing an additional 22 OSCE stations, to improve reliability at the pass fail threshold.

Assessment procedures

99. The School uses blueprinting methods to link assessments to the disciplines taught. However more could be done to demonstrate how the scheme of assessment deals with all of the curricular outcomes.

100. The guidance provided to students prior to examinations and the briefing observed at the Phase 5 OSCE was comprehensive. Students were clear on what was expected of them.

101. The guidelines provided in the examiner briefings at both the Phase 3 ICE and Phase 5 OSCE were appropriate. A training DVD is available to examiners but examiners reported that it was not compulsory for them to watch it. The performance of the examiners observed during the Phase 5 OSCE was satisfactory.

102. We have concerns about the junior level of the majority of examiners involved in the Phase 3 ICE. We noted that more senior examiners were involved in the final examinations.

103. We were satisfied with the guidelines for marking assessments provided to examiners. The mark sheets for the Phase 3 ICE, Phase 5 poster presentation and Phase 5 OSCE were appropriate and indicated how performance against targeted curricular outcomes should be rewarded.

104. Systems are in place to determine pass marks and appropriate methods are used for standard setting.

105. The School employs external examiners to ensure standards are met. During the OSCE, the School uses real time analysis of student performance, which allows external examiners to focus on borderline candidates. The external examiners are appropriately involved in examination boards.

Appraisal

106. We found a lack of formative assessment in the course with summative in-course assessment utilised to monitor student progress. The School returns examination papers to students after the in-course summative examinations.

107. Students reported that formative assessment in the form of mock examinations would be useful to monitor their progress during the course. The School reported receiving some pressure from students to give formative assessment some summative weight, which also ensures attendance. However, other methods could be considered and the School may wish to look at how other schools have addressed this issue.

108. The School is working to improve the feedback provided to individual students and the Sub-Deans also identified this as an issue. Some clinical teachers thought the number of options for marking students should be reduced from five to three so that students were marked as unsatisfactory, satisfactory or excellent. Students agreed that this could work well. Clinical supervisors recognised the challenge in standardisation of the marking of in-course assessments due to the subjective nature of the marks and the possible impact on student progression. Students and clinical teachers both agreed that more than one clinical teacher should contribute to marking as students often have less contact with their supervisor than other members of the team.

Student progress

109. The School has separate rules for progression and accumulation with conjunctive rules for progression from year to year. For the ranking and award of honours, weighted accumulation of marks across the course is used.

110. We noted that students in the second cohort of the EMDP to graduate were placed in the bottom 25% of Phase 5 students. The School reported that successive cohorts are performing better and we encourage the School to closely monitor these students to ensure additional academic support is provided throughout the EMDP course.

111. We are satisfied with the provisions for students who may discover they have made the wrong study choice, with a BMedSci exit degree available after three years of study or options to transfer onto other degree courses.

112. The provisions in place for careers advice are adequate, including advice from clinical advisers, careers fairs and a careers day in Phase 5 with speakers from the main specialties. We anticipate that the School will continue to develop such information.

Student health and conduct

113. We found the School's policy on raising concerns to be satisfactory, although the students we met did not know specific details of any whistle-blowing procedures. However, students were knowledgeable about communication routes and recognised that the necessary information would be in student handbooks and on the virtual campus. We noted that the School informed placement sites in advance about students with difficulties to ensure an appropriate consultant is allocated and additional support is available if required.

114. We found the information transfer between the School and the Deanery to be appropriate.

Acknowledgement

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

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19th November 2008

Dear Professor Rubin

Re King's College London, School of Medicine response to Final Report of QABME Visits to King's College London, School of Medicine 2007/2008

Thank you for the report of the assessment visits for King's College London, School of Medicine, which took place in the academic year 2007/2008. I have pleasure in attaching our response (which we have also sent by email) and we will be sending you a full Annual Return by 12th December. We thank the QABME team for their review and report.

Yours sincerely

Anne Greenough MD FRCP FRCPCH DCH
Head of Kings College London School of Medicine
Professor of Neonatology and Clinical Respiratory Physiology

Copy to Kirsty White, QA Programme Manager
file

King's College London, School of Medicine

Response to the final report of QABME visits to King's College London, School of Medicine for 2007/2008

We thank the QABME team for their report and commendations on the School's areas of innovation and good practice, which include:

- The Extended Medical Degree Programme as a mechanism for widening participation and the additional support available to EMDP students over their first two years.
- The academic support provided to Graduate and Professional Entry programme students.
- The excellent resources of the Gordon museum and Dissection Room.
- The Virtual Campus which provides excellent resources for support of teaching and learning for both staff and students.
- The integration of public health teaching in phase 4.
- The arrangements for the phase 5 OSCE and the introduction of the extended OSCE which gave borderline candidates the opportunity to recover.
- The support provided for students repeating phase 5.
- The structure of phase 5 which prepares them well for final examinations and foundation year 1.

We welcome the finding that the Education committee found that the School is currently meeting the requirements of Tomorrow's Doctors subject to meeting the requirements in paragraph 21 of the report, as we trust we have fully addressed these by our responses and action plans detailed below.

Requirements – responses

21. The School is required to:

a. Review the supervisory structures and quality management processes of the curricula and establish systems to monitor and act on the changes recommended in this report. As part of this, the School must put in place a quality improvement strategy which will:

i. Ensure effective monitoring of student evaluation across all phases in order to identify and respond to issues and monitor trends (paragraphs 53, 61).

The material we provided to the QABME team showed that placements are monitored routinely with good student response rates and that adjustments have been made where there have been any issues. More importantly this is done within rotations at clinical placements by site deans and administrators. We accept that there is some work needed to make sure that the student evaluation methods used are consistent across the phases of the programme and allow analysis of trends (see action plan). As part of this process

we will be working to ensure that feedback on evaluation and any changes as a result of the evaluation process are made available to staff and students.

ii. Improve the consistency of student experience, especially during clinical attachments (paragraphs 60, 62).

Clinical placements are arranged in small groups of one to eight students. This means there will inevitably be variability in the experience of students with different clinical teams and geographical sites. We believe that an element of variation in these placements enriches the student experience and is a positive benefit for students and for the MB BS programme. All the placements are subject to regular evaluation from students. Some students worry about different experiences and links to different specialties. We are confident, however, that their practical experience backed up by the e-learning scenarios ensures that students cover the core material appropriate for their learning at these stages of the programme as this is borne out by their performance in assessments since the introduction of the current curriculum.

b. Revise the overall assessment strategy in order to:

i. Improve the consistency of assessment of student selected components (paragraphs 48, 91).

We were surprised by this requirement as the QABME team during their visits did not request information to determine the consistency of assessment of student selected components. As demonstrated below, the School has recognised the potential for discrepancies in the standards of assessment for the SSM programme and the SSM committee has undertaken a rigorous programme of quality management which has been in place for the past four years. This has included:

1) Standardised assessment methods for SSMs in each year

2) Standardised criteria for marking

3) All written and oral work double marked

4) Monitoring of mean marks awarded by year (four years of data confirms that the year means are virtually identical and are not varying year on year)

5) Monitoring of individual SSM supervisor's mean marks each year. Three years of data have identified a few outliers who have been notified about their marking performance. Follow up has confirmed that these supervisors are now marking closer to the mean.

6) External review of marking standards by the SSM external examiners using a quality control methodology with random pieces of marked written work reviewed to ensure an acceptable and uniform standard of marking

7) Monitoring of marking standards at DGH hospitals by the attendance of the phase 5 SSM Lead at student presentation sessions

The SSM Committee and SSM Board will continue to strive to ensure that the standards of assessment remain uniform throughout the SSM programme and the rigorous programme of assessment monitoring will continue.

ii. Improve the feedback provided to students on their development to ensure they can identify their individual strengths and weaknesses (paragraphs 87, 106-108).

Helping students to reflect on their strengths and weaknesses has always been an important priority for the School. Individual meetings occur with tutors in phases 1 and 2 with clinical advisers linked to each rotation in phases 3 to 5 at mid term and end of attachment meetings in each attachment in phase 3. This means that students in phase 3 have nine one to one meetings in the year. To ensure these meetings are occurring since October 2007 they have to be all signed off in log books. These changes may not have fed through to the students seen by the visiting team. We introduced feedback on ICE last year and feedback on OSCEs to all students in the academic year 2006 to 2007. The feedback from written work was already extended via an on line feedback for SSMs piloted in spring 2008.

We are reviewing the overall assessment strategy for the programme. The marking format suggested in paragraph 108 was in place before 2006/7 and was changed on the basis of feedback from staff and students as it lacked discrimination. The current system was introduced to encourage attendance, professionalism and the pursuit of excellence. As described in the final sentence of paragraph 108 the current arrangements are that supervisors should seek the views of other members of the team before evaluation and feedback on clinical attachments. Students may not always be aware of this process and we will seek to make this clear.

iii. Improve the reliability of the Incremental Clinical Examination in Phase 3 (paragraph 93).

We have moved forward with the improvement in the reliability of the Incremental Clinical Examination by increasing compulsory stations from six to nine per candidate, with a maximum of eighteen measures if the maximum number of resits are also taken into consideration. Most stations have been used previously in Year 3 OSCEs and have had their reliability established. We will consider adding further clinical material (see action points). The ICE assessments, however, are backed up by an end of year OSCE with high reliability for any student who has not passed all nine of the stations by the end of two attempts.

iv. Ensure consistent marking, and reconsider the purpose and complexity of in-course assessments (paragraphs 95, 108).

We acknowledge that the evolution of the course, which preserved a degree of autonomy of each constituent phase, has led to complexity. As part of an overall review, consistent with the KCL wide development following the King's Graduate Project Report, we plan to implement improvements (see action plan).

Recommendations - responses

22. To enhance the quality of the School's MB BS programme, we have identified the following recommendations. With regard to the quality improvement strategy the School should:

a. Ensure all staff, in particular those leading in different phases, understand the course in its entirety and how each phase is related to the others (see paragraphs 26, 49).

We were pleased to hear the QABME team found that the KCL graduates felt prepared for the Foundation Year 1 and that this was confirmed by educational supervisors and Sub-Deans (paragraph 26). We plan to produce more user friendly documentation to inform clinicians involved in clinical placements of their responsibilities. This will be facilitated by further development of our electronic curriculum map via the virtual campus so that staff will be able to relate their individual contribution to the overall curriculum.

b. Review and improve the provision of administrative support for the courses (see paragraph 47).

Paragraph 47 refers to the administrative support for SSMs, in particular that some students had reported problems with the allocation of SSMs, the QABME team note that this was due to a system failure. Unfortunately, due to a change of staff, there was a problem running the selection programme at the beginning of 2007 and a number of students were not allocated an SSM. This one off event was deeply regretted and the programme has now been modified to ensure that it is no longer dependent on one staff member. The School has an in house programme for the allocation of SSMs based on a 'best – fit' model linked to student choices. This programme has proved successful in ensuring over 80% of students achieve one of their top five choices in accordance with the Quality Standards for the SSM programme. In view of this achievement over the past four years, the standard has now been increased to 85% of students achieving one of their top five choices. The success of our allocation continues to be monitored twice yearly by the SSM Committee.

c. Consider the remit of the existing staff-student liaison committees in Phases 1 and 2, ensure that there are effective mechanisms in Phases 3 to 5 to allow appropriate evaluation, and ensure that students are advised of any resulting changes to the content and delivery of the curriculum in response to their evaluation (paragraphs 51-53).

The Student Medical Education Committee (SMEC) are described in the report as not representative of the student body (paragraph 51), but the members of SMEC are elected democratically by the student body. We agree that the introduction of staff-student liaison groups in later phases might be helpful, but they have not functioned in the past because of the geographical distribution of students in phases 3 to 5. We, however, intend to look at a structure for staff student liaison groups organised geographically facilitated by site deans.

d. Ensure all clinicians involved in delivering the curriculum and providing support understand what is expected of them and the degree of acceptable variability in these areas (paragraphs 57-58, 80).

As above (22a) we plan to produce more user friendly documentation to inform clinicians involved in clinical placements of their responsibilities and to further develop our electronic curriculum map via the Virtual Campus.

23. The School should improve the introduction into Phase 3, particularly for students joining from other institutions and those returning after a BSc year (see paragraph 84).

The introductory course for phase 3 receives very good evaluation from the students, and did so again in September 2008. The previous practice of an extended introduction for students joining from other institutions was discontinued on the basis of feedback from these students. Nevertheless, we recognise the difficulties some students face with the change to the more clinically based teaching of phase 3 and will review the induction procedures for the clinical placements, the support over the early weeks of these placements and the preparation for self-directed learning earlier in the programme.