

Quality Assurance of Basic Medical Education

Report on Barts and The London School of
Medicine and Dentistry

Queen Mary, University of London

November 2009

**General
Medical
Council**

Regulating doctors
Ensuring good medical practice

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The GMC's role in medical education

1. 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 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 school documentation and completing a range of quality assurance activities at the School and partner institutions. The determinations in this report have been scrutinised and endorsed by the GMC's Undergraduate Board.

Introduction

4. This is the 2008/09 quality assurance report to the GMC on the established medical school at Barts and The London School of Medicine and Dentistry (the School).
5. Barts and The London School of Medicine and Dentistry is the medical school of Queen Mary, University of London (QMUL, previously Queen Mary and Westfield College, University of London). It was formed in 1995 by a merger of St Bartholomew's Hospital Medical College and the London Hospital Medical College with Queen Mary and Westfield College.
6. The last GMC review of the School was in 2000, prior to the establishment of the QABME programme. The areas identified for further consideration at that time were the streamlining of supervisory structures and the integration of public health.
7. The School has around 1900 undergraduate and 850 postgraduate students making it one of the largest medical schools in the U.K. The School offers two programmes which award an MB BS qualification:
 - a. Five year MB BS course.
 - b. Four year graduate entry programme (GEP), introduced in 2003, for graduates from science and health related backgrounds. GEP students complete an extended Year 1 then integrate into Years 3-5 of the five year course.
 - c. Some students extend their study to six years by taking an intercalated year, normally at the end of Year 3 or 4. There are 11 intercalated degree courses available leading to a Bachelor of Medical Science (BMedSci), or Bachelor of Science (BSc) degree.
8. Unless the report refers to a specific cohort of students, our findings apply to both entry routes into the MB BS programme.
9. The medical course is divided into four phases:

Phase 1: Body in Health.

Phase 2: Mechanisms of Disease.

GEP Phase 1 and 2: Systems in Health and Interprofessional Course.

Phase 3: Clinical Basis of Medicine.

Phase 4: Preparation for Practice.
10. The first three phases are part of a vertically and horizontally integrated, systems based spiral curriculum with opportunities to revisit each of the systems

three times, revising and increasing the depth of knowledge. The fourth phase specifically prepares students for the first year of their foundation training (F1).

11. Problem based learning (PBL) is a central part of the medical curriculum, particularly in Years 1 and 2. Students work in groups of eight to ten to understand and explain problems under the guidance of a tutor. In the first two years of the course students accompany General Practitioners (GPs) at consultations, discuss diagnoses, work with general practice staff and meet patients. In the later years, students develop clinical skills on a variety of clinical attachments and community general practice sessions.

12. Clinical teaching is delivered across a number of sites, including 12 NHS trusts in London, the South East and Essex, four independent charities (three hospice charities and a cancer support charity) and over 100 GP practices across England and Wales.

13. The School has recently reviewed the curriculum. 'Curriculum '08' was implemented into Year 1 of the course during the academic year 2008/09, and will be implemented into Years 2 and 3 in 2009/10 and Years 4 and 5 thereafter. Changes to the student support systems were implemented into all years of the course in 2008/09.

14. Key changes in 'Curriculum '08' include increased contact hours in Years 1 and 2, enhanced foundation in anatomy and pharmacology in Years 1 and 2, the introduction of web-based anatomy 'spotter' tests, further integration of basic science in Years 3 and 4, changes to the structure of Year 3 clinical attachments, and ensuring the student selected components (SSCs) offer sufficient choice. The School has developed an electronic, searchable, curriculum map based on learning outcomes, called COMPAS. The School has also reviewed the student support systems and introduced a personal mentor scheme from 2008/09.

The QABME team

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

Professor Stewart Petersen (Team Leader)

Dr Chris Stephens (Deputy)

Dr Rebecca Dobson

Dr Celia Duff

Ms Roisin Finn

Mr Tom Foley

Ms Sue Leggate

Professor Alison Macleod

Professor Susan Standing

16. Ms Louise Wheaton (GMC Education Quality Officer) supported the QABME team.

Our programme of visits in 2008/09

17. The team conducted six quality assurance visits on: 6 November 2008, 10-11 February 2009, 17-18 March 2009, 26 March 2009, 6 May 2009 and 20 July 2009.

18. The findings of the team have been reached by reviewing documentary evidence submitted by the School and undertaking the following activities:

- a. Meetings with members of the School responsible for curriculum development, assessment, student support, selection, student conduct, and quality management.
- b. Observation of teaching sessions in both the main university teaching hospital and district general hospitals.
- c. Demonstration of the School's virtual learning environment, CE6.
- d. Site visits to various NHS trusts.
- e. Discussions with students.
- f. Discussions with teachers, including general practitioners (GPs) and clinical consultants.
- g. Discussions with Foundation Year 1 (F1) doctors and their educational supervisors.
- h. Observation of the final examination of clinical skills.
- i. Observation of the final examination board.

The report

Summary of our key findings

19. Subject to the requirements in paragraph 22, the School's MB BS programme meets the requirements of *Tomorrow's Doctors* in accordance with Section 5(3) of the Medical Act 1983.
20. Although we have recommended some areas for improvement by the School, these should be read in the context of our overall findings.
21. The School is requested to respond to the requirements with the timelines for action within the 28 day right of reply to the report.

Requirements

22. The School is required to:
 - a. Continue to monitor 'Curriculum '08' and evaluate the changes. The School is required to report in a detailed way to the GMC in the academic year 2010/11 annual return on the implementation and evaluation of changes with the potential for a revisit thereafter (see paragraphs 25, 29, 33-35, 44, 58, 65 and 75).
 - b. Review the evaluation and quality control mechanisms across sites to ensure consistency in approach. The School must look at outputs centrally to monitor and respond to issues raised by students, teachers and external examiners (see paragraphs 59-61 and 97).

Recommendations

23. To enhance the quality of the School's programme, we have identified the following recommendations. The School should:
 - a. Review the procedural skills part of the Final Part 6 objective structured clinical examinations (OSCE) to ensure the standard reflects the competencies required of an F1 doctor and ensure an appropriate emphasis on infection control (see paragraph 39).
 - b. Continue the process of refining SSCs and roll out the proposed changes (see paragraphs 49-50 and 85).
 - c. Review the supervisory structures to ensure clear lines of authority and responsibility are set out (see paragraph 51).

- d. Review the purpose, delivery and timing of interprofessional education (IPE) (see paragraph 64).
- e. Work with QMUL to review and improve IT provision, including the virtual learning environment, CE6 (see paragraph 70).
- f. Review the selection of examiners for the Final Part 6 OSCE to ensure all examiners are appropriately experienced and trained (see paragraph 94).

Areas of innovation and good practice

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

- a. The teaching and assessment of communication skills and the focus on communication skills in the Final Part 6 OSCE (see paragraph 40).
- b. The clinical skills facilities (see paragraph 71).
- c. The support available to Year 5 students for the transition to F1 including support for the F1 application, careers advice and a meeting with their future F1 educational supervisor (see paragraphs 76 and 101).
- d. The student support services and the strong links with college services (see paragraph 77).
- e. The analysis and evaluation of the assessment system and resulting reports (see paragraph 86).

Curricular outcomes, content, structure and delivery

Outcomes

25. We are satisfied that the School's curricular learning outcomes are mapped to *Tomorrow's Doctors* appropriately. The development of an online curriculum map, COMPAS, enables staff and students to search for module, session, system and theme outcomes. We look forward to seeing this develop further in the academic year 2009/10 and the School must update the GMC on this in the next annual return.

26. Graduates from Barts and The London felt generally well prepared for F1 and this was confirmed by their educational supervisors.

Content

27. We are satisfied that the curriculum is intellectually challenging and places a greater demand on students as they progress. Having a spiral curriculum is a clear

goal of the School and students reported that the course revisits and builds on previous learning. This is evidenced by the School's curriculum map.

28. We found that students have adequate time for reflection in the five year course. This is still the case with the increase in timetabled hours and shorter academic years in 'Curriculum '08'. Some GEP students reported limited time for reflection during the first year of the course due to the heavy workload. The portfolio encourages all students to reflect on their learning.

The scientific basis of practice

29. We are satisfied with the School's plans to provide a better foundation in anatomy in Years 1 and 2 and to reinforce the biomedical sciences in the clinical context of Years 3 and 4 within 'Curriculum '08'. Students are aware that some clinicians have concerns about their levels of basic science knowledge and perceive a lack of anatomy teaching. We consider the actions taken by the School appropriate to address these concerns. The School must report to the GMC on the effectiveness of the changes made as part of the requirement to monitor the implementation of 'Curriculum '08'.

30. The level of social and behavioural sciences taught in the course is adequate. We encourage further integration alongside the basic sciences.

31. Students learn about normal and abnormal structure and function, and build on previous learning through the phases - Year 1 covers 'systems in health', Year 2 moves onto 'systems in disease' and Years 3 and 4 'systems in clinical practice'.

32. We found that scientific methods are appropriately covered in the public health module, within SSCs and in the personal and professional development course. Evidence based medicine is part of the outcomes in all years of the course.

Treatment

33. We are satisfied that the principles of treatment required by *Tomorrow's Doctors* are covered during the course. As part of 'Curriculum '08' the School is correcting a self-identified issue with pharmacology and therapeutics teaching. This includes providing a better foundation in Years 1 and 2 and introducing a prescribing course as part of the final year shadowing period. We support this initiative.

34. The F1s we met reported that pharmacology teaching and preparation for prescribing could be improved. However the F1 educational supervisors reported that the F1s were better prepared than in previous years, following the introduction of a prescribing examination in Year 5. We found the examination to be set at an appropriate level for F1.

35. Pharmacology and pathology will be covered in the Metabolism 1 and 2 blocks of Year 3 in 'Curriculum '08'. We encourage these plans and consider they could be effective if properly integrated. The School must report to the GMC on the

effectiveness of all these changes as part of the requirement to monitor the implementation of 'Curriculum '08'.

36. We are satisfied that acute care is adequately covered in the clinical years of the course in the emergency medicine and acute care modules. Students complete an immediate life support course and simulator training in the Year 5 Acute Care and Critical Illness module. Chronic illness is addressed in a number of modules, including general practice and public health.

37. We are satisfied that the role of lifestyle is covered in the public health strand of the course and within community placements. Students were aware of alternative and complementary therapies and learn about them in Year 2. An SSC on this subject is also available.

Clinical and practical skills

38. The course covers the clinical and practical skills required by *Tomorrow's Doctors*. Students begin performing practical procedures in Year 1 and build on these through Years 2 to 5. The F1 doctors we met felt well prepared to perform clinical and practical procedures in their foundation training and this was confirmed by their educational supervisors.

39. Clinical and practical skills are adequately assessed through much of the course. We observed the final Part 6 OSCE with five stations testing clinical examination skills and six stations testing practical procedures. We found that the practical procedure stations were at a relatively simple level for the stage in the course and questioned the validity of communicating with manikins. We also identified an inadequate provision of consumables and a lack of emphasis on infection control. The School should review the practical skills OSCE to ensure that the equipment and consumables used are of adequate quality and the standard reflects the competencies required of an F1 doctor.

Communication skills

40. Communication is a theme running through the course and forms part of the spiral curriculum. All students we met spoke positively about their communication skills teaching. Clinical tutors reported good communication skills as a strength in students from Barts and The London. The communication skills teaching session we observed was of a good standard, using simulated patients and providing students with immediate feedback. The School offers an SSC in Performing Arts to practise difficult communication situations. Six out of the 17 stations in the final Part 6 OSCE focused on clinical communication skills using simulated patients. Communication skills were integral to the marks for all 17 stations. We found that students were very competent in this area and this was confirmed by external examiners. We commend the teaching and assessment of communication skills as an area of good practice.

Teaching skills

41. We are satisfied that students learn about the principles of education as applied to medicine. The Doctors as Teachers and Educators course in Year 5 is well received by students, particularly the micro-teaching. The F1s we met found it useful in preparation to teach students during their foundation training. However, some students and F1s reported that the timing of the course was too close to final examinations.

General skills

42. Graduates are competent in general skills, such as problem solving, prioritisation and time management, which was confirmed by education supervisors. We note that these skills are covered in the learning outcomes.

The working environment

43. Students learn about the structures and functions of the NHS from Year 1 in the doctor and society aspect of the professional theme, which runs throughout the course.

Medico-legal and ethical issues

44. Ethics and law is integrated into the Doctor and Society aspect of the professional theme. The School reported that teaching currently in Year 3 is moving to the obstetrics and gynaecology block of Year 4 in 'Curriculum '08'. We require the School to report to the GMC on the effectiveness of these changes as part of the requirement to monitor the implementation of 'Curriculum '08'. The F1s reported that ethical issues were adequately covered and appreciated the debates and discussions around ethical issues.

Disability and rehabilitation

45. We are satisfied that disability and rehabilitation are adequately covered in a number of modules, including psychiatry and care of the elderly.

The health of the public

46. The School explained its philosophy behind threading the population perspective through the curriculum. We reviewed SSC 3b work, which demonstrated effective integration of the population perspective. Students felt public health was well integrated through the whole course. We are satisfied with the delivery of public health teaching; however, we note the focus on academic public health with some teaching specific to specialist subjects. The School could make greater use of NHS

public health colleagues in teaching delivery. We found the assessment of public health concepts to be appropriate and full.

The individual in society

47. Sociology and psychology are covered in the population science theme which runs through the curriculum. Students spoke positively about the patient profile in the East End of London as it exposed them to cultural diversity and different pathologies, and challenged their communication skills.

48. The Medicine in Society (MedSoc) course runs over Years 1 and 2 and the aim is to introduce students to patients and the patients' experience of health and ill health over the course of their lives. As part of this, students must appreciate how cultural diversity affects the experience of health and healthcare services. The School is aware that student experience is currently variable and we encourage the School to continue its efforts to ensure equivalence of student experience.

Structure

49. The SSC programme has recently undergone a change of leadership and a reformed SSC Committee has been in place since September 2008. The current percentage of curriculum time dedicated to SSCs is only 18.4 per cent but will increase to 23.6 per cent in 'Curriculum '08'. The School demonstrated how it monitors student choice to ensure the appropriate balance of SSCs.

50. We reviewed the learning outcomes for the SSCs available and found that many cover core material. The School reported that this enabled students to reinforce core knowledge. We support the School's plans to revisit and review the aims and objectives for all SSCs over a five year rolling cycle. The School recognises the need to develop SSC options outside of medicine and has plans to expand the range of SSCs. We recommend the School continues to refine the scope of SSCs, to expand the range and implement the rolling review.

Delivering the curriculum

Supervisory structures

51. We are satisfied that the supervisory structures involve individuals with an appropriate range of expertise and knowledge. We recognise that a number of senior academic management staff are new and that new committee structures in place will take time to become established. However, we found some lack of clarity in the structures, with many competing roles, responsibilities, and lines of authority. We recommend that the School reviews the supervisory structures in order to address our concerns.

52. The Dean for Education is the Chair of the Faculty of Medicine and Dentistry Board. The responsibility for programme delivery is devolved to the Associate Dean

for Undergraduate Medicine through the Medical Education Committee (MEC). Four committees feed into the MEC:

- a. The Medical Education Quality Enhancement Committee (MEQEC) chaired by the Associate Dean for Education Quality. This committee has been re-established after a period of inactivity. The key role of the MEQEC is to receive service increment for teaching (SIFT) reports and annual reviews from year groups. The module evaluations feed into the Head of Year, who hold responsibility for the annual review. The MEQEC can scrutinise these reports before they feed into the MEC.
- b. The Curriculum Working Group (CWG) chaired by the Deputy Dean for Education. The CWG would consider significant changes in curriculum content or structure. Changes to curriculum delivery would be considered at year group level.
- c. The Medical Assessment Committee (MAC) chaired by the Head of Assessment considers recommendations from external examiner reports. Assessment methodologies and innovations are brought to the MAC and the examination cycle and pattern of assessment are discussed.
- d. The Education Resources Committee (ERC) chaired by the Associate Dean for Undergraduate Medicine considers resource needs of the programme, including staff and facilities. Where these have financial implications, the ERC produces a bid for the School's annual planning round.

53. Students are appropriately involved in the supervisory structures. The junior and senior Staff-Student Liaison Committees provide a forum for student representatives to raise issues with the School. Students consider that the School listens to them and provided examples of changes made in response to their evaluation.

Teaching and learning

54. The School uses new technologies to deliver teaching, such as simulation suites. The teachers we met during our visits provided excellent role models for the students. The personal mentor scheme aims to develop role modelling.

55. We are satisfied with the college staff development strategy and the training opportunities available to tutors, including annual clinical teachers' days which focus on curriculum planning and delivery, a Certificate in Teaching and Learning, and specific training for PBL and communication skills tutors. The School also offers postgraduate qualifications from other providers and community based training. The School works to ensure that training opportunities avoid repetition with training available to clinicians within the Trust.

56. Many tutors we met demonstrated knowledge of training opportunities available and students reported that tutors were knowledgeable about learning

outcomes and the curriculum. We reviewed the handbooks, and tutors and students reported that they were a useful source of information.

57. Students spoke positively about the clinical experience from Year 3 onwards. Year 5 students reported good experience of clinical teaching, but felt Year 3 could have been more structured and were aware of the plans to re-structure this. Students noted that in the final year their experience varies depending on the firm they are attached to. Students reported some variability between placements and felt there were too many students per attachment at The Royal London Hospital.

58. The structure of Year 3 is changing in 'Curriculum '08' from two 14-week integrated skills attachments to three 10-week systems based attachments, using the same placement sites and teachers. We support this development but we are concerned about the School's current planning for the changes to Year 3. We found that this is not as far advanced as we would have expected, with the detailed structure of the attachments still to be confirmed. As part of the requirement related to 'Curriculum '08', the School must report to the GMC on the implementation and evaluation of changes to Year 3.

59. The School uses a number of methods for collecting evaluative data, including staff/student away days, evaluations in partner trusts, via the School's virtual learning environment, CE6, Dundee Ready Education Environment Measure (DREEM) and the Bristol Online Survey.

60. We have concerns about the School's quality management systems. Although some local feedback loops are in operation, the evaluation mechanisms in use vary considerably in nature and effectiveness between partner trusts. There is a lack of central control and monitoring. However, the School is aware of key issues affecting students and the newly established MEQEC is working towards a consistent approach. We require the School to review the evaluation methods and quality control mechanisms across partner trusts to ensure consistency in approach. The School must look at outputs centrally, monitor and respond to issues raised by students, teachers and external examiners (see paragraph 97) and ensure that these are acted on where appropriate, and evidence for the action taken is documented.

61. The School visits its partner trusts on an annual basis. A template is used for the SIFT visits which include a self-assessment by the trust prior to the visit. Senior staff at the School meet senior teachers and administrators in the trust to go through the self-assessment and meet with students on site. We reviewed visit reports to a sample of trusts, which contained action points but we saw little evidence of follow-up. The School must ensure feedback loops are closed and evidence for the action taken is documented.

62. Having reviewed student timetables, we are satisfied with the range of teaching and learning opportunities available to students, including small group PBL and communication skills sessions, large group lectures and practical classes. We are satisfied that there are sufficient opportunities for self-directed learning.

63. Students reported that their experience of PBL is variable and dependent on the tutor and group size. GEP students were happy with the small PBL groups in

their course. Students valued PBL as advanced preparation is needed and the cases give basic science clinical context.

64. The School works in partnership with City University and with other providers to deliver interprofessional common learning, early years IPE, middle years IPE and peer teaching. The School provided examples of where IPE works well. The School acknowledges the difficulties in delivering IPE to large student numbers and that IPE receives mixed evaluation from students. The School also supports student views about timetabling difficulties. There have been some difficulties at City University which have compromised delivery of IPE over the past year and the School reported that these were resolving. We identified a lack of strategic vision for IPE and recommend that the School reviews the purpose and timing of IPE. The School should also look at the delivery of IPE in partnership with other providers.

65. There is an integrated curriculum from Year 1 of the course. There are weekly clinical lectures in PBL courses; lectures including clinical demonstrations and specific clinical lectures in the basic science modules. The planning for 'Curriculum '08' has involved considerable interaction between basic scientists and clinicians. The School identified a lack of basic science integration in the clinical years of the course and is working to address this in 'Curriculum '08'. The clinical tutors we met recognised that an increased commitment from clinicians was needed to deliver this. We require the School to report to the GMC on the effectiveness of these changes.

66. The School's clinical curriculum reflects the changing patterns of healthcare and is increasing the amount of time spent in the community for 'Curriculum '08'. Students spend time in central and district general hospitals, general practice and community medical services.

67. We are satisfied that students have sufficient opportunities to interact with people from a range of social, cultural and ethnic backgrounds. Students spoke positively about the learning opportunities provided by the East London population.

68. The fourth phase of the course is focused on preparation for practice. All students complete a week's preparation for F1 in the final year of the course after the final examinations. It is not always possible for students to shadow in the post they will take up when they graduate but there are opportunities in local trusts. In addition, graduates starting F1 in the North East Thames Foundation School (NETFS) complete a pre-employment shadowing week in July. The F1 doctors and clinical tutors we met confirmed this and considered it useful in preparation for F1.

Learning resources and facilities

69. We toured the facilities during site visits and found them to be adequate. All clinical and non-clinical tutors we met were satisfied with the facilities, both centrally and at partner trusts. Students spoke positively about the facilities and considered them accessible. The clinical skills facilities at some of the peripheral hospitals visited were very good and students had timetabled teaching sessions. However, an issue was reported with a lack of internet access at some partner trusts. The School visits all sites and checks facilities as part of the SIFT visits.

70. The School's virtual learning environment, CE6, is a good resource and we look forward to further developments, such as the virtual patients. However, CE6 is limited by IT issues, such as slow speed and unreliable network connections. Students had mixed views on the user-friendliness of CE6 and some found it difficult to navigate. Students also reported some difficulties with webmail. QMUL maintains the server and technical services, and sponsors CE6. We recommend that the School works with QMUL to review and improve the IT provision.

71. Students spoke highly of the Robin Brook Clinical Skills Centre and demonstrated awareness of how to sign up for clinical skills sessions online. Students also appreciated the late night learning sessions. The clinical skills centre is funded by the Centres for Excellence in Teaching and Learning (CETL) initiative until this year and we are satisfied that the School has a post-CETL funding strategy in place. The facilities provide good opportunities for self-directed learning with facilitator support. There is also a simulation suite within the Centre. We commend the Robin Brook Clinical Skills Centre as an excellent learning resource and an area of good practice.

72. We visited the learning landscape and the resources were well set out and encouraged self-directed learning. The labelling on some anatomical models could be improved; however, the handouts provided to students were of a good quality.

Student selection

73. We are satisfied with the School's selection procedures. They were reviewed recently and the offer is now based on higher grades. The UK clinical aptitude test (UKCAT) is used to sift applicants for both courses. This has reduced the number of candidates invited for interview for entry to the five year course and to the assessment centre for entry onto the GEP. The School has changed the format of the admissions interview from 2008. Interviewers are trained by the School, and monitored by evaluation from candidates.

74. We note that the School has a number of initiatives for widening participation, including Newham.doc and student assisted medical and dental applicants.

Student support, guidance and feedback

75. The support systems are split into three parts: pastoral support, which encompasses the pastoral pool of senior academics and support from QMUL; the mentor system which has been introduced in 2008/09 to provide students with repeated interaction with senior staff; and the academic year tutors who are available for personal support and remediation for struggling students. The School must monitor the new structures and report to the GMC on their effectiveness as part of the requirement to monitor 'Curriculum '08'. We encourage the School to be mindful of the potential risks associated with transfer of information between the three strands.

76. The personal mentor scheme provides one point of contact for students over the course. Each mentor is responsible for two groups of up to 10 students split into Years 1 and 2, Years 3 and 4 and Year 5. In Year 5 students also meet with their clinical tutor to support their F1 application and have one meeting with their future educational supervisor. Year 5 students appreciated this. We commend this support for the application and transition to F1 as an area of good practice.

77. We commend the student support systems and the links to college services. All students were positive about the support provided by the School and the QMUL services. The QMUL services are well signposted and linked to the School. We found that the representatives we met from the disability and dyslexia service, careers service and counselling service were aware of their role in student support. The services provide confidential support; however, students are encouraged to disclose information to the School.

78. Satisfactory guidance on occupational health is provided in the student support and progress handbook. There is also information on the School's cheating and plagiarism policies which students found accessible.

79. Students receive information during the induction programme on the support networks available and where to find guidance. The student handbooks provide clear information on the core curriculum and SSCs with key contacts for each year, details of teaching methods and resources, guidance on assessment and professionalism. Students were satisfied with the guidance received.

80. The School reported that changes are communicated to students via newsletters, the Student Association Vice-President, emails, CE6, the Student-Staff Liaison Committees and the Student-Staff Conference. Students have also led poster campaigns, for example, on professionalism.

81. Communication skills and PBL sessions provide immediate feedback to students. According to students, the quality of feedback provided in the clinical years of the course varies dependent on the consultant. We support the aims of the personal mentor scheme to improve feedback to students in end of year one-to-one meetings.

82. Students have logbooks and portfolios in the clinical years of the course to record their learning. Students reported that these were useful and we reviewed a sample and found them to be appropriately completed.

Assessing student performance and competence

The principles of assessment

83. After reviewing examination papers and observing the final Part 6 OSCE, we are satisfied that the schemes of assessment support the curriculum and allow students to demonstrate the depth and breadth of their knowledge.

84. Students are assessed appropriately on their professional attitudes and behaviour. Report forms are used in Years 3 to 5 which assess students in 12 domains with associated guidelines for teachers. An overall fail on the report form or three minor misdemeanours through the year would trigger a referral to one of the Academic Year Tutors. Failure of remediation or recurrence of inappropriate behaviour results in referral to the Head of Year and then the Professional Capability Committee (PCC). Each end of year clinical examination has a yellow card scheme for examiners to flag concerns not covered by the mark sheets. We observed these in use during the final Part 6 OSCE.

85. The School's scheme for assessment shows that core and student selected aspects of the curriculum contribute to the overall result. Annual 'hurdles' for all SSCs must be passed but they do not contribute to the ranking. We note that there is a common marking scheme for grading SSCs and measures in place for monitoring tutor marks across the SSC programme. However, the School recognises that the consistency of assessment and quality control in partner trusts could be improved. We recommend that the School continues its efforts to ensure consistent assessment of SSCs across the programme.

86. The School uses a wide range of assessment techniques which we consider appropriate for testing the curricular outcomes. The School uses acceptable methods for standard setting and we are satisfied that the summative examinations are valid and reliable. The School monitors the reliability of clinical examinations and produces very good statistical reports with details on reliability and station performance. We commend the School's analysis and evaluation of the assessment systems.

87. The School is making attempts to assess the reliability of in-course assessments and, where the reliability of an individual small assessment is low, this is combined with other assessments so that it contributes in a small way to an overall grade.

88. We are satisfied that students' knowledge, skills, attitudes and behaviour are thoroughly assessed in the final year with a combination of written and clinical examinations. We observed the final Part 6 OSCE and the examination was well organised and run. There was a good range of stations testing a range of competencies at F1 level in the clinical examination skills and clinical communication skills stations, although the practical procedure stations were of a relatively simple level (see paragraph 39). External examiner reports confirmed this.

Assessment procedures

89. Historically, blueprinting has been against subject areas in Years 3 to 5. In Years 1 and 2 there was not previously a set of overall year outcomes, so the test domains for each paper were based on elements of the curriculum. An appropriate sample of outcomes is tested. We support the School's plans to use COMPAS to develop precise blueprinting against learning outcomes.

90. The School's scheme of assessment and assessment handbook provide clear indication of how individual examinations contribute to the overall result.

91. Students have information on assessment in the relevant year handbook. We observed the student briefing at the final Part 6 OSCE and it was satisfactory. Students understood the process and guidance provided outside each station was clear.

92. The School provides in-house OSCE examiner training and provides an online briefing for examiners to watch prior to the examination. We observed the examiner briefing for the final Part 6 OSCE which was adequate and consistent between sites.

93. The simulated patients used in communication skills training and clinical examinations attend group training and delivered a consistent performance.

94. We reviewed marking sheets for the final Part 6 OSCE and the checklists were clear with a global judgement at the end. We shared the external examiners' concern about the level of seniority and experience of some examiners used in the final examinations, for example F2 doctors. The School should review the selection of examiners for the final Part 6 OSCE and ensure that they are appropriately experienced and trained.

95. We noted at the exam board a number of mark sheets which were not fully completed by examiners in the final Part 6 OSCE. We encourage the School to consider introducing a fixed protocol for making decisions related to examiner error to ensure consistency in decision making in examination boards year on year.

96. The School uses appropriate methods for setting the pass mark. For written examinations it is set in advance using suitable standard setting methods, and for clinical examinations the borderline group method is used.

97. External examiners are appropriately involved in the process from setting examinations to the examination board. External examiner reports are considered at the MAC and the responses feed into the MEC. The School was unable to provide the team with a full set of external examiner reports. Some external examiner reports reviewed contained similar issues in the academic years 2006/07 and 2007/08. As part of the requirement related to quality control the School must ensure external examiner reports are centrally monitored, recommendations considered and, where appropriate, acted upon and documented.

Appraisal

98. Consultants give feedback at the end of each attachment and students reported that this varies in quality. The School provides annual general feedback on written examinations and OSCEs. Students would like more detailed feedback on their performance. It was reported that students receive detailed feedback if they fail.

Student progress

99. We note that the marks for the GEP students were generally high in the final year, with a high proportion of merits awarded compared to the five year course.

100. We are satisfied with the provisions in place for students who have made the wrong study choice. These students may either be awarded an unclassified BSc after three years or given the option to complete a classified honours degree from the intercalated programme.

101. Final year students spoke positively about the careers guidance available, including lectures, careers fairs and appointments with the careers service. We commend this as an area of good practice. Year 1 and 2 students felt that earlier careers advice extending through the course would be useful and we encourage the School to consider this.

102. The PCC was set up this year to address more minor concerns than those which would go to the Fitness to Practise (FTP) Committee. This provides a system to formally monitor students at a lower level and a mechanism to monitor health issues. The PCC processes formal warnings which may refer students to the FTP Committee. We note that the School used *Medical students: professional values and fitness to practise* as a basis for the new processes, and pastoral and fitness to practise issues have been separated. We encourage the School to continue to monitor and evaluate the effectiveness of the changes.

Student health and conduct

103. We are satisfied with the School's policy for raising concerns. Students recalled a talk on fitness to practise and were aware of where to look for relevant documentation. Students in earlier years of the course had less awareness of the whistle blowing policy and routes for raising concerns than students in the clinical years of the course. Tutors demonstrated their knowledge of reporting routes and noted that fitness to practise concerns are closely monitored by the School.

104. The School has very close links with the NETFS and the Deanery. The School worked with the NETFS to develop the transfer of information process, which is now in place nationally. This includes a voluntary declaration by students. We are satisfied with the mechanisms in place for transfer of information.

Acknowledgement

105. The GMC would like to thank Barts and The London School of Medicine and Dentistry and all those they met during the visits for their co-operation and willingness to share their learning and experiences.



Barts and The London

School of Medicine and Dentistry

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12th October 2009
Professor Jim McKillop
Chair of the Undergraduate Board
General Medical Council
350 Euston Road,
London NW1 3JN

Dear Professor McKillop

Quality Assurance in Basic Medical Education: Barts and the London 2008-2009

Barts and the London School of Medicine and Dentistry have read the report of the visiting QABME team and we are pleased with the final outcome. We welcome the commendations of the team on the following areas of innovation and good practice:

- Our teaching and assessment of communication skills and the focus on communication skills in the final year OSCE, and clinical skills facilities;
- The support made available to Year 5 students for their transition to F1 including support for the F1 application, careers advice and a meeting with their future F1 educational supervisor;
- The student support services of the School and our strong links with college services;
- The analysis and evaluation of the assessment system and resulting reports.

We wish to assure the Undergraduate Board of the GMC that an action plan has been configured to address the issues raised in the 2 requirements and 6 recommendations. Please see the attached document for details of the measures being put in place to manage them.

As a School we thank the team for the collegiate ethos of their visits to Barts and The London.

Yours sincerely

Professor Chris Fowler
Dean for Education

Quality Assurance in Basic Medical Education (QABME) Visits 2008-09 Replies to the Requirements & Recommendations

Requirements

Continue to monitor 'Curriculum '08' and evaluate the changes. The School is required to report in a detailed way to the GMC in the academic year 2010/11 annual return on the implementation and evaluation of changes with the potential for a revisit thereafter.

We are implementing our modified MBBS programme *Curriculum '08*, and delighted that many of these changes resonate with the most recent edition of *Tomorrow's Doctors* (2009). The revitalized Medical Education Quality Enhancement Committee and the Medical Education Committee are working together to effect a cohesive action plan for the evaluation of changes. We will look forward to sharing our findings in academic year 2010-2011.

Review the evaluation and quality control mechanisms across sites to ensure consistency in approach. The School must look at outputs centrally to monitor and respond to issues raised by students, teachers and external examiners.

We appreciate that this is an area of the School's activities in need of augmentation and we thank the visiting team for their helpful discussions on effective quality enhancement. To this end:

- We have visited Schools who have been commended in their quality mechanisms to discuss their strategy and day-to-day activities in student evaluation, effective feedback and closing feedback loops.
- We have embedded these ideas into the School's annual site visits to our partner NHS institutions.
- At the next Student-Staff Conference in October 2009, we are to gain the student opinions and needs with respect to collection of evaluations of our programmes aimed at more effective closure of feedback loops.
- We will be piloting the new evaluation in 2009-2010 (with full implementation in academic year 2010-11) for a consistent and equivalent approach across the various sites of our education activities.
- All academics will, with immediate effect, have full access on the virtual learning environment to the external examiner reports and our replies to their comments.
- We have started the process for ensuring adequate human resources to take forward these requirements.

Recommendations

Review the procedural skills part of the Final Part 6 objective structured clinical examinations (OSCE) to ensure the standard reflects the competencies required of an F1 doctor and ensure an appropriate emphasis on infection control.

We thank the GMC for their observations and we will ensure, when preparing the blueprint for the final year OSCE that the procedural skills examined reflect the competencies required in the new *Tomorrow's Doctors* (GMC, 2009) for a F1 doctor. In addition we will ensure that students adhere to the School's guidance on infection control, not only on placement, but also in the clinical examination setting.

Continue the process of refining SSCs and roll out the proposed changes.

The range and choice of student-selected components (SSCs) are continuing to expand, with several new ones being introduced each year. The developments introduced in the last 18 months have improved and refined our assessment schemes. The programme of change will continue over the next few years.

A major new SSC initiative introduced this academic year (2009-10) is the "research SSC", that brings together Year 2 students with individual researchers in the School. We continue to encourage students to self-organize their SSCs.

With the roll-out of *Curriculum '08* in 2009-10, we have introduced a major revision of the Year 3 SSCs, where students can exercise a wide choice in their education within the context of their clinical rotations, building upon and enhancing skills that have been developed in SSCs in Phase 1. In the next academic year (2010-11), there is to be a major revision of SSCs in Year 5.

Review the supervisory structures to ensure clear lines of authority and responsibility are set out.

We would like to assure the Undergraduate Board that our supervisory structures are under review and changes to simplify our arrangements will be implemented in 2009-10.

Review the purpose, delivery and timing of inter-professional education (IPE)

We are reviewing the IPE structures and delivery, for we also feel that this is an area that needs discussion and amendments, particularly in light of *Curriculum '08*. We are also clear that any changes will need to accommodate the guidance in *Tomorrow's Doctors 2009*.

Work with QMUL to review and improve IT provision, including the virtual learning environment, CE6.

We are in discussions with the College to address these issues. To this end, the speed and reliability of connections with the College are being reviewed in order to plan any necessary service upgrades, and QMUL is taking this issue seriously. Any problems regarding access owing to NHS firewalls for students on placements are being monitored. Students on Outer London placements have personal access through non-NHS networks in their accommodation, and may also have informal access through hospital *WiFi* hotspots. Inner London students can access central facilities of the School. We are initiating an extensive student review of CE6 to garner opinion regarding necessary changes and improvements.

Review the selection of examiners for the Final Part 6 OSCE to ensure all examiners are appropriately experienced and trained.

We share the concerns of the QABME team. The School's Medical Assessment Committee has drawn up guidelines to quality assure the seniority of the OSCE examiner, their training and expectations of the School with respect to conduct and vigilance in marking OSCE examinations, and are to be applied for all years of the MBBS programmes. Further guidelines have been prepared to deal examiners who do not complete mark sheets to an acceptable standard and will be implemented in the next cycle of examinations. Our aims are to reduce to a minimum the incidence of examiner variability. We tested the system as a trial at the Part 4 examinations in July 2009 and it appears to work satisfactorily.