

GENERAL MEDICAL COUNCIL

*Protecting patients,
guiding doctors*

FINAL

Annual report of the Visitors to the University of Birmingham School of Medicine for 2003/2004

Introduction

1. This is the report to the Education Committee of the General Medical Council on the Quality Assurance of Basic Medical Education (QABME) pilot of undergraduate provision at the University of Birmingham School of Medicine.
2. The Visiting Team appointed by the Education Committee for this purpose was:

Professor Anne Garden (Team Leader)

Dr Mohammad Akhtar

Dr Amy Ford

Professor Roger Green

Professor David Johns

Dr Gina Radford

Mr Bruno Rushforth (medical student)

Professor Maurice Savage

Dr Mairi Scott

Dr Chris Stephens

Mrs Barbara Wright

3. The team was supported by Kevin Harte.

Our programme of visits in 2003/04

4. The University of Birmingham School of Medicine was one of three UK medical schools chosen in summer 2003 to pilot the Education Committee's new system for quality assuring basic medical education. The other participating schools were the universities of Aberdeen and Liverpool.

5. Prior to commencing the pilot exercise, officers from the GMC met key staff at each School to discuss the management of and ways of seeking feedback on the process.

6. In September 2003 all three pilot Schools were sent our undergraduate template for completion and return by December 2003. In January 2004 the Visitors attended a training event in Manchester at which an action plan (including a schedule of visits to each school) was drawn up. This was later agreed with each school, and approved by the Education Committee.

7. Between February and July 2004 the Visitors made five separate visits to the University of Birmingham School of Medicine. The first four of these visits was undertaken by a small number of Visitors within the team. For the final synoptic visit in July we assembled as many of the team as were available at that time.

8. On 27 February 2004 we met School staff to seek clarification and further information about a number of issues (primarily relating to the curriculum and assessment) identified by the team following its consideration of the completed template. On 24 March we discussed a range of issues with a group of students, drawn from different years of the curriculum and including those following the new four-year Graduate Entry Course (GEC). Later that day we also had further discussions with the School's experts on assessment matters. The major focus of our visit to the School on 27 April 2004 was curriculum development, though we covered a number of other areas including student support and guidance and fitness to practise. On 17 June we attended as observers the year 5 Board of Examiners'

meeting where the marks for that cohort of students were discussed, ratified and agreed.

9. On 13 July 2004 we undertook our synoptic visit to the School. The aims of this visit were to clarify any outstanding issues, to integrate the information we had gathered previously and to agree our findings for the final visit report.

Summary of findings

10. We would wish to thank the School for its co-operative, and helpful approach to the piloting exercise. Its staff deserve praise for the excellent practical arrangements made for each of our visits and for the open and friendly way they responded to our enquiries.

11. Its students were clearly enjoying studying medicine at Birmingham and spoke positively about the level of support they received both academically and pastorally. They felt that their views on the curriculum were valued by the School and gave examples of how their suggestions for change had been implemented.

12. The School has recognised the need for more precise definition of core material and for greater integration and co-ordination of learning and assessment systems. Ongoing reviews are currently addressing these areas. We strongly support the School in this work, which hopefully will result in more curricular time being freed up to supplement the student selected components (SSC) programme.

13. Later in this report we have identified areas of good practice and have suggested some areas requiring additional consideration by the School. Those suggestions should be read in the context of our overall findings in the report as a whole.

Curricular outcomes

14. The Visiting team agree that the learning outcomes for the School's MB ChB programme were consistent with those set out in *Tomorrow's Doctors 2003*.

15. Visitors discovered that the School had developed a set of internal outcomes for the curriculum (with input from both staff and students) and had compared these to those in *Tomorrow's Doctors*. A visual matrix was then produced to ensure that each of the internal outcomes had been thoroughly mapped onto GMC recommendations.

Curriculum structure

16. The School told the visiting team that it is continuing the process of defining its core curriculum. Years 1 and 2 have recently been reviewed with the aims of monitoring repetition of core material, avoiding the over-dominance of lectures and encouraging further integration across biological science and integrated health science boundaries.

17. The School estimated that 12-13% of curricular time was devoted to the SSC programme. This was significantly below the GMC recommendation of between 25 and 33%. The School was reluctant to cut any of its core material in order to expand the existing SSC programme.

18. Although the School was clearly working towards introducing greater horizontal integration, Visitors thought that there was currently little evidence of this in respect of Years 3 to 5 of the curriculum including the pathological sciences, though there was early evidence of integration between the biological sciences and the integrated health sciences. The School was aware of the work that needs to be done, and Visitors would wish to encourage it to continue its efforts in these areas.

19. In shaping the curriculum and assessments the School was required to follow the modular credit system operated by the University. This had some advantages but was seen as a major inhibitor to meaningful curricular restructuring or the driving

through of significant curricular change. Module leaders could see some practical benefit in capturing core learning in a modular format while the credit system lent itself well to the planning of an exit degree for students not suited to a career in medicine. However, Visitors were told that the credit system was seriously constraining integration of the curriculum and allowing the School little or no flexibility in its assessment systems, contrary to GMC recommendations. Most Medical Schools in the UK recognise this and have not adopted such a rigid system. The University should reconsider whether the School was best served by being required to adhere to a modular credit system.

Curriculum content

20. The students Visitors met in March 2004 were enthusiastic about the curriculum, and considered that a good balance had been struck between problem based learning (PBL) components and lectures. They would welcome expansion of the current SSC menus to offer greater choice and also suggested that more anatomy teaching was carried out in the clinical years as they considered that this would help to put surgical teaching into sharper context.

The scientific basis of practice

21. Visitors were pleased to learn that students are currently receiving grounding in the use of scientific method during their studies, as they were required to carry out at least one qualitative testing of a scientific hypothesis.

Clinical, communication and practical skills

22. Clinical skills training in Birmingham takes three forms: communication skills, clinical examination skills and practical procedural skills.

23. Communication skills were primarily assessed in years one, three and five. The School was keen to tell the team about the innovative approach it is piloting for year three students, which involves video-recorded role-play sessions with simulated patients. Visitors were told that the School had introduced this project because they

were continuing to identify communication and behavioural difficulties in year five students. Visitors thought that this was an excellent means of identifying and helping students with poor communication skills and suggested to the School that it might consider starting the project in year one rather than waiting until year three.

24. Clinical examination skills were taught throughout the five years, with increased emphasis in years three to five. Models and simulators were used to assist teaching in some areas such as obstetrics and gynaecology.

25. Students were instructed and examined on their basic life support skills during years one and two, and up to the level of Immediate Life Support during the Senior Surgery module in year five. During year four all students undertook a six-week block in anaesthesia, respiratory and intensive care medicine (ARICM). This block started with a compulsory half-day in the Clinical Skills Centre at the local NHS Trust, where students were instructed in basic and advanced airway management techniques. Instruction was also given in intravenous cannulation using simulators. During the rest of the block all students must complete satisfactorily a pre-determined number of practical procedural skills on real patients before they were permitted to enter year five.

General skills

26. Visitors enquired about student involvement in clinical audit. This occurred predominantly in year two in the community-based attachment and in year five. Before graduation each student would have completed two full clinical audits and would have been assessed on at least one of these.

27. The SSC programme is designed to foster the development of key research independent learning skills. Visitors enquired about the many different forms of assessment used in the programme and were informed that these were deliberately employed to keep pace with student development throughout the course, to stretch students and to equip them with the skills they needed at those different stages (for example producing a patient information leaflet or a conference poster, or giving a

presentation). The School needs to reassure itself as to the reliability and validity of these assessments.

Delivering the curriculum

Supervisory structures

28. In response to concerns raised by the 1999 Quality Assurance Agency Subject Review an examination of the School's committee structures took place in 2001. The structure, organisation, operation and effectiveness of communication and information flows were reviewed, and a report indicating changes required was produced. A three-stage strategy was developed to implement change:

- a. The development of standard operational procedures to be used by all committees including the use of electronic document templates to standardise committee paperwork.
- b. A review and reorganisation of all committees following the standardisation procedures.
- c. The development, implementation and management of a web-based system to capture, encode and store information about the School's committees accessible to staff with appropriate authentication.

29. The Curriculum Development and Implementation Group (CDIG), until recently chaired by Professor Jim Parle, is responsible for managing the curriculum and for overseeing any major changes to it. Minor modifications can be effected by the Year Committees, which report monthly direct to the CDIG. In turn the CDIG reports to the School Executive Committee via the Board of Studies.

30. Visitors were told that any major curricular changes have to be approved at University level through the Academic Board. This has recently approved the new Graduate Entry Course (also approved by the GMC's Undergraduate Board in June 2004).

31. Although the curriculum is managed by the CDIG the School was keen to emphasise the strong input into curricular reviews made by the Medical Education Unit (soon to be the Medical School Education Unit).

32. Although Visitors welcome this streamlining of the School's supervisory structures the team were not fully convinced that the mechanism for managing the curriculum more effectively is sufficiently mature and robust. Visitors look forward to receiving evidence of its development and of the strengthening of the role of the CDIG in future.

Teaching and learning

33. Students spoke favourably of the variety of learning opportunities afforded to them, valuing in particular the different experiences to be gained in undertaking clinical placements in both urban and rural settings.

34. The School was considering introducing an SSC in teaching. Visitors commend this approach, and look forward to learning whether it comes to fruition. Currently some students are involved in teaching others during some of the SSC modules, while final year students help to prepare their year three counterparts for objective structured clinical examination (OSCE) examinations.

35. Visitors were pleased to see that the importance of teaching was also being recognised at staff level. Teaching excellence was a criterion for promotion while the new post of Associate Professor had been introduced earlier in the year. Visitors look forward to hearing of the first appointment in the School.

36. Because Birmingham has had such a significant increase in student numbers in recent years, the School has appointed clinical sub deans in each Trust and five Medical Education Developers in the School to liaise with the clinical sub deans to ensure that the standards of its clinical placements were maintained and improved. The School has also appointed 5 General Practice clinical sub deans.

37. Visitors were impressed by the detailed Framework Agreement that had been drawn up with all clinical Trusts and General Practices.

38. Regular educational monitoring visits were undertaken to each Trust (on a three to five-year cycle). A formal report with recommendations for change that were followed up by the Associate Dean for NHS Liaison was produced after each visit.

39. Visitors were told that although all the major Trusts now had clinical skills centres, these were not always being used effectively by medical students. The School explained that the problem was one of resources; there was a need for increased funding for clinical skills trainers and equipment. Visitors encourage the School and the University to work together to identify and obtain the necessary resource to ensure that medical students in Birmingham will be given increased opportunities to develop and refine their clinical skills in a supervised environment.

40. The School was actively encouraging all of its staff - and especially those involved in teaching students – to keep their skills and knowledge up to date by attending some of the impressive range of professional development programmes offered within the School and the University.

41. Contractual obligations required GP tutors to spend five days per year per practice on staff development training. Visitors would encourage the University to make similar arrangements with NHS Trusts.

42. Visitors invited the School to consider providing staff development opportunities for its curriculum leaders and academic staff, and were delighted to learn that it had already acted on our suggestion by the end of our visit cycle.

43. A University Project Board was looking at the feasibility of introducing shared learning for medical and nursing students under the supervision of both professions. Previously there had been some joint teaching of medical and dental students but this had proved unsatisfactory to both parties and had therefore been discontinued.

Student selection

44. Visitors considered the student selection procedures operated by the School to be open, objective and fair. In common with other medical schools, there was a disappointing lack of applications from Afro-Caribbean candidates.

45. Visitors were told that a large number of senior students (approximately 120) are involved in the interview process (providing reassurance, sitting in on interviews and encouraging applicants to ask questions etc). Their opinions on the applicants are canvassed but they are not required to make any definitive judgements. Visitors were unsure as to whether the School was contemplating arranging any training for these students in order to clarify their role and responsibilities.

Student support, guidance and feedback

46. The School has a comprehensive, highly visible, multi-layered welfare support structure that was greatly valued by staff and students.

47. The number of personal and year tutors had increased significantly since 1998. Birmingham used to operate a personal tutor system where the students had a different tutor each year. This has been replaced by a system of Tutor Group Families (two tutors are assigned to a particular group of students) which allows the student group peer as well as tutor support. The School required its students to meet their tutors twice a year; from this year the Curriculum and Welfare Committee has decreed that the first meeting is mandatory.

48. Visitors were pleased to be told that tutors were not responsible for providing academic supervision of and pastoral support for the same student. These roles were clearly separated. And it was encouraging to learn that students were not restricted to consulting their appointed tutors; they were at liberty to approach different staff depending on the nature of their enquiry.

49. The students following the new four-year Graduate Entry Course (GEC) also spoke positively of the support they received from their PBL tutors but regretted the

lack of information given to them this year about the other support networks offered by the University. This has been brought to the attention of the School and steps have been taken to ensure that this information gap has been plugged.

50. Hitherto the provision of career advice to students had been through informal channels but the School had recently included detailed medical careers information and advice on its website. However, this had not been widely used by students and the School was considering inviting personal tutors to discuss career options with students on a one-to-one basis.

51. The School had taken many positive steps to improve the timeliness and quality of its feedback to students including:

- a. One-to-one feedback in Firm One, and in the year 5 Medicine Firm there was feedback from clinical teachers part way through the attachment.
- b. Informal formative assessment opportunities in most modules (small group and bedside teaching).
- c. Personal tutors have a breakdown of student grades by assessment component.
- d. Mark sheets for written work included comments and feedback on student performance.
- e. Verbal feedback was captured (in writing) during oral presentations and clinical examinations and was copied to students.
- f. Clinicians were now trained in giving feedback.

52. Visitors thought that the instant feedback on performance available to students immediately after the year three and five OSCE seemed particularly praiseworthy.

Assessing student performance and competence

53. The School maintained a rich menu of assessment methods, including a significant amount of written work (there were written papers in years one and two and written project work later in the course).

54. It seemed to the Visiting Team that there were a large number of different assessments in the curriculum and Visitors were not clear how these inter-related with each other. Visitors thought there was a need for a simpler, more co-ordinated system. The Team were pleased to note the School's plans for more co-ordinated assessments in years one and five, and would encourage it to extend this practice throughout all five years of the curriculum.

55. The students Visitors spoke to in March 2004 appeared to understand the assessment system, but the School itself has been engaged in a review of its policies, procedures and principles for assessment since October 2002. The aim of the review was to move to a more coherent system of co-ordinated assessment – currently there was a mixture of modular and discipline-based assessments.

56. Visitors were told that many changes had already been made to existing systems. The Team were pleased to note that true/false written questions were being phased out on the basis that this did not provide an adequate test of student knowledge. Visitors thought that this was in line with what was happening across the UK and internationally. A new integrated examination had been established at the end of year four. Students had not initially taken to this as they had to revisit previous subject areas but Visitors were assured that they could now see its benefit. The review has also attempted to marry up summative and formative assessments and has introduced more in-course assessment that reflects the mode of teaching employed during modules.

57. Visitors noted the format of the year five in-course assessments and the final year examinations, and would be surprised, given the small number of OSCE stations and the potentially unstructured nature of the viva examinations, if analysis were to show that these were reliable assessments. Visitors would encourage the

School to look again at the structure of these examinations in order to ensure their reliability.

58. The Team asked the School to explain the philosophy behind its penalty points system whereby students could pick up such points if they were awarded a D or E grade in some course modules. Visitors were informed that the system was introduced to make sure that students paid attention to all aspects of the curriculum. It took into account gradings rather than marks and allowed the School to look at the academic and professional profile of students. In the past it has been used as one of the sources of information for the School to take into account when making a recommendation for student withdrawal from the course. Its future was, however, uncertain and it might not survive the assessment review in its present form.

59. Visitors thought that the School had explained its new assessment strategy very clearly to the Team, but noted that no documentation of these proposals had yet been prepared for staff or students. The School accepted this, and is working on a clear and definitive document, which should be available early next year once the recommendations of the review had been fully implemented.

60. Visitors were pleased to note that the School's assessment of therapeutics had been highlighted in the recent Department of Health document *Building a safer NHS for patients*.

61. All assessments are reviewed by the School's external examiners to ensure that standards are being set at an appropriate level. The lead external examiner (the Chief Assessor) was present at the year five Examination Board and was fully and appropriately involved in the discussions of some of the more difficult aspects of individual cases. Visitors noted the extent to which mitigating circumstances were allowed to compensate for a fail mark in the final examination.

62. Visitors noted the disparity between pass/fail and honours rates in different subjects in year five and would encourage the School to investigate this further.

63. Visitors were interested to learn that the School had revised its procedures for responding to the formal reports of external examiners. Under the new system these reports are sent to a named contact in the School to prepare an initial response, before being sent for scrutiny and additional comment to the appropriate Year Committee and the Curriculum Development Implementation Group.

Student health and conduct (fitness to practise)

64. Visitors believe that the framework for a comprehensive fitness to practise system for the School is now in place. The School told the Team it was now content with the new procedures that will become operational in autumn 2004, though it needs to ensure that the new arrangements are consistent with those for pre-registration house officers (PRHO) (see paragraph 71 of *Tomorrow's Doctors*). Students will have the right of appeal under the School's new fitness to practise procedures to the University Fitness to Practise Committee and ultimately to Senate.

65. The Visitors were pleased to note the establishment of a Bachelor of Medical Sciences exit degree for those leaving the course on non-academic grounds.

66. The Medical School Student Agreement (Student Contract) has been drafted from the perspective of protecting patients rather than the rights of the individual. For example, students with dyslexia are allowed extra time in written examinations but not in their clinical examinations (after year two). The School explained that this was because students must be able to cope effectively in a clinical (real-life) situation, where additional time was not an option. The students Visitors spoke to were content with this policy, and had no knowledge of any student at the School who had been disadvantaged by it.

67. The School was also refining its systems to enable students to report concerns they may have about the conduct, health or behaviour of their peers. This was being achieved through expansion of the 'Yellow Card' system. Hitherto this has been widely used in all the Birmingham Regional Trusts to allow teachers to flag up concerns about students, proving very successful in the early identification of

unprofessional behaviour. It will now be open to students to register their concerns about teachers and fellow students under this system.

Other issues

Quality enhancement

68. There were a number of issues emerging from the 1999 GMC and Quality Assurance Agency visits, including assessment, integration and identification of core, which had not been fully addressed yet by the School. Visitors were not sure whether the mechanisms were in place to respond sufficiently rapidly to legitimate outside criticism.

Main recommendations of our report

69. The School estimated that 12-13% of curricular time was devoted to the SSC programme. This was significantly below the GMC recommendation of between 25-33% and the Team would invite the School to look at this as part of its ongoing curricular review (paragraph 17)

70. It seemed to the Visiting Team that there were a large number of different assessments in the curriculum and Visitors were not clear how these inter-related with each other. Visitors encourage the School to move to a more coherent system of co-ordinated assessment. It is essential that such assessments are reliable and valid (paragraphs 54, 55 and 57).

Areas for further consideration

71. Although curriculum outcomes had been fully mapped against GMC recommendations, Visitors detected a lack of clear definition of core material. The Team was not convinced that a structure had been put in place for managing the curriculum more effectively. The School accepted the Team's view and assured Visitors that it was working hard to redress both areas but the pace of progress appeared slow to the Visiting Team (paragraphs 16 and 32).

72. Although the School was striving to introduce greater horizontal integration Visitors wondered whether the modular credit system operated by the University was seriously inhibiting the School's plans to increase integration of the curriculum, undertake meaningful curricular restructuring or drive through significant curricular change. The University should consider whether the School was best served by being required to adhere to a system considered by the School to be over rigid (paragraphs 18 and 19).

73. Visitors noted that the School was keen to develop its clinical skills teaching but currently lacked the resources to fund trainers and supervisors at the clinical skills centres at the major Trusts. Visitors encourage the School and the University to work together to identify and obtain the necessary resource to ensure that medical students in Birmingham will be given increased opportunities to develop and refine their clinical skills in a supervised environment (paragraph 39).

Areas of innovation and good practice

74. Students spoke favourably of the variety of learning opportunities afforded to them in the curriculum, valuing in particular the different experiences to be gained in undertaking clinical placements in both urban and rural settings (paragraph 33).

75. The School is to be commended for the steps it has taken to safeguard and enhance the quality of its clinical placements following the significant increase in its student intake (paragraphs 36).

76. Visitors commended the detailed Framework Agreement that had been drawn up with all clinical Trusts and General Practices taking students (paragraph 37).

77. Visitors commended the comprehensive, highly visible, multi-layered welfare support structure in place at the School. This was greatly valued by staff and students (paragraph 46).

78. Visitors felt the School deserves credit for the way it prepares its students for medical practice, as evidenced by the arrangements it makes for assessment of therapeutics (paragraph 60).

79. The School was expanding its 'Yellow Card ' system to allow students to flag up concerns about other students and teachers. Visitors think this will provide a robust means of identifying at an early stage patterns of behaviour that warrant investigation (paragraph 67).

Signed.....

Dated.....

Annex A – School Response

6201/WFD/KE

7th December 2004

Diane Bennett
Education Section
General Medical Council
St. James' Buildings
79 Oxford Street
Manchester
M1 6FQ

Dear Ms Bennett

Response to Final Report of QABME Visits to Birmingham Medical School for 2003/04

I write regarding Professor Rubin's correspondence inviting the Medical School's response to the findings of the final report of the QABME visits, which took place between February and July 2004.

The School has found the QABME visits to be a worthwhile and beneficial process and has given us the opportunity to critically assess our existing provision. We were, however, a little surprised at the extent to which our own educational processes were reviewed, given that, when we volunteered to be a pilot site, we believed that its purpose was, primarily, to assist you in optimising your new processes.

The report, on balance, is a fair and accurate representation of our current provision and has been considered by the Vice Dean and Associate Dean of Quality Assurance with key staff involved in the development and delivery of the MBChB programme. The report's recommendations were considered and actions to address them have been identified. They are summarised below:

Assessment

The School recognises that a more integrated and co-ordinated assessment framework is required. A comprehensive review of assessments in Years 1 & 2 and Year 5 has already been conducted and we will examine, closely, its findings. An assessment working group (a subgroup of the MBChB Curriculum Development Committee - CDIG) has been convened to review the entire assessment process and its remit will include developing a more coherent system of assessment.

Core Curriculum & SSCs

The School acknowledges that a clearer definition of core material is required and various methods by which this could be attained are currently being considered.

In terms of SSCs, the School is considering a move towards an increase in their percentage of curricular time by enabling student selection of experience in some clinical areas, for example Year 4 Oncology and Year 5 Psychiatry. It has been agreed that a sub group of CDIG will examine both of these issues.

Modular Credit System

The School is grateful for the GMC visiting panel's support in this area. Their comments will be forwarded to the appropriate persons at the University.

Clinical Skills Teaching

The School is committed to developing its clinical skills teaching, an area of significant importance and essential to the training of competent doctors. To this end, as well as the training which students currently receive (particularly in the ARICM 4th year module and Life Support training) a project is due to commence that will provide revision and supplementary training in procedural skills required by PRHOs. Using two sites (one in the community and one at University Trust) two skills trainers have been appointed using SIFT monies. All final year students will have two or, if required, three sessions at these skills centre to ensure their competency in core procedural skills. In subsequent years, students will be required to demonstrate their competencies in a summative assessment in order to qualify.

Furthermore, an investigation into the Clinical Skills Centres within the Medical School and the Teaching Trust is currently being undertaken. The report and its subsequent recommendations are expected in late February 2005.

We wish to point out one factual error within the main body of the report [ref. No. 66]. Please note that the exit degree for those leaving on non-academic grounds is a BSc in Medical Studies.

Once again, can we state that we have found the process to be of considerable benefit to us in critically assessing our provision. I trust that the responses we have made to the recommendations above will prove satisfactory, however, if we can provide further clarification, please do not hesitate to approach us.

Yours sincerely,



Professor William Doe
Dean

Cc: Professor Michael Sheppard, Vice Dean
Professor Ian Booth, Associate Dean (QA)
Professor Martin Whittle, Associate Dean (Education)
Mr Nick Ross, DLT
Ms Karen Evans, QA Officer