Quality Assurance of Basic Medical Education

Report on Faculty of Medicine, University of Glasgow
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www.gmc-uk.org
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 2006/07 quality assurance report to the GMC Education Committee on the established medical school at Glasgow (the School).

5. The last GMC review of Glasgow Medical School was in November 1999, prior to the establishment of the Quality Assurance of Basic Medical Education (QABME) programme.

6. In 1996 the School introduced a new integrated five-year curriculum of which the first three years are problem-based learning. On completion students graduate with a Bachelor of Medicine and Bachelor of Surgery (MBChB).

7. In 2005/06 changes were made to the final clinical exam, which became a 48-station objective structured clinical examination.

The QABME team

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

Professor Sam Leinster (Team Leader)
Dr Martin Talbot (Deputy)
Professor Yvonne Carter
Professor David Johns
Dr Johann Malawana
Dr Gina Radford
Dr Bruno Rushforth
Dr Chris Stephens
Mrs Barbara Wright

9. Mr Rodney Dennis and Ms Alison Lightbourne (GMC Education Quality Officers) supported the QABME team.
Our programme of visits in 2006/07

10. The team conducted seven quality assurance visits on: 7 February; 14 March; 1 and 2 May; 9 May; 18 May; 6 June and 5 July 2007.

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

   a. Meetings with a variety of members of the School.

   b. Observation of teaching sessions in GP practices and both the main university teaching hospital and district general hospitals.

   c. Observation of the examination of clinical skills.

   d. Analysis of exam papers.

   e. Observation of the final examination board.

   f. Site assessments to various NHS Trusts.

   g. Site assessments to various GP practices.

   h. Discussions with students.

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

   j. Discussions with Foundation Year 1 doctors and their supervisors.
The report

Summary of our key findings

12. We found that the School’s MBChB programme meets the requirements of Tomorrow’s Doctors in accordance with Section 5(3) of the Medical Act 1983 and it delivers a high quality learning experience for students.

13. Although we have suggested some areas for additional consideration by the School, these should be read in the context of our overall findings.

14. We were particularly pleased that areas we identified for enhancement had already been identified by the School and steps have already been taken to develop these aspects.

Requirements

15. There are no requirements in the findings of this report.

Recommendations

16. We have identified the following recommendations for the School to address:

a. The School is advised to give priority to the training and quality assurance of, and communication with, clinical and community teaching staff. We welcome the recent appointment of a senior university teacher who will have responsibilities in these areas (paragraphs 38 and 39).

b. During the School’s ongoing curriculum review next year it is advised to pay particular attention to:

   i. Ensuring that the integration of the underpinning science of women and children’s health is adequate and balanced across the course (paragraph 25).

   ii. Ensuring that the PBL cases reflect current health problems and practice, particularly in Year 3 (paragraph 29).

c. The School is advised to continue the improvement of assessment in line with international best practice. Particular areas for attention include:

   i. The refinement of final examinations blueprinting to ensure balanced coverage of the curriculum (paragraph 65).

   ii. The consistency of student selected module (SSM) assessment (paragraph 67).
iii. In-course, end of block assessment during clinical placements (paragraph 61).

iv. Arrangements to ensure adequate psychometric and statistical input into assessment processes (paragraph 64).

d. The continued expansion and improvement of the student academic advisory system and career guidance for students which we strongly support (paragraphs 52 and 53).

**Areas of innovation and good practice**

17. We commend the School on the following areas of good practice:

a. The School’s constant and active process of reflection, which has identified areas for improvement and instigated changes (paragraph 35).

b. The strong emphasis on attendance, and the mechanism for recording, checking and taking timely action when students were in potential difficulty. There is a clear delineation between procedures for student support and welfare, and academic progress, while communication channels between the processes were effective. Generally, staff were genuinely supportive of and engaged with the students (paragraphs 69 and 71).

c. The fact that students can develop their own student selected module choices (paragraph 33).

d. The modern and high quality facilities available, including the communications suite, clinical skills suite, and the well-resourced library which has excellent IT and study resources (paragraph 46).

e. The vocational studies modules for effectively developing learning skills and self-reflection (paragraph 30).

f. The dual role of the Year 1 Director as Chair of the Admissions Committee (paragraph 49).

g. The School’s efforts to widen the participation of under-represented groups (paragraph 50).
Curricular outcomes, content, structure and delivery

Content

18. The School operates a PBL curriculum where Year 3 is a linking and transitional year into the predominantly clinical Years 4 and 5.

19. We observed a wide range of teaching, including clinical teaching in primary and secondary care settings.

20. Having undertaken an overall review of the learning outcomes and teaching in the curriculum, we then focused on basic sciences, the input of social and behavioural sciences, public health, the extent of women and children’s health teaching, and the opportunities for prescribing practice.

21. Basic sciences were adequately covered within the curriculum with evidence of an upward spiral, and were integrated into the final examination. The School is planning to increase the amount of the basic science teaching which takes place in Years 4 and 5. Progress on this should be noted in the School’s annual update to the GMC, and for the next GMC quality assessment visit.

22. We found the input of social and behavioural sciences and public health curriculum to be satisfactory overall. We encourage the School to continue exploring ways to integrate public health into the curriculum.

23. The School recognised that the opportunity for students to practise prescribing was a topical issue. We saw positive evidence that the competence was beginning to be tested in the final objective structured clinical examination (OSCE).

24. We reviewed external examiner criticisms on the extent and appropriateness of anatomy, physiology and biochemistry teaching and learning opportunities. The School had investigated these concerns and we considered that they had responded appropriately.

25. We were concerned that women and children’s health is under-represented in the early stages of the course. This places increased pressure for learning on clinical attachments in later years. The subjects were covered in the final OSCE, but we had concerns about this as discussed in paragraph 53.

26. Clinical and practical skills were taught and assessed satisfactorily.

27. Communication skills, and general skills such as time management, prioritising tasks and self-reflection, were taught and assessed. Students displayed a high level of competence.

28. Students and Foundation Year 1 trainees demonstrated a high level of awareness of the value of reflection and of responding to their own learning needs. Students utilised the concept of patient centred care without prompting, and by the end of the Year 5 course students are patient, rather than disease-centred.
29. Problem based learning (PBL) cases used in Year 3 could be more relevant and up-to-date. The School is aware of the difficulty with some of the content and it is part of an ongoing review.

30. The PBL course requires self-directed study and student consciousness of their style of learning. We commended the vocational skills sessions in the first year of the course for effectively introducing these generic skills into the curriculum, encouraging student reflection and consideration of ethics.

31. Students and Foundation Year 1 trainees were generally enthusiastic and satisfied with the standard of teaching and learning at the School:

   a. Both groups commented positively on the early clinical exposure, vocational skills sessions, and the wide range of student selected modules.

   b. Students were on the whole positive about their experience at Glasgow Medical School. They noted that improvements could be made in the operation of student advisor mechanisms, and that consistency was needed for assessments within clinical placements and subject modules/blocks. This confirmed our findings.

   c. FY1 trainees and supervisors commented that the transition for some individuals from the student to professional was slow and difficult. This may be an experience common to most medical schools and could be associated with deficiencies in the shadowing period. The School has already planned changes to the structure of Years 4 and 5 to address the difficulties students may have in the transition to FY1.

32. The School undertook a full curriculum and structure review in 2006, and is in the process of implementing the outcomes. We will request an update on the outcome of this in the School’s next annual update for the GMC.

Structure

33. The student selected components of the course are appropriate for the requirements of Tomorrow’s Doctors. There was a good spread of student selected module topics, including in primary care. Students were also able to develop their own student selected modules.

Delivering the curriculum

Supervisory structures

34. The structures and processes for internal quality assurance were appropriate and were being applied. Student and external examiner feedback was analysed and responses communicated. The School has a range of feedback mechanisms and we were pleased to see it was continually and actively reviewing feedback.
35. The School had reflected and acted on the review by the university’s Departmental Programmes of Teaching, Learning and Assessment (DPTLA) process, in March 2006. The School considered the report and undertook its own study to confirm the DPTLA findings. We commended the School for taking the recommendations seriously, and their active and ongoing steps to address the findings.

36. We discussed the role of students on school management committees such as the Medical Education Committee and Evaluation Working Group. We were satisfied that students were represented appropriately. Students were able to feed in to the Assessment Working Group through meetings with the Chair. The boards and committees were strong and effective.

Teaching and learning

37. We noted the enthusiasm of teaching staff across the five years of the course, and the high teaching and learning quality at the sessions they observed.

38. There was room for improvement in communication between the School and clinical teaching staff. This was confirmed at meetings with staff and students. We suggest that mechanisms for communicating with clinical staff should be reviewed, with improvements implemented and monitored for effectiveness.

39. We commended the School for investing in a senior university teacher post to develop clinical staff in their teaching role. The new appointment will start in the autumn of 2007.

40. We were satisfied with the extent to which the curriculum integrates learning, and spirals in order to provide opportunities for students to revisit subjects and learn more complex material.

41. Clinical experience in Years 1 and 2 appeared to be orientation visits rather than practical attachments. The third year clinical experience could therefore be strengthened.

42. Improvements could be made in Year 3 PBL sessions to monitor and follow-up non-participating students, although most students were generally active and engaged in the sessions observed.

43. The provision and sustainability of placements in Years 4 and 5 was well managed and changes to placements were facilitated when necessary.

44. We observed an examiner training event which was well structured and delivered. We and the School acknowledged that examiner knowledge of, and attendance at training could be better managed.

45. The quality of teaching, enthusiasm and experience of the GP teachers was noted. Teachers were aware of the School’s curriculum and their role within it, and provided effective feedback to students.
Learning resources and facilities

46. The library and study facilities within the new medical school building are of a very high standard and well-utilised by the students.

47. We found that students made effective use of the Virtual Administration and Learning Environment (VALE). Many students thought it was integral to the learning process. VALE was used to gather student feedback at the end of modules. Teachers should be encouraged to make more use of it.

Student selection

48. We were satisfied that student admission procedures were valid, open, objective and fair.

49. The inclusion of the Year 1 Director in the process as Chair of the Admissions Committee is notable. The arrangements help to dovetail issues identified during the intake of students with those occurring in early curricular engagement.

50. The School is actively participating in widening participation schemes, and is developing a new approach to selection in order to support under-represented groups into the application process. In particular we commended the School’s outreach work with young people from deprived communities, the access scheme partnership with Stow College, and the new initiatives to engage young Muslim women.

Student support, guidance and feedback

51. We concluded that student support, guidance and feedback procedures and processes were robust.

52. The School has actively addressed university criticisms of the student advisor system regarding the number of advisors and variability of support by recruiting more advisors. There are now 49 student advisors, up from 29, three years ago. We commended the efforts of the student advisors, although remain concerned about the low numbers of advisors in relation to their large student case-load (currently 35 students per advisor), and about the differences in the regularity and quality of contact with assigned students.

53. There is room for improvement in the current career guidance and advice on the future working environment, although the School does introduce the topic in the first year. We did not find much evidence of formalised guidance beyond the first year. The confusion surrounding the present professional environment in the UK is acknowledged by the School. This strengthens the need for a forward-thinking and pro-active approach.

54. Student support resources were appropriate, with the Year 4 and 5 handbooks providing information on how students could report and address any problems in placements.
55. Students felt able to access support for academic, pastoral, financial and health reasons, from a variety of sources.

56. The School gave good examples of cases where a range of support and assistance had been accessed and provided to individuals.

57. Whistle-blowing processes and support mechanisms were in place and seen to be working. The School discussed a case where changes had been made as a result of a student complaint.

58. We noted that the School staff at all levels had genuine enthusiasm and concern for students and were interested in how they could improve support for students.

Assessing student performance and competence

Assessment principles and procedures

59. The School’s assessment practices overall were effective and appropriate, with some areas that could be improved.

60. We noted that overall examiner numbers, examiner and assessor training, and marking consistency was satisfactory. The School is making a good effort to ensure that only fully trained examiners are used during assessments.

61. Assessments at clinical placements in Years 4 and 5 could be improved in consistency and structure. This was already being addressed by the School and should be followed up in the 2008 annual update.

62. The new final OSCE examination and written papers were found to be comprehensive, well-run and well organised. We were pleased that the School has robust mechanisms in place for continued monitoring and improvement of the examination.

63. We commended the way basic sciences were included in the OSCE.

64. The School should continue its efforts to ensure there is sufficient psychometric and statistical support to assist with assessment analysis.

65. Exam blueprinting was well developed by the Assessment Working Group. The responsibility for applying the blueprint to examinations for delivery was subcontracted to academic departments, and this was less well executed. In women and children’s health, the blueprint was not followed in practice, and there was considerable overlap and repetition. The School was aware of this problem.

66. We also saw evidence of a lack of correlation between student guidance and the marking criteria for some stations.
67. The assessment of student selected modules was of concern as we found potential inconsistencies. There was a variety of requirements across the wide range of SSMs, although the problem had already been identified by the School and was being addressed appropriately.

Appraisal

68. We were concerned about the lack of involvement and commitment of some clinicians towards the assessment and appraisal of students during their clinical placements. We are aware that the School acknowledges the issue and that the new clinical staff training post is essential to making improvements.

Student progress

69. We were satisfied that the School had robust and fair policies and procedures in place for student progress decisions.

70. Informal and formal student Fitness to Practise (FtP) policies and mechanisms were robust and consistent, and triggers for intervention were in place. We commended the School’s separation of FtP from student welfare processes and support, while maintaining liaison.

Student health and conduct

71. The School has good mechanisms for student health and welfare, with student welfare co-ordinated by an Associate Dean and a senior administrator. Students confirmed that formal and informal support is readily available from a range of sources including administrative and academic staff, tutors and advisors. Students reported that individual members of staff were easily accessible, approachable, helpful and friendly.

Acknowledgement

72. The GMC would like to thank Glasgow Medical School and all those they met during the visits for their co-operation and willingness to share their learning and experiences.
Alison Lightbourne,
Education Section,
General Medical Council,
350, Euston Road,
Regent’s Place,
London
NW1 3JN.

7.12.07

Dear Ms Lightbourne,

RE: Final Report of QABME Visits to Glasgow Medical School for 2006/7

Thank you for your letter of 22nd November 2007 enclosing the report of the assessment visits to Glasgow Medical School.

I am very pleased that the GMC found much to commend in their report. I note the recommendations and enclose a document outlining our response to these recommendations. I would comment again that we found the entire QABME process a positive and constructive one that will enable us to continue to improve our provision of basic medical education.

With kind regards,
Yours sincerely,

[Signature]

Professor Jill Morrison
Head of the Undergraduate Medical School
Recommendations

a. The School is advised to give priority to the training and quality assurance of, and communication with, clinical and community teaching staff. We welcome the recent appointment of a senior university teacher who will have responsibilities in this area.

Response

We agree that this is extremely important. We are currently addressing this issue at a number of levels. Firstly, we are working with NHS Education for Scotland on developing a quality assurance system for NHS based teaching. This includes developing and introducing a common evaluation proforma to be used across all of the Scottish Medical Schools. This common evaluation and monitoring system is expected to be implemented next year. Secondly, at a Scottish level the undergraduate medical schools are collaborating with NHS Education for Scotland on a training programme in medical education for doctors involved in postgraduate education who may also teach undergraduate students. Thirdly, our Senior University Teacher in Medical Education (appointed 1.10.07) has prepared a plan for the educational development of our NHS teachers that includes workshops, meetings and postgraduate courses. He is currently preparing a survey to identify their needs and this will be conducted in January 2008. The first workshop will also be conducted in January 2008. Finally, we have restructured our meetings with our hospital Sub Deans to ensure a more open dialogue with them and individual meetings have been planned with some of our Sub Deans for January 2008 to take forward specific issues.

b. During the School’s ongoing curriculum review next year it is advised to pay particular attention, i. Ensuring that the integration of the underpinning science of women and children’s health is adequate and balanced across the course.

Response

I have discussed this with the course directors in each aspect of the course and we are currently reviewing our map of this part of the curriculum. I have also discussed this with the lead for Children’s Health and we have identified an individual (Clinical Lecturer in Child Health with a special interest in Medical Education) who will be asked to work with year and block directors to identify gaps and suitable areas for insertion of new material within the curriculum. I hope to shortly identify a similar individual within Obstetrics and Gynaecology.

It is planned to complete any further review and revision of this aspect of our curriculum in advance of the start of the next academic session i.e. September 2008.

ii. Ensuring that the PBL cases reflect current health problems and practice particularly in year 3.

All of the cases used in PBL in years 1 and 2 were reviewed as part of their regular review during the summer in 2007 and appropriate changes were made. In year three we have been undertaking a more extensive process of review and revision. There are
four blocks – blocks 12, 13, 14 and 15 in year three. In block 12, eight out of nine scenarios and facilitators notes were extensively reviewed and modified or completely rewritten and the new versions are currently being used by students in this session (2007-2008). The ninth scenario will be reviewed during this session. Blocks 13 and 14 are being reviewed regularly. In Block 15, four of seven scenarios and facilitators’ notes are currently being extensively updated. Three of these will be ready for inclusion in the pool for the current session and it is hoped that the fourth will also be ready. The final three sessions will be addressed during this session. The entire process will be completed well before the start of third year next session i.e. August 2008.

c. The School is advised to continue the improvement of assessment in line with international best practice. Practice areas for attention include,

i. The refinement of final examination blue printing to ensure balanced coverage of the curriculum.

Response

This was discussed at length at the first meeting of the internal examination group for 2008 finals. The GMC comments were discussed in the meeting with the whole group and also separately by the chair of the assessment working group with assessment leads of academic departments, particularly those of women and child health (these departments have a less experienced team of station writers and will be given additional assistance). We will review the blueprint over time to maintain its validity. We will minimise any potential overlap, repetition of stations or omissions by a consciously targeted review of the draft of the examination by the Director of Finals, the Chair of the Assessment Working Group and at least one external examiner, all of whom will look at this particular issue. This process is currently underway and will be continuous.

ii. The consistency of student selected module (SSM) assessment.

Response

We appointed a Deputy SSM Director with particular responsibility for assessment in August 2007 and he has undertaken a review of our assessment processes in SSMs. He has analysed the grades awarded by supervisors in 2006-7 and found that only 5% of supervisors awarded outlying grades. He is currently planning further statistical analysis of the grades awarded to identify any supervisor who is consistently over- or under- marking. We are also planning further training of SSM supervisors/ markers in assessment processes. We would emphasize that the opportunity for our students to develop their own student selected modules (identified as a strength in the report) and the wide choice of modules means that we will always have some variation in the type of assessment completed by students but we will endeavour to reduce any variability in consistency of assessment to a minimum.

iii. In-course, end of block assessment during clinical placements
This has been identified as a particular problem with some educational supervisors by our students. We intend to use the NES Quality Assurance process and our own student feedback to help us identify where there is a particular problem. Our Senior University Teacher in Medical Education (appointed October 2007) is planning a workshop in assessment during clinical placements that is planned to take place in the Spring. I am also planning to discuss this issue at the level of Clinical Director (initially in Greater Glasgow Health Board and Clyde and then with other Health Boards) to assess if this can be included in teaching consultant job plans. We feel that this will be an ongoing problem and plan to raise it repeatedly at various fora and to repeat workshops on assessment and feedback on an ongoing basis.

iv. **Arrangements to ensure adequate psychometric and statistical input into assessment processes.**

Response

We would welcome any advice that the GMC could provide in the area of psychometric testing and where they would like us to focus our attention. We continue to discuss the general issues at the Scottish Deans Medical Education Group and continue to pursue the possibility of sharing a resource across Scotland.

We will continue to refine our statistical analysis to ascertain whether there are any distinct patterns of gaps in student performance within our assessments. We are clear that reliability is the most important characteristic of our 48 station OSCE in our final examination and we will continue to undertake further analysis of this. This is an ongoing process.

d. **The continued expansion and improvement of the student academic advisory system and career guidance for students which we strongly support.**

Response

Nine new/additional Advisors were recruited for the start of academic session 2007 – 08 and recruitment of advisors is continuing. We are also collecting a “bank” of colleagues interested in becoming advisors who will be interviewed and briefed/trained prior to being accepted as advisors. Procedures for addressing communication issues between advisors and students will continue to be emphasized at a range of meetings with students. An Advisor of Studies website is currently under production to improve information provision and advice to students.

We are working with the University Careers Advisor with special responsibility for medical students and he has already provided several sessions with our students. These have focused on final year so far this session because of ongoing anxiety among students about MTAS and their foundation training. A course long programme of career guidance is currently being planned by the lead for Personal and Professional Development in collaboration with the University Careers lead and also with the careers lead for NHS Education in the West of Scotland who is based in Glasgow to ensure continuity from undergraduate through to postgraduate training. These initiatives are current and will be continuous.