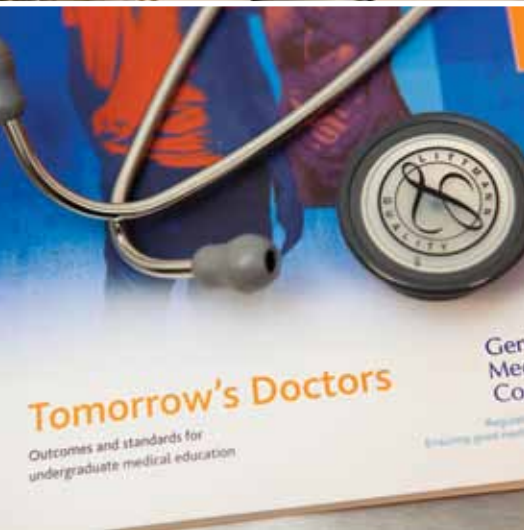


The State of Basic Medical Education

Reviewing quality assurance and regulation



Chair's foreword



Professor Peter Rubin

Medical education is the bedrock on which high-quality healthcare is built. Training is important but education is vital. Of course, the newly graduated doctor needs extensive knowledge and practical skills and that is where training is important. But education during these formative years will establish the principles that will guide doctors through their ever-changing careers. Medical students must be educated in an atmosphere where excellence is expected; and excellence means that students must be curious about new ideas, want to know more and do things better. Medical students must be encouraged to be stimulated by the unknown, not intimidated by it; to work with uncertainty, not run away from it; to question the status quo, not accept it as always right; to analyse, to weigh evidence and to challenge. It is this education which will enable doctors to lead change as the years go by.

The General Medical Council has been setting requirements for undergraduate medical education for over 150 years. Our challenge is to ensure that medical education reflects the evolving knowledge and ideas of contemporary practice, and the ever-changing expectations of society, while standing firm and resisting change to the core values of professional practice.

This publication gives our overview of the current state of medical education in the UK. We have highlighted learning from our quality assurance reviews in recent years along with a number of examples of schools' activities and perspectives that have contributed to the development of medical education.

The Postgraduate Medical Education and Training Board (PMETB) has produced a similar review, *The State of Postgraduate Medical Education and Training*, which provided a platform

from which those involved at all levels of postgraduate training could voice their views and contribute to key debates. The merger of PMETB with the GMC this year will enable us to utilise the strengths of both organisations across the continuum of medical education, training and regulation as we consider and take forward recommendations from the Lord Naren Patel review in 2010 and beyond.

We are not complacent and, as ever, there are challenges ahead as there always have been, but we believe that medical education is an area of which the UK can and should be proud.

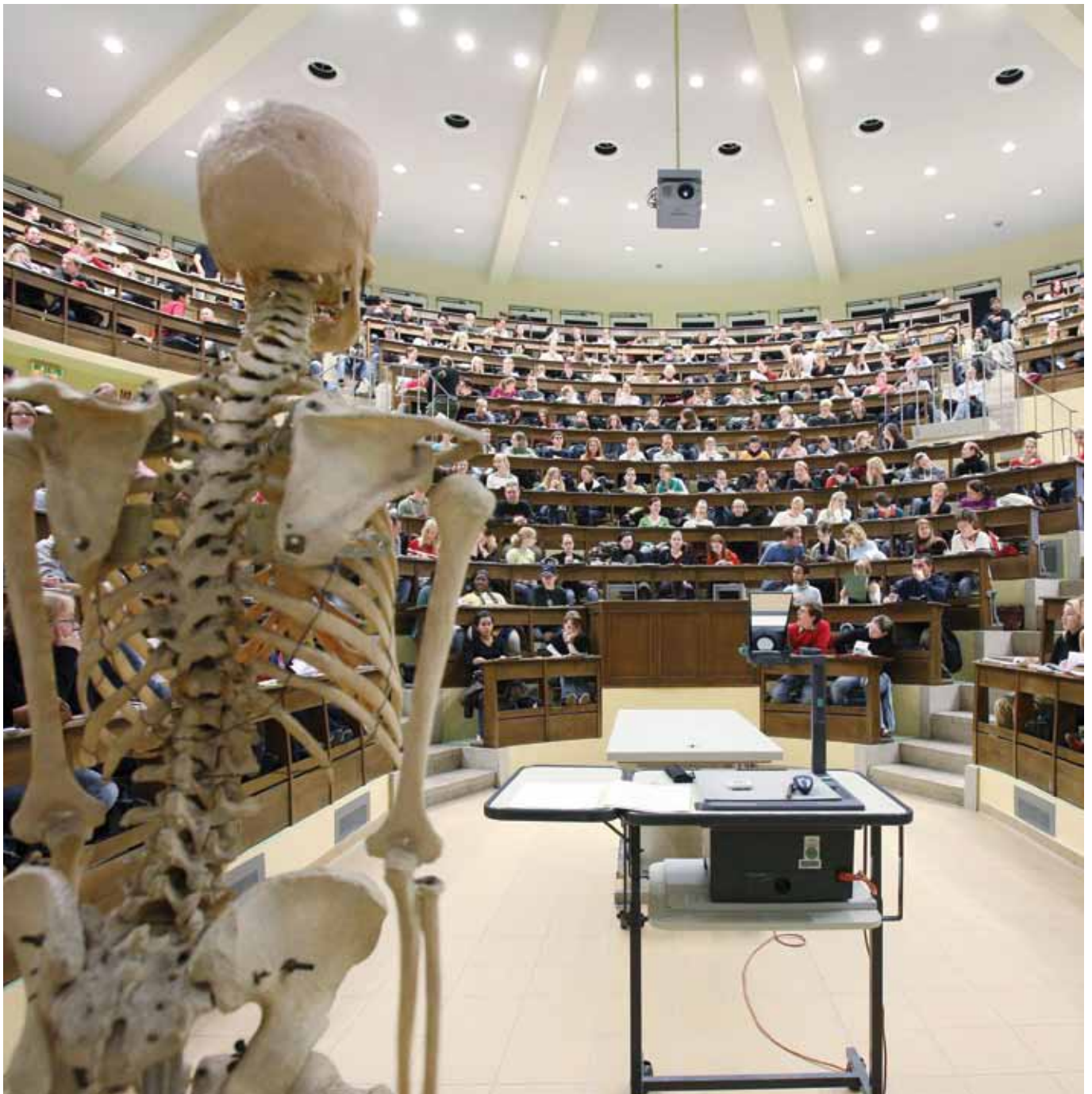


Professor Peter Rubin
Chair, General Medical Council

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Regulation and assuring quality in basic medical education



In this section we introduce our programme for quality assurance of basic medical education (QABME). We look briefly at the GMC's statutory duty and discuss how QABME brings together people with a range of experience to carry out quality assurance reviews.

The GMC has a statutory duty under the Medical Act 1983 to set and maintain the standards for undergraduate medical education.

We hold a list of universities that can award a primary UK medical qualification (Bachelor of Medicine and Bachelor of Surgery). The GMC also has the power to add and remove universities from the list.

Our requirements and standards for the knowledge, skills and behaviour of graduates are set out in the publication *Tomorrow's Doctors*.

The GMC has the power to visit universities to make sure that teaching is consistent with these standards, and to review examinations to make sure that the standards expected are maintained.

Universities and medical schools are responsible for operating a quality management system that designs, delivers, monitors and reviews medical curricula and assessment programmes to meet the standards.

By assessing the standard of basic medical education at all UK universities which offer qualifications leading to registration and a licence to practise with the GMC, the QABME process supports our primary purpose to protect patients and the public.

What is QABME?

QABME assesses whether medical schools are meeting the standards set out in *Tomorrow's Doctors*.

Teams of experienced visitors identify where changes are required and recommend areas where schools could improve. The process was designed to be developmental so that innovation and good practice, as well as concerns, could be identified.

Before the QABME programme began, evidence was collected from medical schools and from visits carried out by a small number of Council members.

QABME began as a pilot in 2003 and is a formal and standardised process involving evidence collection and analysis, and verification visits to all UK medical schools.



The QABME programme consists of two main aspects. Firstly, there is a yearly submission from all medical schools detailing developments in, and changes to, the curriculum, that also lists identified risks and innovations. Secondly, there is a cycle of visits to each medical school; all established medical schools have been reviewed in the first QABME visiting cycle, which was completed in November 2009.

Through its QABME processes the GMC carries out systematic activities to verify evidence that schools are meeting the required standards, and to provide confidence and assurance for the GMC and the public that graduates of UK medical schools are fit to start employment as a foundation year one doctor.

Who is involved?

Each visit and assessment is undertaken by a skilled and experienced visit team of GMC associates (known as 'visitors'). They are drawn from medical education and clinical practice, but also include students and lay people with a variety of experience (for example, in regulation, healthcare and management).

Medical schools provide evidence to the GMC, which is reviewed and analysed by visit teams before they visit schools where they meet with management, teaching and clinical staff and students, and observe teaching sessions and examinations.

Visit teams consider the evidence submitted by schools, and the evidence collected on visits, to assess compliance with the standards in *Tomorrow's Doctors*. A report on each school is submitted to the GMC Undergraduate Board following the review process, with requirements and recommendations for change. The requirements are then monitored through the yearly submissions by each school to the GMC. The visit and review process lasts 12-18 months for each school.

The QABME programme also included reviews of four newly established medical schools over several years from start-up until the first student cohort graduated. In addition, during this time a number of schools have established new courses, or have separated from



“ While I’m the last person to say that all schools should run identical courses, I do think that they should all conform to a basic set of principles. ”

another university and begun to offer separate programmes.

Professor Peter McCrorie, a QABME team leader, comments: ‘Schools really do take the QABME process very seriously and spend months preparing. Ensuring schools run their courses according to the framework outlined in *Tomorrow’s Doctors* is a major achievement.

‘Through the QABME visits, experts from external institutions have looked

into schools from the outside. It is all too easy to get complacent and think you’re doing a good job. It sometimes takes a view from outside to make you realise that change is needed and that maybe your course isn’t all it might be. While I’m the last person to say that all schools should run identical courses, I do think that they should all conform to a basic set of principles. The QABME visits enable this to happen, while allowing each school to develop its own

characteristics. Variety is important, but within boundaries.'

Another **QABME visitor, Professor Trevor Beedham**, says: 'Each team member came from significantly different environments and there is obvious mutual benefit to using the standardised approach which still permits individuality and innovation.'

'Once it was understood, the gradual impact of QABME on guiding medical education to deliver identifiable standards was helpful to visitors and schools alike. The impact was not only on the schools visited, as the visitors

took back to their own teams the lessons being learned. After a period of scepticism the process is now accepted as being a very useful tool as well as providing reassurance for the public.'

QABME is a balancing act

A balance is sought between ensuring consistency in how QABME is applied, and maintaining and promoting innovation and diversity in medical schools. The GMC must make judgements that uphold the standards in *Tomorrow's Doctors* while

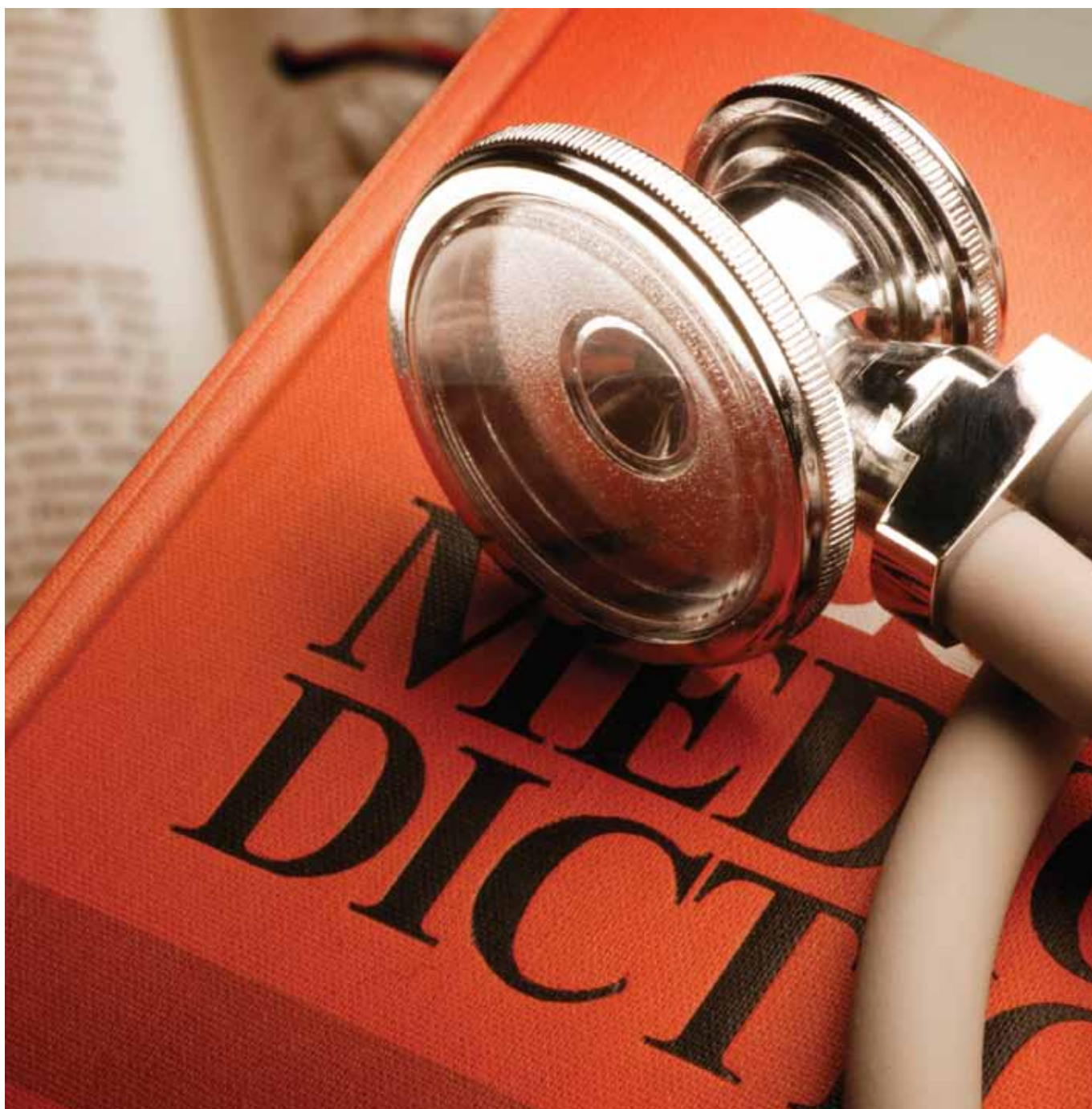
maintaining and enabling diversity. The process should also support the continuous improvement of basic medical education in the UK through constructive dialogue.

Professor Stewart Petersen, a QABME team leader, comments:

'The QABME process is structured, with properly trained and experienced visitors and strict rules of evidence. There is no doubt that the visitors from the previous era were experienced and capable of good judgement, but the structure in which they worked did not always allow for that to occur.'



Developments in UK medical education



In this section we highlight some key developments in medical education over the past five years. This includes the establishment of four new medical schools in England, and a number of areas where all medical schools have been making changes.

Expanding medical education and training

During the first QABME cycle four new medical schools have been successfully established in England.

The new schools were Brighton and Sussex Medical School (Universities of Brighton and Sussex), Hull York Medical School (Universities of Hull and York), Peninsula Medical School (Universities of Exeter and Plymouth) and the University of East Anglia Medical School.

All four schools completed an intensive quality assurance process that followed the same systematic QABME cycle. It began the year before the first students arrived, and was repeated each year of the first student cohort's course, assessing the development and delivery of the programme.

QABME teams met with students throughout the process, including after they had graduated and were in the Foundation Programme.

Professor John Cookson, Dean of Medical Education at Hull York



Medical School, sees the graduation of two cohorts as the school's most important achievement to date.

He says that feedback from the graduates and their supervisors in Foundation Programme training is positive: 'People speak highly of their communication skills with patients and with colleagues.'

Professor Cookson identifies as a particularly important aspect of the school's experience the 'clear and transparent system for the distribution of SIFT (Service Increment for Teaching) across the NHS teaching partners', where there is a 'shared responsibility between the medical school, the strategic health authority (SHA) and the trusts' to ensure that funding and

delivery of teaching are effectively managed and monitored.

This was a common experience for the newly established medical schools, and enabled them to exercise a greater flexibility than established schools where SIFT is often embedded in institutions based on historical factors.

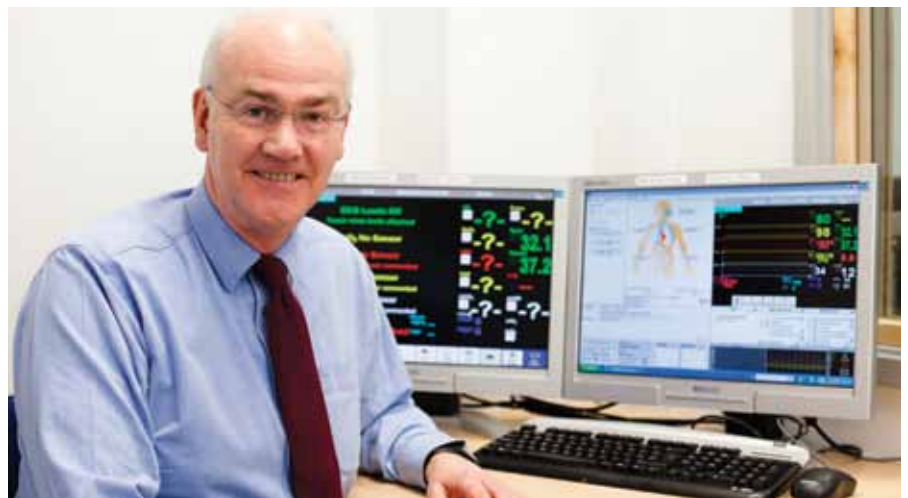
Professor Jon Cohen, Dean at Brighton and Sussex Medical School, agrees: 'We were very fortunate that the SIFT funding stream was "new" and this gave us the opportunity to work closely with our NHS partners in deciding how best to use the resource.

Although most established schools do not have this luxury, any new funding models would certainly benefit from this approach.

Starting a new medical school from scratch is not an everyday occurrence. Steering the school's curriculum through to final approval by the GMC (and, ultimately, the Privy Council) was a challenging, but very rewarding, experience.

We were particularly pleased that we were able to incorporate several innovative approaches to medical education that were commended by the visit team.

It has been gratifying that the first two sets of data from the National Student Survey have shown that students have an extremely high level of satisfaction with the course.'



Professor John Bligh

Professor John Bligh, Vice Dean and Professor of Clinical Education, Peninsula College of Medicine and Dentistry.

What are you most proud of in the context of the school's development over the last five years?

'The Peninsula College of Medicine and Dentistry welcomed its first medical students in 2002 and its first dental students in 2007. The College has grown from an initial staffing of just five in 2001 to its current staffing of over 500 clinical and academic teaching and research staff, and over 1,000 honorary teachers in the NHS and wider community. We are most proud of our graduates, who are providing distinguished service in the local healthcare community and more

widely in the NHS; and we are proud of our staff, both in the College and in the NHS, who are committed to the principles of the College – a quality which is reflected in the recent high scores in the National Student Survey.

Quality, innovation and partnership have been the three watchwords underpinning the successful development of the College over the years.

The quality of the partnerships we have developed with the NHS and general practice in Devon and Cornwall, in both teaching and research, has been outstanding; and the partnership between the higher education institutions and the NHS in the far South West has sustained the quality of education and research during difficult economic times.'

What do you think has changed over the last five years, and what is most challenging for the future?

'The greatest change in medical education in the last five years has been in the area of assessment – more assessment is taking place in the workplace and similar assessment tools are being developed through undergraduate and postgraduate training. These assessments aim to reflect the integration of clinical and science learning, the nature of professionalism in clinical practice, and the role of the doctor in the healthcare team.

These changes promise to profoundly influence the nature of the medical student experience.

The greatest challenge is undoubtedly the effects of the current economic situation and the pressures this will put on both higher education and the NHS, affecting access to patients and clinical teachers. Whilst continuing to be innovative and imaginative in our delivery of medical education we must also be practical and pragmatic in these times.'



Ensuring professional behaviour and student fitness to practise

At what point should a medical student be held to account for upholding the standards of the profession which they will join in the future? At what point do freshers' week hi-jinks go too far if you are a medical student? Should medical students be treated differently from other non-healthcare undergraduates?

From the very start of their training, medical students are held to account for their behaviour both inside and outside medical school.

Medical students are in the first stage of a professional career, and start to see and interact with patients often from the first year of study. Because of this, different standards of professional behaviour are expected of them.

However, students do not face this task alone; medical schools also have a responsibility to ensure that students have opportunities to learn and practise the standards expected of them.

The first five-year QABME review cycle demonstrated that there were varying thresholds between medical schools for the initiation of formal fitness to practise procedures and triggers for action. Many schools



have reported difficulties aligning their student fitness to practise policies and processes with the university's statutes and regulations. To address this lack of consistency between medical schools, the GMC and the Medical Schools Council (MSC) have developed guidance to support schools in recognition of the difficulties that the schools have reported as part of the QABME process, and in policy development consultations. The initial guidance *Medical students: professional behaviour and fitness to practise*, was published in September 2007.

Professor Jon Cohen, Dean, Brighton and Sussex Medical School, says: 'Medical education has generally followed an evolutionary, rather than revolutionary path. One of the most noticeable changes has been the emergence of the concept of "professionalism" as a recognisable

theme. I am not sure this is really new; we have always trained our students to understand and practise the concepts of professionalism, but perhaps they have become more clearly articulated. I think this reflects the long-standing debate about what it is, precisely, that characterises a doctor as being distinct from other healthcare professionals, and I suspect that this debate will continue, particularly as the roles and responsibilities of other groups also evolve.'

Developments in policy and practice

Since 2007 all graduates have had to demonstrate that they are fit to practise before provisional registration is granted. This removes the automatic link between graduation and registration. Previously the GMC was unable to make any further enquiries about a graduate's fitness to practise, nor were we able to refuse registration.

Bearing in mind our purpose, which is to protect the health and safety of the public, it was important that we had the ability to investigate and satisfy ourselves that a graduate's fitness to practise was not impaired.

After additional consultation and discussions, the 2007 guidance was revised and published in April 2009. The new guidance looks at the scope of student fitness to practise, including more detail about how health issues can impact on an individual's fitness to

practise. It emphasises the importance of the role of student support in providing medical students with opportunities to seek support before an issue becomes a fitness to practise concern.

The revised guidance also has more detail on defining and applying thresholds for student fitness to practise and offers a decision-making chart for medical schools. The guidance was sent to all medical schools, foundation schools and other stakeholders.

Looking ahead

Schools' policies are adapting and changing in response to the additional guidance on student fitness to practise. The assessment of professional behaviour and definitions of professionalism are both topics of considerable interest inside medical education, and remain an area for development in medical schools.

It is increasingly important for medical schools and foundation training providers to share information on the progression of graduates. Schools need to monitor the outcomes for graduates in *Tomorrow's Doctors 2009*, and relevant and timely information is essential for ensuring the safety of patients and the public. As a result of fitness to practise issues, some medical students require further support as they move into a new stage of medical education; and a few students and new graduates are simply not suitable

to continue their medical course or to work with vulnerable groups. Fitness to practise concerns may only be considered as isolated occurrences, rather than representing a pattern of behaviour, if information is not passed from the undergraduate to the postgraduate environment and used effectively to ensure patient safety.

Medical schools are also considering how information might be shared at the admissions stage to prevent a student who is asked to leave one medical school for fitness to practise reasons from applying to another medical school without disclosing their history.

The GMC agreed in 2009 to establish a working group to examine specific fitness to practise issues in undergraduate medical education and foundation year one.

This working group presents an opportunity to join up fitness to practise policy development across the continuum of medical education, and to support high-quality healthcare, by ensuring a co-ordinated approach to education and training across all phases of a doctor's career. The group has a specific interest in the transition between the stages of a doctor's career. It will provide advice to the GMC in late 2010 on issues such as sharing information in medical education, how to encourage consistency in decision making, and responsibility for fitness to practise in the Foundation Programme.



Professor Tim David

Professor Tim David, Pan-Faculty lead on student fitness to practise at Manchester Medical School, discusses current issues in student fitness to practise: 'The GMC has an exceptionally strong track record for providing guidance concerning education for undergraduates and newly qualified doctors.

The GMC guidance on student fitness to practise is also having an impact on other health professions, and has been used as a model by other healthcare regulators (for example, the General Dental Council and the Royal Pharmaceutical Society of Great Britain) in the preparation of guidance for their own students. Set against this impressive record, the press coverage on student fitness to practise has been scanty and misleading, with erroneous emphasis on the risk of career loss

“ The GMC guidance on student fitness to practise is also having an impact on other health professions, and has been used as a model by other healthcare regulators.

”

from 'high jinks', 'messy kitchens', 'parking violations' and 'playing loud music'. Student matters are regarded as strictly confidential by universities, and disciplinary committees are usually held in private, unlike GMC fitness to practise hearings.

So there may be some scope for helping to educate the media and the public, not only on the guidance and procedures, but also on the ways that UK medical schools incorporate GMC guidance in their programmes. There are still plenty of issues to think about:

- To what extent should there be harmonisation of professional codes of practice, and student fitness to practise procedures and regulations, between students of different healthcare professions?
- To what extent should there be harmonisation of student fitness to practise procedures and regulations between different medical schools, particularly given that we do not have harmonisation for other university regulations or exit examinations?

- Given that all medical students are by definition not yet fit to practise as doctors, is further thought needed regarding the meaning of the phrase "fitness to practise" when considering medical student cases? Whilst it is undoubtedly a useful construct for dealing with certain types of problem behaviour, does it make sense to declare a particular student unfit to practise?
- To what extent is it an advantage for a university to have a single committee dealing with all healthcare student fitness to practise cases, as happens here in Manchester?

I am personally most interested in trying to ensure that hearings are conducted fairly, with close adherence to the local regulations, and comply with the rules of natural justice, and in trying to ensure that students appearing at a hearing are adequately supported.'

“ QABME teams were recruited with the explicit goal of ensuring a balance of expertise, and to help bring public and patients, experts and students into the quality assurance process. ”

Patient and student involvement

How can patients and students be effectively involved in quality assuring and continually developing the quality of medical education? Building on *Tomorrow's Doctors 2003*, which recognised the need for the input of students and patients in reviewing and developing basic medical education, *Tomorrow's Doctors 2009* calls for more involvement from all those involved in basic medical education. This includes the involvement of patients and employers as well as students at a number of levels, to ensure that students are truly equipped to start work as foundation doctors in the modern and changing NHS.

While at medical school, students learn from patients through their clinical contact with real patients from an early stage in their courses. Many schools use patients as part of the assessment and teaching of students, with patients able to provide feedback on student performance.

The involvement of students on staff-student liaison committees,



and on curriculum and other school committees, is widespread.

QABME teams were recruited and formed with the explicit goal of ensuring a balance of expertise, and to help bring public and patients, experts and students into the quality assurance process. Visitors were drawn from primary and secondary care medicine, medical education, and from other backgrounds to provide a lay perspective.

Lay visitors have a range of backgrounds, such as experience in the NHS, the law or the media. Student visitors have been a core and crucial part of visit teams from the beginning of QABME. Early student visitors have gone on to visit as part of the quality assurance of the Foundation Programme as foundation doctors, or have stayed involved as a QABME visitor as they have progressed through their training.



Elaine Brock

Elaine Brock is a member of the GMC reference community, which involves patients and the public with doctors in a group that considers and helps in the development of GMC policy.

She was involved in the review of *Tomorrow's Doctors* from 2007 to 2009, ensuring there was a public voice on the review group.

She reflects on the role of patients and the public in medical education: 'Regarding the role of patients and the public in delivering and quality assuring medical education, I think that the key thing is for students to have access to real patients from early on in their course.'

I can't think that you can get a proper feel for what it means genuinely to work in partnership with patients unless you practise it from early on, with appropriate supervision, of course!

Personally, I think that very many patients would be happy to contribute to students' learning, provided that they are asked sensitively and proper supervision is provided. I also think that expert patients (and indeed others, such as carers) can make great teachers – who better to explain a condition than someone who has lived with it for years?

I'm not sure to what extent patients and the public are used for either assessment or quality management as yet, but this is an area that medical schools should exploit. After all, students are training to serve patients, and patient feedback should be key to assessing whether they are doing so well or not.

In the presentation I made to the *Tomorrow's Doctors* conference in March 2009, I used a quote from one of my daughters, then aged 8, which attracted a lot of comment: 'Doctors should be nice and friendly and not scary. They should help you get better without hurting you.'

Obviously this is a fairly simple analysis but it does speak to the main areas of public and patient concern: the need for good communication, establishing a partnership of trust, having the knowledge and skills to provide good care, and patient safety.'

Clinical practice

Tomorrow's Doctors 2003 strongly encouraged learning in clinical settings and required that schools integrate clinical and non-clinical learning. Findings from the first QABME cycle and research commissioned by the GMC on graduate preparedness reinforced the importance of students gaining experience in real clinical contexts.

QABME teams and reports have noted the increase in clinical experience in medical school courses following the publication of the standards in *Tomorrow's Doctors*. QABME teams observed teaching, and discussed with schools the systems and processes in place for measuring and maintaining consistency and comparability of provision across sites, and for ensuring students were able to achieve the learning outcomes. In many cases, management units in schools provided oversight across years and teaching sites to ensure that teachers and students had clear learning objectives, and that there was an effective and comparable learning experience.



Paul Ratcliffe, Quality Management and Educational Business Manager at Imperial College London, explains one of the ways that Imperial has responded to the clinical experience and integration challenge: 'One of our main objectives is to produce highest-quality doctors, clinician scientists and leaders of the future. To achieve this, we expose students to clinical and academic staff in an innovative and world-class research and education environment. Our use of clinicians to teach basic science was commended by the GMC in their QABME report.

The school's curriculum review has allowed us to continue to integrate basic and clinical sciences throughout the course; one example being the introduction of the new 'Science and the Patient' course in Year 2.

The management structure of the course was based around leads in each year; a practical solution that worked well in the main. The consequence of this is, however, a tendency to compartmentalise the course and not look broadly across it. In response, we have now appointed six new theme leads who are intended to be of equal status to the year leads and work closely with them to embed the curriculum both within each year and across all years of the course.'

Involving clinicians

Tomorrow's Doctors 2009 goes further than previous editions in reinforcing



the requirement for integrated learning with structured 'practical experience of working with patients throughout all years'. It also specifically requires at least one period of 'student assistantship' before graduation when a student will act as assistant to a junior doctor.

While all medical schools already offer clinical placements of some sort, there are differences in duration, the role of students during the placement, and how the placement is monitored and learning evaluated.

Tomorrow's Doctors 2009 recognises the importance of the involvement of clinicians and NHS employers in basic medical education, not only as the recipients of graduates, but also because of their central importance in delivering a crucial part of the

undergraduate training. In 2010, QABME will support medical schools to work with employers and other stakeholders towards implementing the revised standards and outcomes in *Tomorrow's Doctors 2009*.

Professor John Cookson, Dean of Medical Education at Hull York Medical School, says that the development of clinical experience for students and the input of clinicians has worked well at Hull York Medical School.

'Half the clinical experience is in primary care and, despite some initial reservations about how this would be managed, in practice it has gone well with enthusiastic participants from both sides. This has been because it has been possible to fund teaching at an appropriate level.

Facilitators in Phase One problem-based learning sessions are all clinicians, and most of them general practitioners. Although this is an expensive model, and different from most other medical schools, it seems to have been successful in helping students to make clear links between the basic sciences and patient problems.

The facilitators also teach consultation skills, and are themselves models for developing professionalism amongst students.

Students are presented from the start with the multifaceted aspects of medical practice. The clinical placements are not just about giving the students skills with real patients, but also illustrate the importance of the basic sciences within the context of real patients.

Integrated learning continues throughout the course and in Phase Three the 'Assistant Intern Scheme' seems to be both achieving its original aim and meeting the precepts of *Tomorrow's Doctors* 2009, as students have real responsibility within legal limits for the care of patients.

The course has been created very largely in the absence of a team of clinical academics. It does seem possible, therefore, to deliver a good curriculum largely within the NHS so long as there is a good underpinning structure, and the clinical teachers have resources with which to operate.'

“ The clinical placements are not just about giving the students skills with real patients, but also illustrate the importance of the basic sciences within the context of real patients. ”



Training of educators

The quality of trainers and educators underpins the quality of the teaching and learning experience of students. QABME teams noted the difficulties some schools had in tracking and monitoring staff attendance at training,

and discussed the potential benefits and difficulties of mandatory training. This is not only an issue for basic medical education but is also being considered by regulators, deaneries, royal colleges and other organisations in relation to all medical training.

Dr Faith Hill, Division of Medical Education Director at the University of Southampton, School of Medicine, explains their staff development programme for clinicians.

'The staff development programme is specifically designed to meet the needs of clinicians from across the NHS South Central region who teach our medical students.

Staff development for teachers of medical undergraduates is traditionally designed with individual teachers in mind, and it is usually offered as a separate activity to curriculum development. In Southampton we reflect the changing needs of the institution as well as the expressed needs of the individual teachers.

The strategy was determined in close consultation with key stakeholders and through an extensive needs assessment with staff. It ensures that the educational changes we identify are prioritised through the staff development programme. Staff development and curriculum development are linked and the educators collaborate closely with the clinicians and researchers.

Teaching tomorrow's doctors is one of our most successful courses and has so far attracted over 350 participants. This is a four-day course that aims to enhance the knowledge and skills of individuals with significant teaching roles.

“ The educational changes we identify are prioritised through the staff development programme. ”



Our continuing challenge is to ensure that busy clinicians continue to value the time spent with us. We are producing an e-learning resource to supplement hands-on courses. This resource, partly funded by the Strategic Health Authority, is enabling clinicians from across the region to access interactive guidance on teaching issues.

All staff development events are evaluated using questionnaires and

open-ended feedback. The feedback and evaluations from the training activities are consistently excellent. In addition, we have conducted long-term evaluations, which show that the courses continue to be highly regarded and that participants claim a positive and lasting impact on their teaching. The success of the staff development activities has also been noted in key areas where student evaluations have improved after its introduction.'

Assessment

How should the preparedness of medical graduates to enter the workforce as a foundation year one doctor be best assessed during their basic training?

What is an acceptable level of performance and competence for a student who will soon be a doctor?

In *Tomorrow's Doctors* the GMC sets high-level standards and requirements for assessment, but does not lay down how schools should assess knowledge, skills and behaviour.

It is the responsibility of each school to design, deliver and monitor assessments and to demonstrate the effectiveness of the methods chosen. Schools must provide evidence that the assessments are the best way to examine the intended learning objectives, and that students pass or fail in accordance with school and university regulations and the standards set out in *Tomorrow's Doctors*.

We recognise the importance of effective assessment in ensuring that graduates are competent to practise as foundation year one doctors, and this was an area that QABME teams paid particular attention to. In final QABME reports most schools had requirements and recommendations relating to various aspects of their assessment strategies, policies and practices.



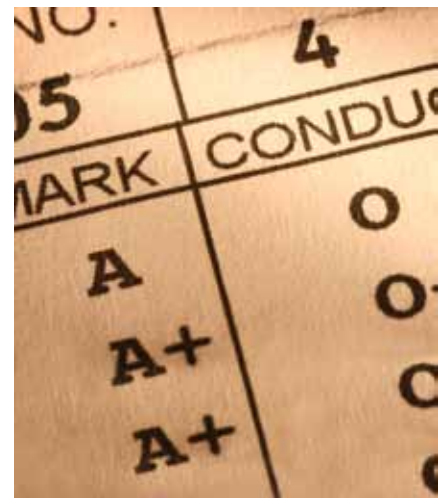
Dr Katharine Boursicot

Dr Katharine Boursicot, Reader in Medical Education and Deputy Head of the Centre for Medical and Healthcare Education at St George's, University of London, comments on recent developments in medical school assessment practices. 'The last five years have witnessed major changes in assessment across medical schools in the UK, with one of the main drivers being the QABME review process, which probed assessment practices in a manner that had not previously been quite so searching.

Another driver has been the rising professionalisation of medical education, with the establishment of centres and chairs of medical education, and certificates, diplomas and Masters degrees in medical education becoming more widespread across the UK. The awareness and prominence

of assessment pedagogy in medical schools has been increasing, with the result that assessment practices have undergone more scrutiny and quality enhancement.

Medical schools have had to scrutinise their own assessment strategies and have endeavoured to move away from disjointed, localised, inconsistent, outmoded and often unmonitored (i.e. not quality assured) assessments in various parts of their courses, and take an overview of assessment over the whole curriculum. This movement has been variably successful and requires more work to ensure that students are fairly and adequately assessed over their whole undergraduate course. The development and implementation of a coherent and consistent assessment strategy in each institution is still a major challenge.



One of the most important milestones for medical schools is the graduation point – can medical schools assure the preparedness for practice of their graduates? The processes by which medical schools across the UK address this issue are hugely uneven, and it is questionable whether we can be assured that all graduates have the same minimum standards of clinical competence at graduation.

The concerns of the public and employers about graduate performance and preparedness are legitimate, and medical schools need to demonstrate more robust evidence to address these issues in a manner which will restore and enhance public confidence in the medical profession. There is a wealth of evidence in the academic literature which defines the current “best practice” for assessing clinical competence. Assessments need to be reliable and valid, and there needs

to be mechanisms for measuring these parameters; but unfortunately these issues are still being ignored, or misunderstood, in many undergraduate and postgraduate institutions. There are other key challenges that remain to be tackled, particularly in the area of professionalism. The evidence demonstrates that we can no longer assume that appropriate professional values and behaviour will be unconsciously learned during the undergraduate course.

Teaching of professionalism is already being addressed in many medical schools. The more thorny issue of monitoring and assessing professionalism still requires more attention. There are a few examples of institutions where this is being addressed, but the tools need to be deployed more widely; and the processes used to make pass or fail, progress or exit, decisions remain

largely untested. The area of workplace-based assessments (WBAs) is a new development in the last five years. Originally developed for use in the postgraduate arena, some medical schools have introduced WBAs on medical student placements. Given the wide variability of teaching and assessment students experience at their numerous clinical attachments, the use of these WBA tools is a key way of ensuring that students are observed in real clinical settings with patients, and have the opportunity to get feedback on their performance.

Additionally, the use of multi-source feedback tools would enhance the awareness of professionalism issues earlier. The challenges of assessing professionalism, and the use of WBAs at undergraduate level, need to be addressed to assure the fitness of tomorrow’s doctors. In summary, there have been notable positive changes

to assessment practices in medical schools in the UK, but more consistency across institutions is required, with the purpose of ensuring equivalent minimum standards and preparedness of graduates across the country.’

QABME activities

During the cycle, QABME teams increasingly requested more detailed, as well as higher-level curriculum maps that indicated where and how elements of the curriculum were assessed, what was a core part of the curriculum, and how student-selected components were included.

All QABME teams met with each school’s assessment leads and questioned them against the standards and the evidence submitted to the GMC about the school’s assessment strategy, methods and management.

The teams spoke to students in all years and discussed their experience of examinations, and their perception of whether the examinations are fair and the guidance appropriate. The teams looked in most detail at the final tests of competence that must be carried out by medical schools.

They observed final clinical examinations, including the examiner and student briefings, and the final examination board in which decisions are made about whether students progress each year and are eventually able to graduate.

“ Many teams agreed on the benefit to assessment systems of a central, coordinating leadership group or assessment focused unit – with a strong remit... ”

QABME findings

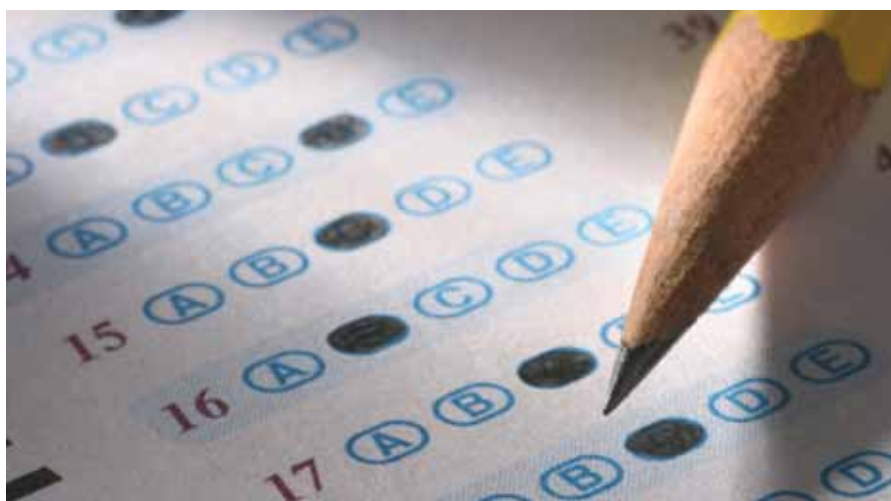
During the first QABME cycle of medical school reviews, many school reports included requirements and recommendations covering the practice and management of assessment.

There was disagreement at times between different schools and QABME teams about which assessment methods were ‘best practice’ for testing different skills and knowledge, and what was appropriate in terms of the statistical result analysis to ensure reliability and validity. Teams also often discussed issues around ensuring consistency and comparability between examinations run on different sites or days, and with different examiners. Real and simulated patients are often used in clinical examinations, which adds another variable that needs to be carefully monitored to ensure that there is not unacceptable variation which could impact on student performance and results.

Reports from QABME reviews highlighted the coordination and central leadership of assessment

across a programme as an area for improvement. Many schools separate the management of assessment into years or phases, but without strong oversight and coordination, which can lead to inconsistencies. During QABME reviews many teams agreed on the benefit to assessment systems of a central, coordinating leadership group, or assessment-focused unit, with a strong remit to work on assessment across modules and years in order to build a consistent approach to assessment throughout the course.

Clinical examinations were highlighted as an area of difficulty in a number of schools. This was often where there were large student cohorts or a number of examination sites. Schools recognised the difficulty of handling the logistics of multiple examination sites for clinical assessments, and the potential for variability between examiners, stations and patients. There were also a number of examples of schools managing complicated examination timetables very effectively. The revised requirements on assessment, in *Tomorrow’s Doctors*



“ Schools are making use of sophisticated marking and examination analysis computer programs to meet the challenge of ensuring robust assessment that is fair, reliable and valid, not only with each individual exam but across a programme of assessments. ”

2009, will continue the increasing emphasis on schools assessing students' clinical skills in real workplace settings. This is a need that has also been highlighted in GMC-commissioned research on graduate preparedness, published in 2009 in partnership with the Economic and Social Research Council.

The QABME process has shown that schools have worked in recent years to improve examiner training and to look at what others in the sector are using for assessments.

Schools are also becoming increasingly sophisticated in mapping examinations to the curriculum and to the standards

in *Tomorrow's Doctors*. Improvements have been made in policies and procedures for standard setting, analysing performance, and making progression decisions.

Schools are making use of sophisticated marking and examination analysis computer programs to meet the challenge of ensuring robust assessment that is fair, reliable and valid, not only with each individual exam but across a programme of assessments. While the use of psychometrics is expanding, its use is somewhat curtailed by a shortage of experienced staff.

Variability in examiner marking, and the importance of having effective training and monitoring for examiners in place, arose in a number of reports, with schools often reporting difficulties in ensuring examiners attended training. Some schools, including the universities of East Anglia, Warwick, and Edinburgh were commended on their examiner training.

On QABME visits students were often critical of the variability of the marking of their assessments, and schools agreed this can be a challenge particularly in workplace-based assessments or log book sign-offs.

For these assessments clinical teachers must observe students and sign them off for particular skills. There can be problems ensuring that guidance or training reaches all of the many staff involved.

Work-based assessment at the University of Leeds Medical School

Case study

In 2007, Leeds School of Medicine introduced work-based assessment to assist with the remediation of under-performing final year students. The purpose of the project was to provide students with multiple opportunities to gather feedback from a variety of sources on their competency-based skills. This was combined with research work examining the value of delivery via mobile technology.

The students completed a series of Mini Clinical Examination (Mini-CEX) assessments whilst on work placement using a personal digital assistant (PDA). Students said they

found completing assessments using a PDA straightforward, and the structured format of the assessment resulted in an increased and improved level of feedback, allowing students to improve their skills during the placement.

In 2008 and 2009, all fifth year medical students (approximately 250) undertook formative Mini-CEX assessment through their placements, emphasising the link between undergraduate and postgraduate education. We have continued using PDAs with cohorts of students and have added additional learning resources such as e-books, in addition to the

email and internet facilities already provided.

The two great successes of the project have been the effect of regular assessment and structured feedback on student performance and the effective implementation of a mobile learning project of this scale. Next year we plan to provide all fifth year students with PDAs and completely phase out paper alternatives.

From Ceridwen Coulby, Teaching Fellow, Leeds Medical School

Learning to work with other healthcare professionals

From day one on the wards graduates will work in a multi-professional healthcare team. It is therefore fundamental that medical students gain an understanding and appreciation of the roles, responsibilities and expertise of their future colleagues.

The first QABME cycle investigated how inter-professional working and learning were developing in different circumstances and schools, and discussed the experiences and challenges with schools, students and teachers.

The standards in *Tomorrow's Doctors* do not lay down curriculum content or define inter-professional or multi-

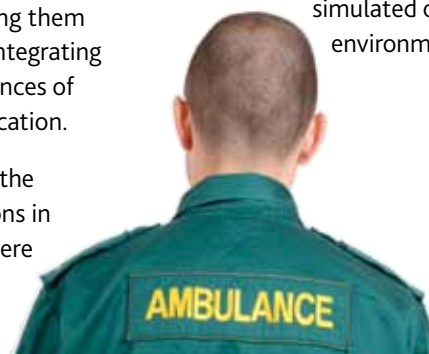
professional working and learning. In appreciation of the importance of effective teamwork, the standards have been strengthened in *Tomorrow's Doctors* 2009.

In setting the standards in this area, the GMC reinforces an ongoing commitment to inter-professional learning and working by making them specific requirements, and by integrating them within the core competences of professionalism and communication.

The GMC is also supportive of the involvement of other professions in assessing medical students where appropriate.

QABME findings

A number of schools used the integration of clinical experience with knowledge-based learning as an opportunity for medical students to learn with students from other health and social care disciplines when applying knowledge and skills in simulated or real clinical environments.



“ From day one on the wards graduates will work in a multi-professional healthcare team. It is therefore fundamental that medical students gain an understanding and appreciation of the roles, responsibilities and expertise of their future colleagues. ”



Students also took advantage of unplanned opportunities when they were on placements in wards with students from other faculties.

Other schools provided opportunities for students to learn with other health and social care students in lectures or tutorials; but there could be difficulties with aligning timetables or with healthcare faculties that were not close to the medical school. Some students and educators expressed concern that these experiences may be counter-productive, and some initiatives reported on by schools had critical feedback from students who met QABME teams.

In other cases there was widespread support from students, and an understanding of the benefits. Longer-term evaluation by medical schools of student perceptions about inter-professional learning and working opportunities could yield more positive results.

Inter-professional education at Leeds Medical School

Case study

The inter-professional education (IPE) project at Leeds was developed from a series of pilot workshops between the School of Healthcare and the School of Medicine at the University of Leeds targeting final year adult nursing, medical and pre-registration pharmacy students. The development and expansion of the project has led to collaborations with the universities of Bradford, Huddersfield, and Leeds Metropolitan, and the involvement of 14 different professional programmes. Initially the project involved a workshop on breaking bad news to patients. Case scenarios have been developed with patient and professional input; they now include autism, breaking bad news, diabetes, domestic violence, post-natal depression, and stroke. To date, we have delivered 157 workshops reaching 1,181 final year health and social care students from all four local higher education institutions.



Evaluation

- 97% of students attending said that the teaching and learning methods were entirely or mostly relevant to their work
- 96% would recommend the workshops to their peers
- 93% rated the workshops as entirely or mostly relevant to their work
- 91% rated the workshops as excellent or very good.

The involvement of all four local higher education institutions, local patient, service user and carer groups and NHS staff has increased collaboration and networking amongst those individuals and organisations involved.

By engaging with patient groups to develop scenarios and train as simulated patients, community links have been strengthened and future opportunities to collaborate have arisen. For example, patients are now working with other schools within the University of Leeds, and in some cases, with partner institutions in West Yorkshire.

Facilitators from both education and healthcare settings have been involved in the planning and delivery of the project and have developed their skills in management and facilitation. Some are working on developing IPE and

'Patient and Public Involvement' in their own organisations; particularly concentrating on sharing good practice, strengthening networks, and embedding projects such as this in course programmes. In 2007, the project was awarded the highly commended award for research in 16+ settings at the British Educational Research Association awards.

Lessons learned

The timing and type of initiative should be appropriate for the participant's stage of professional development. For this project, the learning was work-based and the context involved team-working, thereby enabling participants to apply this to their work settings. Liaison across different professions, departments and higher education institutions continues to be very challenging. Additionally, identifying sources of funding for projects that cross departmental and institutional boundaries continues to be difficult.

Findings from the project have highlighted the importance of content – case scenarios must be clinically realistic and relevant to all professions involved.

*From Shelley Fielden,
Inter-professional Education
Co-ordinator, Leeds Medical School*

Diversity and widening access to medicine

In recent years there has been an increasing demand for institutions across the higher education sector to deliver effective initiatives that will enable a broader range of students to enter university.

It is the responsibility of medical schools to select students for admission. The GMC is responsible for providing assurance to the public that selection criteria for all programmes are objective and fair, and based on the principles of equality as well as on relevant legislation. Through the standards in *Tomorrow's Doctors* and the QABME programme, the GMC encourages the widening of access to medicine. We are also interested in promoting and increasing diversity in basic medical education so that it reflects better the population of the UK.

What does widening access mean?

Widening access or widening participation might include, for example, activities that consider adjustments for potential students who have disabilities, and outreach to schools in lower socio-economic areas or to ethnic groups that are under-represented in a medical school. Initiatives often engage with the local community and raise the profile of higher education.

Some programmes are student led, and are a valuable source of teaching experience for the students. There are many examples in QABME reports of schools identifying opportunities in their communities and regions. For example, the QABME report on Glasgow Medical School noted the school's outreach work with young people from deprived communities, the access scheme partnership with Stow College, and new initiatives to engage young Muslim women.

Advisory guidance for medical schools was issued by a partnership led by the GMC in *Gateways to the Professions – Advising medical students: encouraging disabled students*, which was published

in early 2008. The guidance includes practical suggestions to help schools ensure that disabled students do not face unnecessary barriers to successful medical careers, and provides advice to prospective medical students.

In the QABME visits prior to the *Gateways* guidance being published, several QABME teams reported on effective admissions processes and support for students. For example, students at Newcastle Medical School, University of East Anglia Medical School, and Queen's University Belfast Medical School spoke positively of their experiences of school support mechanisms and of the reasonable adjustments made.





Elaine Brock

Elaine Brock was involved in bringing a public perspective to the March 2009 consultation on *Tomorrow's Doctors 2009*. 'In terms of the key changes in basic medical education over the past few years, I think the specific initiatives aimed at widening access are particularly welcome.

From the public perspective, it is very important that doctors are more reflective of society as a whole than has been the case in the past.

I think the *Gateways* guidance on disabled students entering and succeeding at medical school, for instance, is a really good example of the GMC and the medical schools working together to tackle a really difficult area. In terms of ensuring graduates are fit to practise, I hope that the new *Tomorrow's Doctors* will be instrumental in ensuring that patients

can be completely confident that all graduates, no matter which school they come from or what type of course they have followed, will have a common set of skills and competences.

The development of guidance on student fitness to practise is also, I believe, an important step in ensuring that medical graduates have a proper understanding of, and commitment to, professional behaviour.

I also really like the three domains in *Tomorrow's Doctors 2009* – scholar and scientist, practitioner,

and professional – as I feel this emphasises the different but complementary aspects of the 'whole doctor' which patients want to see; a brilliant diagnosis is no use if you lack the practical skills to treat it or the interpersonal skills to work in partnership with your patient.

In terms of key challenges for the future, widening access to the profession will continue to be a major issue and there is still a long way to go, given that around a fifth of current entrants to medical school has one or more parents who are a doctor (BMA. 2007. *Cohort Study 2006: First Report*).

There is still work to do in persuading all doctors that they should be working in partnership with their patients and/or carers. The pace of change, in society as a whole and in medical research and treatment in particular, will continue to challenge the profession; and the medical schools have the difficult task

of producing graduates equipped with the skills and enthusiasm to keep up and keep learning throughout their careers.

Related to that is ensuring that doctors are able to deal with the mass of information, and misinformation so readily available to patients nowadays, and that they have sufficient understanding of, and respect for, alternative therapies which patients may wish to try.'



“ A number of schools said that the *Gateways* guidance provided reassurance and confirmed the schools’ approach to student selection and support as appropriate. ”

Responses to the guidance

Responding to the *Gateways* guidance, schools have reported that the guidance has been helpful in a number of ways. For example, rather than questioning whether or not a student with a disability can complete a medical degree, the question is now more focused on how the school and university can help students. A number of schools said that the guidance provided reassurance, and confirmed the school’s approach to student selection and support as appropriate.

Queen’s University Belfast Medical School reported in its 2008 annual return to the GMC that it had revised the admissions policy for students with disabilities. In the same year, UCL Medical School reported on its new system of student support cards, which aid student requests in clinical settings where there may be many different teachers involved on different sites.

Following the guidance, a number of schools have reported plans to improve their approach to communicating and publicising the fact that applications from disabled students are welcomed, and also plans to review pre-admissions processes and admissions policies.

Some schools are concerned about the need to avoid inappropriately raising student expectations, and there remains some uncertainty about the extent of reasonable adjustments that are possible in clinical settings. Schools will also need to consider carefully student selection processes and reasonable adjustments to take into account the outcomes and standards set out in *Tomorrow’s Doctors 2009*. The *Gateways* guidance will be updated in 2010 to reflect *Tomorrow’s Doctors 2009* and other changes such as the anticipated Equality Act.





Medics in Primary Schools at Manchester Medical School

Case study

Medics in Primary Schools is a student-led organisation which encourages medical students from Manchester Medical School to teach in inner city primary schools in Manchester. The scheme was set up in 2005 by four second-year medical students and it aims to enhance medical students' ability to teach whilst engaging with the local community.

Since the last GMC visit we have increased the number of schools on the programme and now reach over 420 primary school pupils. There are now 130 medical students involved in the scheme compared with 38 when it first started. In the classes, we cover basic science and also tackle some important topical issues such as nutrition and exercise, dental hygiene and basic life support.

Over the last five years we have increased the number of teachers per class and we use models, including

miniature skeletons, and games like 'nutrition lotto' to make classes as interactive and fun for the children as possible. We now also give a formal training evening to those students taking part, including detailed information about pupil management and child protection.

Many pupils involved do not have aspirations to continue on to higher education, perhaps as they have a lack of knowledge about it. Through the scheme we have been able to educate children about higher education and provide positive role models for them.

Anne Zaidi, a teacher at St Philip's Primary School, says that 'this is a really excellent scheme that the children absolutely love!'

Communicating ideas effectively is crucial in a successful medical career and can be especially challenging when communicating with young children. By teaching, medical students have been

given an opportunity to practise these skills.

The University of Manchester has been supportive of the scheme. The university's 2015 Agenda outlines nine goals, and Medics in Primary Schools addresses two of these: 'widening participation' by raising awareness and providing an insight into higher education for school pupils; and 'more effective community service' by highlighting educational opportunities for those traditionally under-represented in higher education.

Now that the scheme is well established, we are looking to expand in Manchester and hopefully in the coming year introduce it to other medical schools, and encourage them to adopt the scheme in other cities across the United Kingdom.

From Medics in Primary Schools participants at Manchester Medical School.

University of Sheffield Medical School

Case study

Sheffield's Outreach and Access to Medicine Scheme is an exciting and well-established initiative helping to raise aspirations through a varied programme of activities for local Year 9-13 students from groups that are currently under-represented in higher education.

The programme includes an introduction to the medical student experience, attainment-raising activities such as revision sessions for key subjects at GCSE and A-level, interview practice, e-mentoring opportunities, a residential summer school, and sessions with parents.

Approximately 100 pupils from around 50 schools are selected to participate in Year 9. Around 30% of these pupils progress on to phase two of the programme when they reach Year 12. We also accept a few additional college students from the local area into phase two. At this stage participants are offered a guaranteed interview for one of 20 ring-fenced places at the University of Sheffield Medical School.

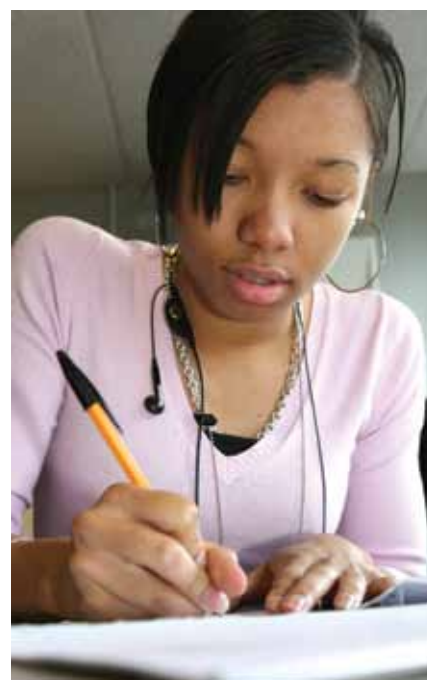
There are a number of previous participants currently studying medicine at the University of Sheffield, and we also have a number of students who have progressed all the way through the scheme

and are now qualified doctors. We are particularly pleased that around 20-25% of participants on phase two ultimately attend Sheffield Medical School, and nearly all participants from phase two progress on to a higher education course, either at Sheffield or elsewhere.

We intend to explore how this scheme could be broadened to include other health-related disciplines. We already have a scheme running for dentistry but we feel there may be scope to combine some of the activities, and include other lesser-known subject areas such as orthoptics and human communication sciences.

We hope to broaden young people's horizons by exposing them to a wide range of potential careers, and assist them in achieving their goals by providing both aspiration and attainment-raising activities. Therefore more emphasis is likely to be placed on study skills activities, building on the revision sessions that we've already introduced by incorporating generic study skills that will help students during their post-16 studies as well as helping to prepare them for degree-level study.

From Deborah Fowler, Head of Outreach at the University of Sheffield Medical School.



University of Edinburgh Medical School

Case study

Pathways to the Professions at the University of Edinburgh Medical School encourages state school pupils to consider careers in the professions of medicine, veterinary medicine, law and architecture.

Established in 2001, Pathways targets pupils aged 15-18 based in Edinburgh and the Lothians. The scheme operates two strands: Pathways is open to anyone who attends one of 46 state schools; and the accompanying Pathways Plus specifically targets individuals who fulfil the criteria for disadvantage.

Medical school staff receive a profile of each applicant. The profile provides details of events attended as part of the project, career exploration undertaken, and relevant academic information. It also confirms attendance at a school which has a low progression rate to higher education, details of parental educational background, and the student's entitlement to educational allowances.

The best advocates for the Pathways to the Professions programme are the students themselves. Callum Gillespie, first in his family to go to university and now in Year 3, says: 'As I attended more of the Pathways events, things like revision days, I began to feel

more at home with the university environment and this gave me real confidence when applying. People at university and other students often ask why I chose to come to Edinburgh, and for me it wasn't just the prestige and reputation for medicine which it gets, it was the fact that I already felt a part of the university in some small way.'

Pathways to the Professions is a key part of the medical school recruitment and admissions activity. Since the project's inception, 95 students registered with Pathways have been admitted to the MBChB at Edinburgh (including 52 Pathways Plus students), representing an increase in admissions from local state schools of 136%. Pathways is the clearest evidence of the medical school's commitment to widening participation, and has been positively externally evaluated on two occasions. It remains a challenge to respond to the increasing demand for access within the existing staff and financial resources. In future, the school plans to expand and develop the programme, liaising with the Scottish Funding Council and Scottish Government following the *Fair Access to the Professions* report.



Newcastle University's PARTNERS Supported Entry Route Programme has operated since September 2000 and accepted its first students into the medical school in September 2002.

We celebrated the graduation of the first cohort of PARTNERS students in June 2007.

Around 12 students are admitted to the medical school each year. Applicants through PARTNERS receive a lower entry grade offer than the standard course. But students are selected through the normal processes and upon successful completion of a rigorously assessed summer school where applicants study a clinical case in depth as they would at medical school.

Evaluating outcomes

The Board of Medical Studies tracks the performance of this entry cohort and in 2007 commissioned a comprehensive review of the performance of PARTNERS students to ensure they were being supported appropriately and progressing normally.

To date, 92 students have been admitted to the MBBS programme and the performance of 50 of these students was considered in the review. Of the 50, four students repeated a

year of study, one withdrew due to academic reasons, and one withdrew due to non-academic reasons.

There was evidence that across the whole cohort, A-level grades correlate with performance in the end-of-year examinations.

As the PARTNERS programme permits students to enter with lower A-level grades, it was not surprising to see that these students performed at a slightly lower level than students entering through the standard route.

The differences between the PARTNERS students and the standard entrants were most striking in the first two years of the programme. However, once the PARTNERS students are in Year 3 and beyond, these differences were no longer significant. This may indicate that PARTNERS students could benefit from extra support in the early years.

The most pleasing aspect of the decision to engage with this initiative has been the performance of the PARTNERS students.

Only a small percentage of students left the programme, with only one due to academic reasons. The attrition rate for PARTNERS students was not significantly different from that for the standard entry cohort. The performance

of students entering through the scheme continues to be considered at the end of each academic year.

Extending the programme

The programme was initially open to schools or colleges within the immediate Newcastle area, but following its success we have extended the catchment area to include Cumbria, Berwick, and North Yorkshire.

The most recent initiative has been to include any individual who may have spent time in care prior to applying to the university.

Our move to the use of the UKCAT (United Kingdom Clinical Aptitude Test) score as a means of identifying individuals to call for interview should also help to widen access further. It will allow for selection based on potential rather than on education-dependent factors, and so should ensure that more individuals get a chance to study medicine.



King's College London Medical School

Case study

In 2001, the then Dean of what is now King's College London Medical School, Sir Cyril Chantler, visited a local primary school in Southwark. He was told by the head teacher that a boy he had been speaking to could never be a doctor because he was about to move to a poorly performing local secondary school where he would probably not even get A-levels, let alone three top grades.

The Extended Medical Degree Programme (EMDP) at King's College London (KCL) was developed in response and is a highly successful six-year programme open to students studying at non-selective state schools or sixth form colleges in inner-London boroughs, Kent or Medway.

Student profile

EMDP students have a very different profile to the conventional King's medical student.

- Since 2006, when fees rose to £3,000, 67% have been awarded the full government grant and a KCL bursary because their gross family income was less than £25,000, compared to 10% of standard entry students.
- 93% are from black or minority ethnic backgrounds, compared to 60% of standard entry students.

- 37% are of Black African or Caribbean heritage compared to 3% of standard entry students.

Students are taught alongside those on the conventional course for the core curriculum and in small EMDP-specific groups for additional subjects, taking three years to complete the first two years of the conventional course. Extra pastoral support is also provided during the first three years. In the final three years, students cover the clinical curriculum at the same pace as other students. They sit the same examinations and are required to achieve the same pass mark.

Extra teaching was initially on basic medical science subjects. The emphasis has now shifted to include writing, presentation skills, study methods and communication skills – subjects and skills that would be taught or acquired at high-achieving schools, but to which many of the EMDP students have not been previously exposed.

In general, EMDP students need significantly more pastoral care than conventional students. Many live at home and sometimes have significant family responsibilities. One student, who failed his exams, was working 40 hours a week to pay the family mortgage and to look after his younger sibling, in the absence of his parents.



A number of students came to the UK as refugees and need to interpret for their parents at meetings with local councils, doctors or lawyers. These problems can mean missing teaching sessions and, often, examination failures. We have therefore created a small team of specialised academics who each support 10 EMDP students in each year group, and who meet regularly to discuss any students considered at risk.

The ultimate goal of the initiative was to enable bright pupils with academic potential, but without top A-level grades due to poor schooling, to become doctors; and students from the first three cohorts have now graduated.

From Dr Pamela Garlick, Reader in Medical and Biomedical Education Director, EMDP, King's College London (KCL) Medical School.

Schools' experiences of QABME



In this section we relate the experience of a small number of the many people and medical schools involved in the QABME process.

School feedback on QABME

Feedback from schools was sought each year and it has been honest, often forthright and challenging, particularly about the amount of documentation required. Continuous development has improved a number of aspects of the process, including altering the timing of visits, and the type and amount of initial evidence required.

The trend across the five-year cycle was for increasing overall satisfaction with the process and the results of QABME. Since the first year, feedback from schools has been that they were satisfied with the guidance, performance and conduct of the visit teams, and the visits. The conclusions in reports were considered on balance to be valuable, although school feedback also provided a number of areas for further improvement in future QABME cycles.

An upcoming QABME visit was seen to provide schools with a chance to focus on areas for potential improvement. Knowing that external review was going to occur provided an opportunity for

schools to assess their curriculum and infrastructure.

Schools also reported that, despite taking time and effort, QABME visits validated and supported action by the school to make changes.

The personal contact and support from GMC staff were often considered helpful, and feedback indicated that having a named contact helped to improve communication. The balance of expertise on visit teams was also considered by schools to be an important element in their satisfaction with the visit process. The GMC is working to improve the ways that schools can access and share information on practice with other schools.

An area of considerable concern to schools, but which was not possible to investigate in depth by visit teams in this round of QABME reviews, was funding for basic medical education. The standards in *Tomorrow's Doctors* include consideration of the impact of resources on the teaching and learning experience; and *Tomorrow's Doctors* 2009 is more explicit than earlier editions in requiring input

from employers and patients, and emphasising the importance of clinically-based experience and thus the necessity of sufficient funding.

Taking a look from both sides

The University of East Anglia Medical School (UEA) was reviewed by QABME for a number of years leading up to the graduation of its first cohort. In this section the QABME team leader, and the Dean from UEA reflect on their experiences.

Professor Tony Weetman, the QABME team leader for the University of East Anglia (UEA) Medical School.

What was your perspective at the start of the process on what the role of QABME would be at UEA?

'I was called out of the blue one afternoon in 2001 by Sir Graeme Catto, then Chair of the GMC Education Committee, and asked if I would like to be one of the team leaders for the new quality assurance process being put in place for UEA and Peninsula, the first two of the four new UK medical



Professor Tony Weetman

schools. The work sounded interesting but not too onerous (“about two days a year”) and it is easier to say yes than no to Graeme. I’d been on one of the GMC’s old-style inspection visits previously but it was soon apparent that we would need a far more detailed set of processes to guide the new schools and the teams. Setting those processes up was the start of what became the QABME programme.

What were the initial challenges?

UEA and Peninsula were the first new medical schools to be established for 20 years. The standards expected and the influence of the GMC had both changed over that time, and so there was little to guide either the GMC team or the school on how to work. The GMC decides which bodies or combinations of bodies are entitled to award UK

primary medical qualifications, but final approval required Privy Council assent, and this could only be obtained at the end of a full cycle of the course. So students were admitted on to these new courses but would only receive a registrable qualification if the GMC team made a recommendation in the final year that the GMC Council accepted. The stakes were therefore very high to get it right!

How did the relationship between the school and the QABME team change during the visit process?

When I first visited UEA, the main new teaching hospital and the medical school building were still only architects’ plans! The school was continuously making appointments and adjustments, and therefore we all had to trust that the course would come together to form a coherent whole. Obviously, those starting the school had a very clear vision of what they wanted to achieve, but the team inevitably asked for information initially that seemed irrelevant or duplicated.

There is no doubt that, after the first few visits, getting clarification of what was required to assess the course helped enormously. And it was inevitable that having a group of outsiders imposed on the school to visit at odd times and making recommendations created some tensions: GMC visitors act as critical friends but owe their final duty to the

regulator and patient welfare.

However, the professionalism of everyone minimised such friction and, by the end of the five-year cycle of visits, there was a deep understanding and a robust relationship that worked well for the benefit of the students. I would also add that the team developed an excellent camaraderie and worked incredibly hard; everyone was committed to the process in a way that made the work much easier.

What was your perspective at the end of the process on what the role and impact of QABME had been at UEA?

The team needed to flag up any potential issues in sufficient time for the school to respond. We also highlighted the many examples of good practice the school developed; and all of us envied them their blank canvas, the chance to set up new systems without having to worry about previously established practice. Finally, we were able to support the school in areas in which there were external factors at university or trust level which it needed to address.

Finally, what has changed the most over the last five years in medical education, and what do you think are the pressing challenges for the future?

The cycle of QABME visits has been a very successful improvement in quality

assurance over the last five years. Over the same time, the joint GMC/Medical Schools Council work on student fitness to practise has rightly placed emphasis on professional behaviour.

The 2009 version of *Tomorrow's Doctors* is already shaping the way we'll be thinking for the next few years, and has taken the last two years to produce, so we are on the cusp of a major challenge for medical schools to address these requirements. However, looming on the horizon are major changes to funding in the university sector and NHS, and I think dealing with the consequences of these, while continuing to enhance the quality of medical education, will be our most pressing challenge.'



Professor Sam Leinster

Professor Sam Leinster, Dean at UEA.

What was your perspective at the start of the process on what the role of QABME would be at UEA?

'At the beginning of the process I assumed that QABME would have a purely observer status. I anticipated that they would comment on what we were proposing and doing, but would not enter into detailed dialogue.'

What were the initial challenges?

There was a feeling among the UEA team early in the process that the QABME team was suspicious and unsympathetic to our innovative approach. This became a particular issue when it came to our approach to assessment. There was very robust discussion on the topic, which culminated in a letter from the Chair of

the Education Committee requiring us to reconsider our approach.

My response to that led to a visit from the Chair of the Education Committee and a senior GMC member of staff. A better understanding was reached, and thereafter the interaction between the school and QABME became very positive. The overall perception from our point of view was that, for the remaining years of our interaction, the team offered the opportunity for informed discussion and peer review. This resulted in agreed outcomes which were acceptable to both parties.

How did the relationship between the school and the QABME team change during the visit process?

The relationship evolved from one of a certain amount of suspicion to one

“ We believe that the interaction with QABME was a positive experience which resulted in a more robust and acceptable curriculum at UEA. ”

of mutual respect. The school came to regard the QABME team as a source of support rather than a threat.

What was your perspective at the end of the process on what the role and impact of QABME had been at UEA?

We believe that the interaction with QABME was a positive experience which resulted in a more robust and acceptable curriculum at UEA. The engagement of the team throughout the process was much better than having a single validation visit at either the beginning or end of the process.

Of necessity, the proposed curriculum changes as it rolls out over a five-year programme, and the ability to test the changes with the QABME team in a timely manner was invaluable.

Finally, what has changed the most over the last five years in medical education, and what do you think are the pressing challenges for the future?

The greatest change in the last five years has been the impact of changes in

the NHS which have led to the effective disappearance of clinical firms.

As a result, the clinical experience of students is being diminished. The most pressing challenge for the future is the proposed shift of up to 30% of service delivery into the community. A complete restructure of clinical teaching will be necessary.'

An established school perspective

From Professor Ian Booth, Dean of Medicine at Birmingham Medical School.

Birmingham Medical School was visited early on in the QABME process and has made many changes since the QABME report.

What are you most proud of in the context of your school's development since you were last visited by a QABME team?

'We are developing clinical scenarios which bring together students from different professions to allow them to learn more about how the different professions need to work together to



Professor Ian Booth

provide effective patient care. The West Midlands Centre for Innovation and Training in Elective Care (CITEC) is a collaboration between the University of Birmingham, Birmingham City University, and the University of Worcester.

At the moment these scenarios are being piloted with a limited number of students, but it is anticipated that they will be available for more students in due course. The students who have participated in these scenarios have evaluated them very positively, and noted that they have really opened their eyes to the role and value of other professional groups.

The scenarios build on the work the collaboration has already undertaken in developing online learning materials in various core patient pathways, and in running plenary days which bring

students from different professions together to engage in inter-professional learning activities.'

Within the context of a major curriculum review, Birmingham Medical School is also developing an academy structure for teaching in partner trusts.

Professor Booth explains: 'This will enhance collaboration between the school and the NHS, give trusts more autonomy and responsibility for providing clinical teaching, and give academies a strong voice in the development of the curriculum and in its implementation'.

Although costly, the benefit to students of practising their clinical skills partly in a simulated environment is recognised and increasingly being implemented at UK medical schools.

Professor Booth: 'Using simulation to prepare students for activities they will shortly be doing for real is one way to help students in their preparation for foundation year one placements. In the 2009-10 academic year, all Year 5 students will spend a day at the Hollier Simulation Centre at Good Hope Hospital. During the day they either take part in or observe a number of acute scenarios. The feedback the students have provided so far has been extremely positive'.

How is Birmingham Medical School responding to the challenge to ensure that

“ [The academy structure for teaching] will enhance collaboration between the school and the NHS, give trusts more autonomy and responsibility for providing clinical teaching, and give academies a strong voice in the development of the curriculum and in its implementation. ”



Leeds Medical School Clinical Skills Learning Centre

students are sufficiently prepared for practice?

'The clinical procedural skills passport to record skills as they are developed has now become well embedded in the MBChB at Birmingham. The Postgraduate Deanery recognises the value of such a passport, and

this has provided the impetus for Keele and Warwick Medical Schools to begin collaborating with us on a joint procedural skills passport that can be recognised across the West Midlands Deanery. If this collaboration is successful, it should bring benefits to both our students and their employing trusts as they move into the foundation grades'.

QABME across the UK: a Scottish perspective

Medical schools in Scotland have collaborated to produce an outcomes and guidance document, *The Scottish Doctor*. The third edition was published in 2009, and is steered by the Scottish Deans' Medical Curriculum Group. The five Scottish schools regularly work together on developing a range of initiatives, such as preparation for practice where modules are supporting the transition from medical school to employment as a foundation year one doctor.

Professor Allan Cumming, Chair of the Scottish Deans' Medical Education Group and Director of Undergraduate Learning and Teaching, University of Edinburgh Medical School.

'While the recent QABME process was essentially the same across the UK, the Scottish medical schools had previously agreed and published common learning outcomes in *The Scottish Doctor* and mapped them against *Tomorrow's Doctors*. This helped them to be sure that they were delivering the outcomes in advance of the QABME process.

Developments in basic medical education highlighted by QABME in Scottish medical schools include:

- Increasing attention to the standardisation, validity and reliability of assessments, driven

“ New consultant posts in Scotland are generally advertised with nine programmed activities (PAs) for direct clinical care, and only one PA for supporting professional activities, which will include continuing professional development, postgraduate and undergraduate teaching. ”

partly by GMC requirements and partly by students' concerns about the new ranking procedures for entry to foundation.

- Increasing focus on feedback to students on their performance and helping them to improve, driven partly by the National Student Survey results.
- Ongoing development of clinical skills and communication as curriculum domains – the subject of a national initiative from NHS Education for Scotland (NES).
- Increasing involvement of NES in quantification and performance management of clinical teaching, with a nationally agreed methodology linked to the allocation of Additional Cost of Teaching (ACT) funds.

Redistribution of ACT funds away from traditional 'teaching' health boards over the last five years has made funding of new developments in clinical teaching in these regions extremely difficult, but this phase is about to end.

- An arrangement for all Scottish final-year students to shadow their destination foundation year one post simultaneously.

Clinical staff: As the NHS tightens its managerial grip on consultants through the new contract, job planning and appraisal, the place of undergraduate teaching becomes less secure. For example, new consultant posts in Scotland are generally advertised with nine programmed activities (PAs) for direct clinical care, and only one PA for supporting professional activities, which



Professor Allan Cumming

will include continuing professional development, postgraduate and undergraduate teaching. Deviations from this standard job plan must be separately negotiated.

University staff: It is ever more difficult to identify biomedical scientists who are motivated to teach science in medical curricula as staff from traditional medical science disciplines, including physiology, biochemistry and anatomy, retire or move on.

Legislative change: It becomes more difficult with time to reconcile the absolute requirements of the disability legislation as related to education, and the rapidly expanding patient safety agenda in relation to graduate outcomes such as safe prescribing.

Preparedness for practice: The issue of graduates' preparedness for practice



Queen's Medical Research Institute, University of Edinburgh

is a hot topic in Scotland as elsewhere. The original *Tomorrow's Doctors* in 1993 focused attention on key aspects of preparedness, such as communication, practical skills and professional attitudes. It initiated reform which has rolled forward ever since. The 2009

document should drive a further stage in that process, by specifying in detail the outcomes that all graduates must achieve in order to be prepared for the workplace, and by requiring schools to implement this agenda through appropriate teaching and assessment.'

Who are the visitors?



In this section we meet a few of the visitors who have been involved in the first QABME cycle of medical school reviews.

A specialty trainee

Dr Jennie Johnston graduated from Edinburgh Medical School in 2004 and trained as a General Practitioner within the Royal Army Medical Corps. She is currently serving as a Medical Officer based in Germany.

At university Jennie was Chair of the UK Medical Students Committee (2001-2003) and a Council Member of the British Medical Association (BMA). Currently Jennie represents the Tri-Services Deanery on the Vasco da Gama Movement (UK), an international body of doctors promoting excellence in training and research within general practice. 2010 is Jennie's seventh year as a visitor. She has contributed to several reviews as part of QABME, and in the Quality Assurance of the Foundation Programme (QAFP).

What are you doing in your 'day job'?

'I am currently serving as Regimental Medical Officer to The Royal Scots Dragoon Guards (Carabiniers and Greys) based in Fallingbommel, Northern Germany. I have recently returned from an operational tour in Afghanistan where I spent most of my time working in a Forward Operating Base in Sangin DC, Helmand Province.

Why did you get involved with QABME?

I applied to be a QABME visitor during my penultimate year studying medicine at Edinburgh University Medical School. I had worked hard as a BMA representative in a number of roles, which included serving as Chair of the Medical Students Committee, as a Director of the Association on the BMA Council Executive and as a member of the Board of Medical Education. I was keen to improve opportunities and quality within medical education from a different front, and the potential to contribute to the pilot of the new QABME process seemed perfect.

QABME was in its infancy when I became involved. I hoped that I would have the opportunity to help shape the quality assurance process to ensure it was robust and effective – able to generate excellence in medical education whilst enabling a strongly collaborative approach with the school which did not place too great a burden on those visited.

How did your role develop and change?

When I started as a QABME visitor I was a medical student. I continued as a visitor during my pre-registration house



Dr Jennie Johnston

officer year, year two of the Foundation Programme and specialty training. Thus my role evolved greatly. I have thoroughly enjoyed mentoring new student and foundation trainee visitors as they have been selected to join the visit teams. In addition, the process of QABME has been carefully developed and refined over the years allowing the visit teams to concentrate far more on assuring quality and promoting excellence as the processes have been optimised.

Initially as a student visitor I found questioning and occasionally challenging senior members of both the clinical and academic worlds daunting, and I frequently questioned

“ One of the greatest benefits arising from QABME has been the dissemination and sharing of both lessons learned and best practice across schools. ”

my credibility within the team. Thanks to the support of the GMC Education team, and to fellow QABME visitors, I rapidly developed both a conviction in the need for student visitors and a strong evidence base for their worth.

The contribution of student and foundation doctors is integral to the quality and effectiveness of the QABME process, and whilst there may always be a few who question the importance of such real and recent experience, it is clear that the vast majority of both those visited and visiting can see the enormous value that results. This is always well reflected in the feedback from those medical schools visited.

One of the greatest benefits arising from QABME has been the dissemination and sharing of both lessons learned and best practice across schools. QABME has managed to enhance quality within UK medical education without limiting the diversity of delivery between medical education programmes at different medical schools: a characteristic of UK medical education we should be very proud of and work hard to maintain.'

A healthcare and governance professional

Sue Hobbs has 30 years' experience of healthcare in the UK and the USA. Initially specialising in neuroscience nursing, she moved into nursing education, followed by clinical then general management. Since 1988 she has worked at board level across a variety of healthcare settings as Director of Nursing and clinical governance lead.

What experience did you bring to QABME, and why did you become involved?

'I have six years' experience as a non-executive director, a very challenging and different role, and I chair a clinical governance committee.

I got involved with QABME because I have a major interest and experience in quality management and quality assurance, as they relate to clinical care and professional education. My experience is underpinned by a



Sue Hobbs

Masters degree in Quality Assurance in Healthcare.

I believe that undergraduate medical education should be comprehensive, fit for the 21st century, and that curricula should be developed to really prepare students to practise safely in today's society: to really provide them with the knowledge and skills to manage the care of others, patients, carers, colleagues and themselves. Also having worked in several teaching hospitals, I value the input of medical students to clinical teams.

It is a huge amount of work!!

My perspective on what my role would be at the outset was pretty accurate and, once I got over the anxiety of being with some very senior people, I realised that they were all normal and as committed as each other in

making a difference. I believe that my experiences, largely different from many of my team colleagues, has served to add a different dimension, and has sometimes allowed me to ask questions that others might not have.

I believe also that the schools and the students themselves find having lay people as members of the QABME teams valuable, if not occasionally challenging.

If we believe and accept that quality assurance is a constant cycle of improvement, then the QABME approach has been beneficial to the whole process of constant review, redevelopment and refinement in the delivery of undergraduate medical education.

Although I had no experience of the previous peer review process, the scrutiny of the process in itself and the changes that have been implemented in terms of a more open and transparent process are clearly welcomed.

In the years since the start of the QABME reviews I have certainly noticed that schools have developed a less suspicious approach to the inevitable feeling of scrutiny, and seem to have become more open to a partnership approach to developing the final report. Also, electronic information beats the 'trees' that used to arrive for pre-visit review! I have enjoyed it thoroughly – I would recommend the role to others.'



Dr Nick Bishop

A clinical quality regulator

Dr Nick Bishop is a consultant clinical radiologist, working part-time, mainly in cardiovascular and interventional radiology, and based at the Bristol Royal Infirmary. Nick was appointed Assistant Medical Director to the Commission for Health Improvement. After the creation of the Healthcare Commission in 2004 his role became that of Senior Medical Adviser, a role and title that he retains with the Care Quality Commission (CQC) formed in April 2009.

What are you doing in your 'day job'?

'As Senior Medical Adviser to the CQC, I provide clinical input to some of the strategic and operational work of the

commission. In particular, I am involved in the work of identifying and analysing trusts that are outliers for mortality in certain diagnostic groups or procedures.

Why did you get involved with QABME?

I had experience of assessing quality as a clinical governance reviewer for the Commission for Health Improvement and subsequently in helping to develop assessment criteria for the Healthcare Commission. So I knew about standards-based assessment and I was also interested in undergraduate medical education.

My experience as a medical director and on the Board of the British Association of Medical Managers showed me the value of instilling ideas of good clinical governance, quality improvement and leadership at an early stage in a doctor's

career. I wanted to see how different medical schools approached this.

I think the most important skill I was able to apply in QABME is an ability to assimilate a large amount of information about a situation and pick out the relevant aspects. Coupled with this is an overdeveloped need for evidence to support statements of fact, and an ability to identify where more information is needed to support the case.

I've been greatly impressed by the serious response to all the visits I have done. I have no doubt that the QABME process contributes to improvements in the delivery of medical education. At the same time, schools retain the freedom to offer varied courses that comply with QABME standards but do not all fit the same mould. I think this is important to retain, as students vary in their preferred teaching and learning styles.

Did you notice any areas of particular change during your time as a QABME visitor?

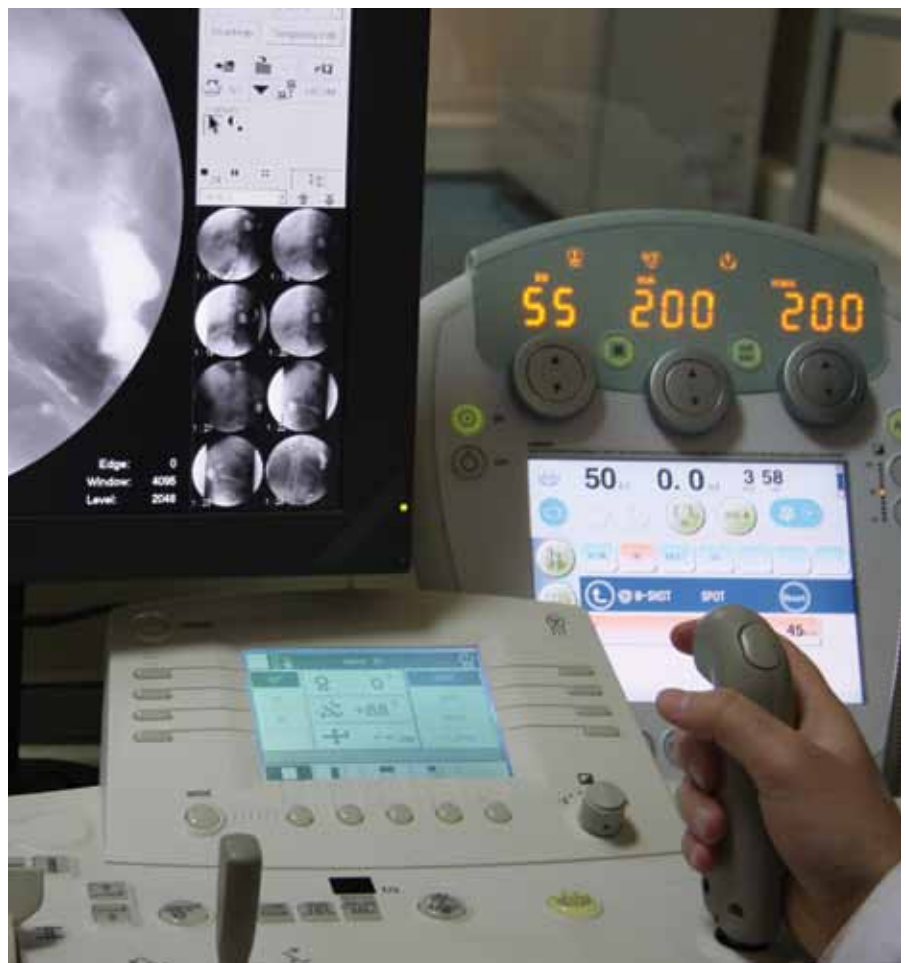
I think the QABME process has become more prescriptive, which is actually a good thing as it reduces variation and improves fairness in the QA process. For example, matching findings to individual paragraphs in *Tomorrow's Doctors* has been introduced.

Whilst the current process is very thorough it is time-consuming for the team and therefore costly to the GMC.

Now that all schools have gone through

the process, I think a slimmed-down version of QABME could be considered for future rounds. This could be themed to concentrate on particular areas rather than covering the whole of *Tomorrow's Doctors*, and schools should be required to inform the GMC of any changes to curricula or delivery, which would enable a more tailored assessment.

Providing a route into the GMC for students to raise concerns would also give a further strand of information. The net result would be that QABME visits are targeted and proportionate in line with best practice in regulation. The aim should be to retain the assurance of the current process whilst reducing the costs to the GMC and the regulatory burden to the schools.'



A student

James Read is currently a final-year medical student studying at the Peninsula Medical School's Devon campus in Plymouth. He has been involved in student support and student input into the development of the medical school since starting there in 2005. His career aspirations are toward emergency medicine and continuing his involvement in medical education.

'I'm currently in my final year at the Peninsula Medical School and have just applied for my F1 jobs for which I'm hoping to remain in the South West.

I have previously been heavily involved in student representation at the Peninsula Medical School, which involves a large focus on quality assurance of the curriculum and also curriculum development.

My involvement with the QABME process was more by chance than anything else. When this opportunity to become involved with the QABME process arose, it seemed a natural progression from the work I had previously been involved with during my time as a student representative.

In my experience, the QABME visits have helped to promote diversity in medical education. By bringing together teams from such varied backgrounds, it promotes sharing of good practice and new ideas about how challenges can be faced, thereby helping schools

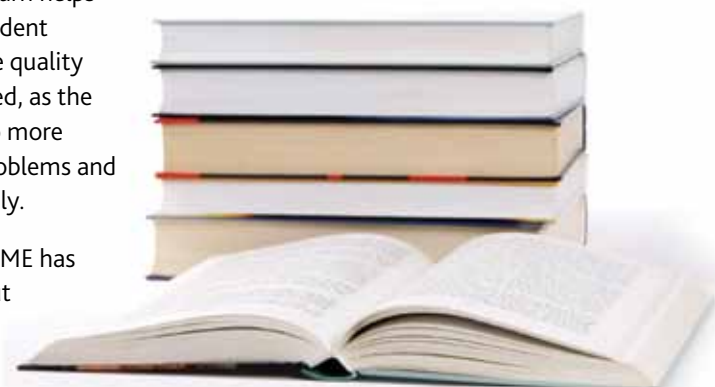
“I also feel that the QABME process has helped schools to examine their own curricula, often encouraging them to identify the same strengths and weaknesses that the QABME teams have found, and therefore strengthening their own internal quality measures.”

to develop their courses in new and different ways.

I also feel that the QABME process has helped schools to examine their own curricula, often encouraging them to identify the same strengths and weaknesses that the QABME teams have found, and therefore strengthening their own internal quality measures. This in turn helps to improve the student experience and the quality of doctors produced, as the schools are able to more quickly identify problems and correct them rapidly.

My time with QABME has been fairly brief but one of the major changes I have

experienced is the increased reliance on distance learning and e-learning. This could pose its own unique challenges, but I look forward to seeing the positive contributions that this can make. I have greatly enjoyed my QABME experience and would like to thank the GMC for giving students such an important role in quality assurance.'





Professor Steven D Heys

A surgeon

Professor Steven D Heys is Deputy Head of the Division of Applied Medicine and an honorary consultant surgeon at the University of Aberdeen and NHS Grampian, with a special interest and involvement in research on the treatment of breast cancer.

He co-ordinates Years 3 and 4 of the medical curriculum in the School of Medicine at Aberdeen and is an external examiner at universities in the UK. He has a specific interest in all aspects of undergraduate and postgraduate education and its interface with the changes in postgraduate training. He is also a team leader on visits to postgraduate deaneries for the quality assurance of postgraduate training.

“ I understand how medical schools work within the context of being part of a university and I have an understanding of working in the NHS, with all the different objectives of the different organisations that come to bear on undergraduate training. ”

Why did you get involved with QABME?

'I was an experienced surgeon and was interested in teaching at both undergraduate and postgraduate levels, as well as research. I thought it was an opportunity to do several things: (i) to contribute to QABME through my experience as a clinical surgeon working with doctors at all stages of training and having experience of them, their strengths and where perhaps they were less strong, and to look for this in their undergraduate training, (ii) to learn myself from other medical schools and to disseminate good and innovative practice – particularly bringing it back to Aberdeen! (iii) to learn from the students, (iv) to learn from other visitors who I knew would have a diverse

background, especially those not medically qualified; and so it was also an opportunity to develop myself. Also it was important to strike the right balance and help schools reflect on how to achieve high-quality teaching whilst providing a high-quality research base.

I have a strong clinical background working with students and doctors at all stages in their training, and have been fully involved with my own school in teaching at various levels, including curriculum design and development of innovative practices. I understand how medical schools work within the context of being part of a university; and I have an understanding of working in the NHS, with all the different objectives of the different organisations that come to bear on undergraduate training.

Did you notice any areas of particular change or challenge in basic medical education during your time as a QABME visitor?

Yes, the changing patterns of healthcare delivery and fitting and enhancing medical education into this context; and the development and establishment of fitness to practise procedures.

How have QABME teams contributed to the development, management and delivery of medical education in the schools you visited?

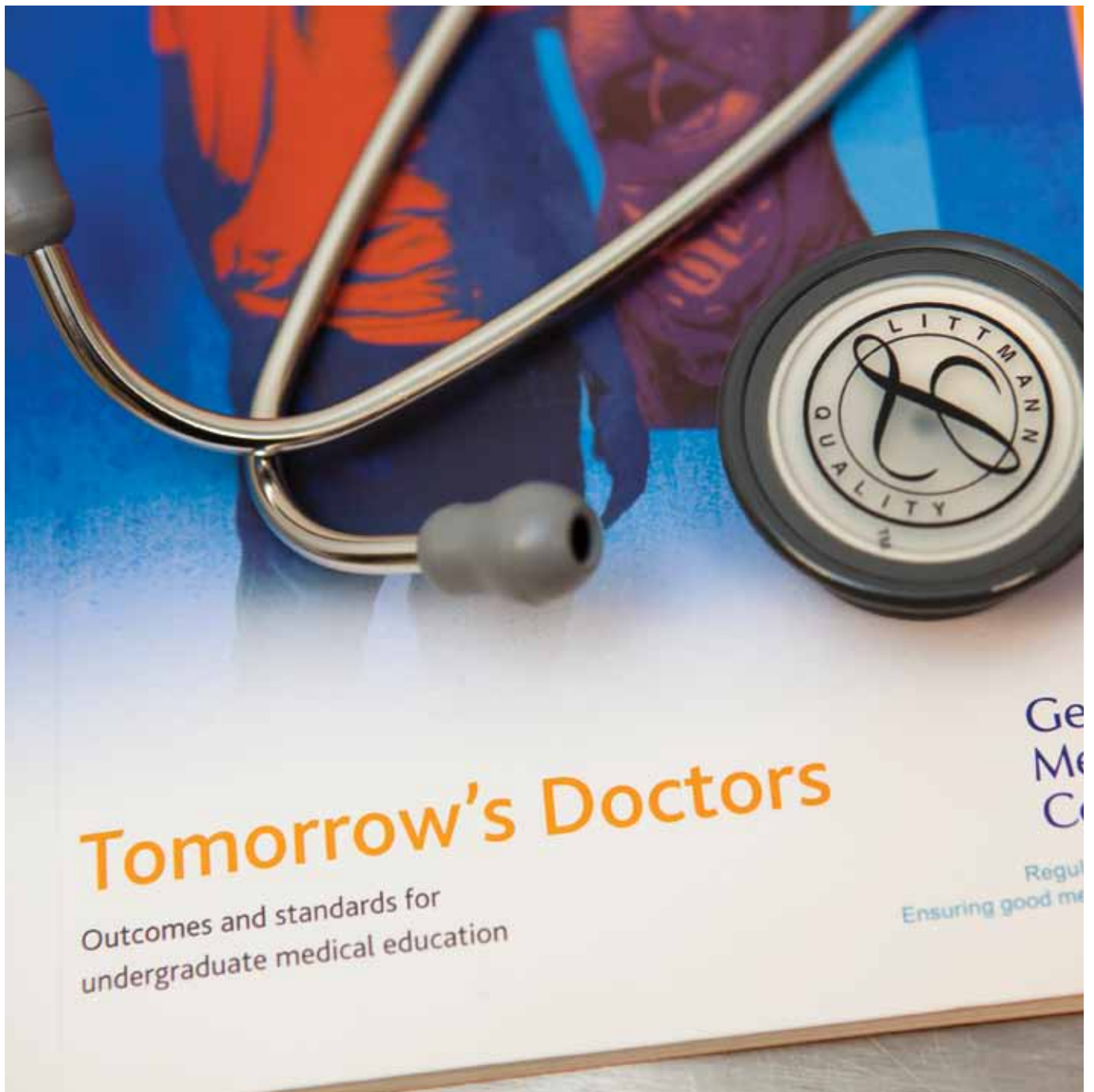
I was in the team visiting the University of East Anglia Medical School (UEA) for several years, and the support of QABME was very important to the Dean and his team in helping a new medical school develop in the context of an established university and with a collaborating Private Finance Initiative (PFI) NHS hospital.

QABME teams have also supported older universities to change where necessary and to develop and reflect on their current curricula – usually it was the universities themselves that moved things forward.

I have had the opportunity to visit medical schools that all have areas of excellence. I have been able to bring back and develop ideas and apply them to the medical curriculum here – a real opportunity to develop changes to enhance teaching!



Views on the road ahead



In this section a range of people involved in medical education and training, and in the medical profession, reflect on a range of opportunities and challenges in the delivery, regulation and quality assurance of basic medical education.



Professor Jim McKillop

Professor Jim McKillop, Chair, GMC Undergraduate Board.

'The requirements for undergraduate medical education are challenging and continuously changing. An important role of the GMC will be to promote the continuation of high educational standards in spite of financial constraints and the demands of delivering patient care. Reduction of educational standards could have a long-term effect on the quality of clinical care.

The GMC has to ensure that medical

students are educated in ways which encourage them to develop the knowledge and the attributes required in clinical practice. Clinical experience early in their education is important as it provides greater insight into the career they seek to enter. The standards set by the GMC must ensure that students are well prepared for the Foundation Programme posts they will take up after they graduate. However, they must also be equipped to adapt to the changing expectations of patients and the public, to changes in clinical practice, and to the changing demands from their future employers.

Thus basic medical education comprises both educational and training elements. Medical education and training at all stages will be coordinated by the GMC from 2010. This will provide opportunities to better align educational activities at the various stages, and for the GMC to work with medical schools, postgraduate training providers, employers and other organisations. This will be essential in retaining the confidence of the public in the quality and competence of all doctors at any stage of their education, training or professional practice.'

Confidence for patients

Stephen Whittle, Lay member of the GMC Undergraduate Board and Chair of the Broadcast Training and Skills Regulator.

'It is all about patient reassurance. The challenge for medical schools is how to identify and nurture not just the knowledge and the intellectual skills of would-be doctors but also their sense of vocation.

Patients need to be confident that a doctor at any stage of their career can deliver the care appropriate to their stage of knowledge and, when in doubt, is ready to call in more expert help.

Good education and mentoring lay a solid foundation, but equally important is the attention paid to professional standards. Being a doctor is about more than being a scientist: it involves a commitment to high ethical standards. Ethics can be taught but they can't flourish if the doctor-to-be neither cares nor understands their importance.

Over the past year, I have had the opportunity to meet a number of



Stephen Whittle

medical students as a member of the GMC rather than as a patient. I've been impressed by their attitudes, their approaches, their thoughtfulness and their sense of who they are. All of those attributes are what patients hope for from their doctor.

Patients want a doctor who knows what he or she is doing, is empathetic, communicates well, and is thinking about their best interests, using a range of knowledge and skills to address whatever the health problem might be.

Tomorrow's Doctors should ensure that those existing qualities are strengthened and developed by putting even greater emphasis on contact with patients throughout the undergraduate years, and by identifying a range of consistent outcomes that each new doctor, wherever they are trained, should be able to demonstrate.'

Greater collaboration on key challenges

Medical Schools Council's perspective

Professor Tony Weetman was a QABME visitor throughout the first cycle of medical school reviews. In 2009 he was elected Chair of the Medical Schools Council (MSC).

'The GMC's QABME process is central to ensuring the delivery of high-quality undergraduate medical education and has been welcomed by medical schools. Its success is evident from the examples in this report. As Chair of the MSC, I was asked to highlight some of the future challenges for medical schools and other partner organisations in relation to the delivery of high-quality undergraduate medical education. As with any degree course, there are obvious questions about future funding arrangements in the wake of the recent financial downturn, but we will have to deal with these as they arise. More immediately, the following issues need to be fully addressed.

To ensure better continuity between undergraduate and postgraduate education, and to improve the clarity for students on what is expected of them as they move into and through the Foundation Programme.

The MSC and GMC will contribute to the review of the Foundation Programme that is currently underway,

to ensure that the programme maps on to the outcomes for graduates set out in *Tomorrow's Doctors* 2009, and to delineate responsibilities better in relation to foundation year one. We have now established a transition group which will bring together the various bodies involved in this critical period of a doctor's career.

To ensure that UK graduates are equipped to be safe prescribers.

The MSC established a Safe Prescribing Working Group two years ago, which involved a large number of stakeholders. One outcome has been the creation of Prescribe, an e-learning package that supports teaching and learning in basic and clinical pharmacology (www.cpt-prescribe.org.uk/). The Prescribe team is also working with the MSC and individual medical schools to develop a prescribing competency test. The Safe Prescribing Working Group also recommended the adoption of a common prescribing form for the UK as a simple way to improve prescribing, and we are pressing for this measure to be adopted.

To address the comparability of assessments in UK medical schools.

The GMC has asked medical schools to develop, and draw a proportion of exam questions from, a shared question bank to enhance quality assurance. In 2008, all medical schools agreed to contribute to the bank and to use a proportion of these questions in final examinations.

“ The GMC’s QABME process is central to ensuring the delivery of high-quality undergraduate medical education and has been welcomed by medical schools. Its success is evident from the examples in this report. ”

The MSC is now coordinating the work to establish this resource.

To ensure greater consistency across schools in the way in which the MSC/ GMC fitness to practise guidance is implemented.

An MSC working group has been established to improve the consistency of fitness to practise procedures across medical schools.

This group will add formality to existing informal networks between schools, and will work with the GMC on how best to maximise the benefit to medical schools of GMC expertise in this area. The MSC will also work with the GMC to develop improvements in its current quality assurance processes in this area.

To address the under-representation of lower socio-economic groups and certain ethnic minorities in the UK’s medical profession.

The MSC and individual medical schools have a key role to play in widening access to the medical profession, and to this end will be taking forward a number of recommendations from *Unleashing Aspiration*, the final report from the Panel on Fair Access into the Professions.

The MSC has identified three key themes which will be the focus of our work in this area:

- raising aspirations through outreach work
- improving access to, and availability of, quality information and advice on medical careers
- ensuring a best-practice approach to admissions that is sensitive to the widening access agenda.’



Toward a future career

Professor John Cookson from Hull York Medical School sounds a caution and highlights the need to balance the demands for knowledge and skills.

'The greatest change in recent years has probably been the increasing emphasis on 'fitness for purpose' of new graduates. The phrase itself has unfortunate connotations of the production line.

There is a significant danger that the clinical governance agenda will drive us too much towards training and away from education; too much about doing today's job and not tomorrow's; too much about acquiring a series of discrete competences and not enough about the individual in whom those competences rest. The emphasis on knowledge-based examinations towards the end of postgraduate training fails to recognise that essential components are expertise and performance.'



Professor Jon Cohen

Professor Jon Cohen, Dean at Brighton and Sussex Medical School.

'The challenge for the future is to ensure that we can continue to educate all our doctors in a research-rich environment, and that they are properly prepared to make a pivotal contribution to the NHS, recognising that the nature of the service will almost certainly change over the next 30 years. We must be flexible and responsive, but not lose sight of the core qualities that patients will expect from their doctors.'

Professor Malcolm Lewis, GMC member, GP and Sub-Dean and Director of Postgraduate General Practice Education in Wales.

'It is always difficult to identify how changes to undergraduate curricula might influence the later years of postgraduate training, and in particular the activities of doctors no longer in



Professor Malcolm Lewis

training programmes. It is, however, worth noting that there are aspects of the curriculum that can set patterns for lifelong learning. The awareness and demonstration of necessary skills and an emphasis on professionalism, including continuing professional development, are key to the successful delivery of medical care through all stages of a doctor's career.'

Dr John Jenkins CBE, Chair of the GMC Postgraduate Board, Senior lecturer at Queen's University, Belfast Medical School and Consultant Paediatrician, Antrim Hospital.

'Today's undergraduates in medicine – tomorrow's doctors – will see huge changes in medical practice during their working lives, most of which we cannot even guess at. Because of this, undergraduate medical education needs to prepare each student to remain up to



Dr John Jenkins CBE

date and fit to practise throughout their medical career.

Becoming a doctor today is about so much more than understanding how the body works and developing technical skills. The demands of being a doctor mean that students will need to understand conditions in relation to each patient's environment, beliefs and outlooks, and communicate with them in a way that they understand. As well as being practitioners, they must also work in partnership with patients, and as team members and leaders. To help medical students and their teachers with this daunting prospect, the GMC has developed the updated version of *Tomorrow's Doctors* which sets out the outcomes medical students should achieve at medical school and what they need to know for their first posts as a trainee doctor.

The requirements will ensure medical students have the right mix of medical knowledge and clinical ability, as well as important professional attributes. This will apply to every medical school in the UK, so that whether they start work in Eastbourne, Edinburgh or Enniskillen they will have the necessary competences to provide safe and effective care for patients, and to continue to develop in the lifelong, triple apprenticeship of the head, the hands and the heart, which is what being a doctor entails.

Graduation is an early threshold in a doctor's career, and undergraduate learning needs to link coherently with postgraduate medical education and training. New graduates cannot be expected to have the clinical experience, specialist expertise or leadership skills of a consultant or GP; but they must be able to demonstrate all the outcomes in *Tomorrow's Doctors* in order to be properly prepared for clinical practice and the Foundation Programme. The Foundation Programme builds on undergraduate learning, allowing new doctors to demonstrate performance in the workplace.

A 2009 editorial in *The Lancet* welcoming the new edition of *Tomorrow's Doctors* also highlighted the challenges to be faced in effectively implementing it. These challenges are for all those with responsibilities in this area: the GMC, the universities and medical schools, the departments of

health, and all commissioners and providers of care. They must all appropriately recognise and value teaching and teachers, and ensure that the necessary resources are made available.

It is clear that meeting these outcomes and standards will be challenging, but the benefit will be to tomorrow's patients through the further enhancement of the knowledge, skills and behaviour which tomorrow's doctors will bring to their practice.'

Confidence for graduates and employers

Professor Derek Gallen, Postgraduate Dean for the Wales Deanery at Cardiff University and National Director of the UK Foundation Programme Office.

'The biggest challenge that the postgraduate deans are facing with regard to basic medical education is to truly develop the transitional phase between the final year of medical school and the first year of employment.

The revised version of *Tomorrow's Doctors* has made this a major issue that can no longer be ducked. Working closely with the medical schools will provide opportunities to tailor more closely the needs of individual students to the new working environment ensuring that they are fit for purpose on day one of their employment.

The continuation of the undergraduate portfolio will also be a big step forward in the ongoing training and professional development of the individual.

While the medical schools value the diversity of their respective curricula it is surely right to move towards more uniformity, allowing employers greater understanding of, and input into, exactly what postgraduate work and training is needed in a modern NHS.

In Wales we are meeting these challenges through close working relationships with our two medical schools. Associate deans meet representatives of the medical schools on a regular basis. The transitional phase will make these meetings more challenging as we are also mapping the workforce needs and skills mix required for the health service in Wales. This means close working with the Welsh Assembly and the BMA to ensure we develop a quality workforce that has been trained from medical school through to the postgraduate arena.'

David Grantham, Head of Programmes at NHS Employers.

'Ensuring undergraduate and postgraduate training is effective and produces doctors fit for the future purposes of the NHS is a key concern for employers. The focus for the last few years has been on establishing agreed standards and expectations, set out now in *Tomorrow's Doctors* and the various foundation, core and specialty curricula. These have helped identify

“ The focus for the last few years has been on establishing agreed standards and expectations, set out now in *Tomorrow's Doctors...* These have helped identify the various levels of knowledge, skills and competences expected of doctors.”

the various levels of knowledge, skills and competences expected of doctors. There have been some important changes in emphasis; for example, the inclusion of clinical leadership skills and doctors' roles in public health and prevention. There are also clearer standards for organisations delivering the training and development, supported by activity such as QABME visits and PMETB surveys to monitor and report on performance.

Increasingly though, the focus will be on improving the quality and cost effectiveness of training, as the NHS faces up to its biggest ever financial challenge and continues to adjust to training within a 48-hour week. The pressure, as with clinical services, will be to improve quality, and at the same time achieve greater cost effectiveness. Innovations such as e-learning,

simulation, and self-directed learning will play a part; and we can undoubtedly learn much from undergraduate and postgraduate trainees themselves about what works and what doesn't. The requirement that undergraduate medical students have greater exposure to the NHS is a case in point, where the views of doctors and employers have both supported this exposure and the benefits of providing a smoother transition into postgraduate training.'





Dr Maria Slade

Dr Maria Slade, GMC visitor and F1 doctor.

Maria joined QABME in 2007 while studying medicine at Warwick Medical School. She is a foundation year one doctor in Middlesbrough.

'I joined the QABME team in 2007, when I was in the penultimate year of my undergraduate medical education. In the subsequent two years there was a shift in the emphasis of my learning, away from the necessary foundations of science and towards a portfolio that enveloped a wide spectrum of practical, inter-professional and leadership skills around a growing clinical knowledge base. Meanwhile, my role within QABME provided me with an insight into the responsibilities of the education providers; and how UK schools strive towards common standards, whilst maintaining their individual characteristics and research strengths, creating a diversity of

“ I believe QABME processes are valuable in ensuring equivalence of training; benefiting trainees and service users...” ”

medical training within the UK. In August 2009, I started my foundation training and those more practical elements of my course such as pharmacology. Shadowing periods and communication skills have been drawn upon more intensely than any intricate knowledge of pathogenesis or anatomy. I believe such elements will continue to dominate, but not outweigh, the development of undergraduate courses and from earlier stages, aided by more cohesive partnerships between trusts and schools. The transition from medical student to foundation doctor will be a less abrupt and feared one: safer for doctor and patient alike.

Widening participation schemes will introduce a medical population derived from a broad spectrum of backgrounds and personalities who can all accomplish broad competences whilst bringing their own specific talents to a complex demographic. In addition, increased patient representation will monitor outcomes and shape development in a progressive system. As a trainee doctor and a visitor for the GMC, I believe QABME processes are valuable in ensuring equivalence of training; benefiting trainees and service users by encouraging a flexible structure that can incorporate individual, trust and patient needs.'

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Further information on QABME can be found in the Education section of the GMC website at www.gmc-uk.org/education/index.asp

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