Role of the patient in medical education

British Medical Association
Medical Education Subcommittee

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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ASME</td>
<td>Association for the Study of Medical Education</td>
</tr>
<tr>
<td>CbD</td>
<td>Case-based discussion</td>
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<tr>
<td>CCT</td>
<td>Certificate of Completion of Training</td>
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<tr>
<td>CMO</td>
<td>Chief Medical Officer</td>
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<tr>
<td>CPD</td>
<td>Continuing professional development</td>
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<tr>
<td>DOPS</td>
<td>Direct observation of procedural skills</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>EWTD</td>
<td>European Working Time Directive</td>
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<tr>
<td>FASD</td>
<td>Fetal alcohol spectrum disorders</td>
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<tr>
<td>FY1</td>
<td>Foundation year 1</td>
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<tr>
<td>FY2</td>
<td>Foundation year 2</td>
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<tr>
<td>GMC</td>
<td>General Medical Council</td>
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<tr>
<td>GP</td>
<td>General practitioner</td>
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<td>GPAQ</td>
<td>General Practice Assessment Questionnaire</td>
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<tr>
<td>LGB</td>
<td>Lesbian, gay and bisexual</td>
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<tr>
<td>mini-CEX</td>
<td>Mini-clinical evaluation exercise</td>
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<tr>
<td>mini-PAT</td>
<td>Mini-peer assessment tool</td>
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<td>MMC</td>
<td>Modernising Medical Careers</td>
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<td>MSC</td>
<td>Medical Schools Council</td>
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<td>MSF</td>
<td>Multi-source feedback</td>
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<tr>
<td>NHS</td>
<td>National Health Service</td>
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<tr>
<td>NOFAS-UK</td>
<td>National Organisation on Fetal Alcohol Syndrome UK</td>
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<tr>
<td>OSCE</td>
<td>Objective structured clinical examinations</td>
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<tr>
<td>OSLER</td>
<td>Objective structured long case examination record</td>
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<td>PMETB</td>
<td>Postgraduate Medical Education and Training Board</td>
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<tr>
<td>SEA</td>
<td>Significant event analysis</td>
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<td>TAB</td>
<td>Team assessment behaviour</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>WPA</td>
<td>Workplace assessments</td>
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Foreword
Patient contact lies at the heart of medical education. Traditionally, patients have had a passive role; they were useful in terms of what the student could learn from them but not usually invited to be a fully informed and autonomous partner. Now, as greater emphasis is given to providing patient-centred care, valuing the partnership between patients and doctors, sharing decision-making and promoting self-care; there has been a corresponding shift towards patient-centred learning within medicine. This provides considerable benefits for learners and patients alike.

There are, however, a number of challenges that arise from patient involvement in medical education. These range from practical considerations relating to the organisation of clinical placements to patient concerns about consent and confidentiality. As many of these challenges are an unintended consequence of changes to medical education and healthcare service delivery, they will require flexible and innovative solutions. Medical educators also need to consider how patients can be more actively involved throughout all stages of the educational process.

This paper aims to raise awareness of patient involvement in medical education through highlighting examples of good practice and by making a number of recommendations for the successful involvement of patients in medical education. At a time of radical change and increasing pressures on the healthcare system in the UK, it is essential that we meet the key challenges outlined in this report. Ensuring patients are actively involved in the education of all students and doctors will help maintain a responsive and competent medical workforce.

Sir Charles George
Chair, BMA Medical Education Subcommittee
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Introduction

Patient contact occurs in various formats and settings during both undergraduate and postgraduate training. Clinical observation, supervised practice, and real case-based teaching are all vital for medical students, and on-the-job training necessarily forms the bulk of junior doctors’ learning experiences during foundation and specialist training. Such contact with patients is also a way in which students and trainees can gain exposure to different medical specialties. They are able to develop an understanding of the National Health Service (NHS) and healthcare systems through placements in different settings, including hospitals, general practitioner (GP) surgeries and other community-based locations. Once training is completed, patient contact in education continues through continuing professional development (CPD) and on-the-job learning. Assessment at all stages of education and training can be validated through the use of either real or simulated patient contact.

Expectations of the roles of patients in medical education are changing as greater consideration is given to what patients themselves can contribute to the educational process and what the benefits (or harms) are to them in doing so. Their roles are starting to develop beyond involvement in training and assessment, to contributing to the way future doctors are educated, such as having a formal role in teaching.

This discussion paper examines the roles of the patient in undergraduate, postgraduate and continuing medical education. It aims to raise awareness about the importance of patient-centred learning and outlines the key challenges to patient involvement. The paper highlights examples of current practice and makes recommendations for action. It is aimed at individuals and organisations with strategic and operational responsibility for medical education including medical schools, postgraduate deaneries, general practice directors, CPD organisers and remedial education organisers. It is intended to be of interest to doctors, trainees, medical students and patients.

‘To study the phenomenon of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all.’

Sir William Osler
**Section 1: Rationale for patient involvement**

All doctors have a professional obligation to be able to interact effectively with and treat patients. As set out in the standards for undergraduate and postgraduate curricula, a key part of achieving this is through interaction with patients during medical education and training. Contact with patients is central to establishing a patient-centred perspective and is considered to be an integral part of medical education.

**1.1 Educational benefits of patient contact**

Patient contact is at the heart of learning: it provides students, trainees and doctors with an opportunity to learn and then to apply their knowledge and skills in real and teaching settings. The educational benefits of patient contact are broadly accepted to include: that it motivates by emphasising the relevance of learning; it helps to develop clinical reasoning; it encourages the valuing of cultural diversity; and it fosters empathy and the development of professional skills including communication.

A 2006 Association for the Study of Medical Education (ASME) survey of the individuals responsible for organising clinical placements in hospital and general practice in UK medical schools found that clinical placements provided ‘indispensable’ opportunities for a number of learning outcomes. This is demonstrated in Table 1 which shows the top eight learning outcomes as ranked in the survey.

**Table 1: The benefits of clinical placements**

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience a wide range of clinical specialties</td>
<td>70</td>
<td>24</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>4.6</td>
</tr>
<tr>
<td>Become proficient in conducting physical examinations</td>
<td>60</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.5</td>
</tr>
<tr>
<td>Explore patients’ experiences of illness</td>
<td>59</td>
<td>30</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>4.5</td>
</tr>
<tr>
<td>Gain competence in history taking</td>
<td>53</td>
<td>39</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>4.4</td>
</tr>
<tr>
<td>Develop a patient-centred approach to clinical practice</td>
<td>38</td>
<td>51</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>4.3</td>
</tr>
<tr>
<td>Develop professional attitudes</td>
<td>44</td>
<td>33</td>
<td>19</td>
<td>3</td>
<td>0</td>
<td>4.2</td>
</tr>
<tr>
<td>Learn clinical reasoning and decision making skills</td>
<td>30</td>
<td>57</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>4.2</td>
</tr>
<tr>
<td>Integrate clinical, basic, behavioural and social sciences</td>
<td>38</td>
<td>41</td>
<td>19</td>
<td>0</td>
<td>3</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Five point scale – results expressed as a percentage of all respondents. Respondents were given a five point scale for each outcome, where 5 represents ‘Learning in clinical settings indispensable’ and 1 ‘Can be learnt in other settings’.


Patient interaction in undergraduate education offers students a valuable early insight into the day-to-day role of a doctor and the patient perspective on specific conditions. It also encourages empathy and understanding; motivates students to learn; can encourage the student to gain in confidence; and gives them a greater knowledge of professional roles and responsibilities and the illnesses they need to recognise and treat. Students are able to develop their professional skills, attitudes and identity,
through both direct interaction and from the observation of their teachers and peers. A community-based setting in undergraduate education, for example, is beneficial as it allows students to experience a more personal relationship with patients, to recognise the importance of treating people instead of ‘a disease’ and how the social environment has a significant impact on health and healthcare.

‘…we start our clinical placements early. We tend to get to grips with communication skills, patient rapport and procedures quite quickly. I think this is a really good part of the curriculum because we have really early patient contact – which is why many of us want to be doctors in the first place! It certainly reinforces learning outcomes and revision, as we see in reality what we see in books.’ Medical student

1.2 Benefits for patients

One of the primary benefits of patient involvement in medical education is the improved training of the medical workforce, resulting in improved healthcare for the whole population. Patients will benefit, for example, as students gain experience of interacting with patients and develop sensitivities needed for shared decision-making, which is an increasingly prominent and expected aspect of healthcare.

A number of studies in a variety of settings have shown that patients are willing to participate in the education of medical students, and that satisfaction is generally positive after participating in undergraduate medical education. Patients who participate and interact in medical education have reported a number of perceived benefits, including being able to increase their own knowledge; share their knowledge and expertise with the learner; and gain satisfaction and enjoyment from the encounter. Patients are also used in undergraduate examinations and studies have shown that patients generally enjoy participating in examinations and are willing to contribute. In cases when patients may not perceive a significant benefit to themselves, an altruistic notion of a greater social benefit, rather than having an obligation, can motivate patients to participate in medical education.

While the majority of feedback from patients is generally positive in regards to medical student participation; there may still be the risk of patients having a negative experience or experiencing an adverse effect. A 2003 study by Walters et al looked at the impacts on patients with common mental disorders participating in undergraduate teaching in general practice. The study found that there were high levels of patient satisfaction; however, a small minority of patients reported negative effects including that they found the encounter distressing.
Section 2: Patient involvement in context

Patient involvement occurs throughout the continuum of medical education and training including: undergraduate education, postgraduate training, CPD, on-the-job learning, NHS appraisal, remedial training, and in assessments and examinations. The involvement of patients, both real and simulated, is essential at all stages of education and training.

2.1 Undergraduate medical education

Patient contact in undergraduate education can occur as part of clinical observation, supervised practice, real case-based teaching or learning encounters with simulated or real patients. The majority of a medical student’s contact with real patients occurs on clinical placements. These can take place in a range of settings including in hospital wards, GP surgeries, outpatient clinics and community-based settings (see Case study 1). Clinical placements vary in terms of their starting point, location and duration, depending on the medical school.

Case study 1: real patient contact at Brighton and Sussex Medical School

In Brighton and Sussex Medical School, real patient contact in a healthcare setting starts from the second week of the first term. There are six half-day visits to a named GP practice and five half-day visits to a secondary care setting. Students also visit a family with a new-born baby five times, which is arranged through the GP they are placed with, and they are accompanied by a Health Visitor on the first occasion. Real patient contact in the second year is similar to the first year. In addition, students visit a family in which a member has a chronic illness and this is arranged through the GP they are placed with. During years three to five, clinical placements are the focus and contact with real patients is a central component of this. In year three, hospital-based clinical placements occur throughout the year. Out of the 10 sessions per week, six are clinical and the remaining are seminars or self-directed learning. In year four, there are five half-day visits to a named GP practice along with several community visits. There are also six rotations in secondary care specialties each lasting six weeks. Year five involves three regional attachments, each lasting eight weeks. The attachments cover both primary and secondary care.

The 2006 ASME survey found that, on average, UK medical students spend 80.6 weeks on clinical placements within hospitals during their medical degree (range 60-111 weeks). The average for general practice placements was found to be 10.8 weeks (range 5-20 weeks). A study by Hopayian et al in 2007, found that of the 28 medical schools surveyed, all had patient contact during the first year; with 24 having patient contact by the end of the first trimester, eight by the end of the first week and three by

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* For the purpose of this paper, the term real patients refers to both volunteer real patients (ie those participating in a learning session) and actual inpatients or outpatients. The term simulated patients refers to people (eg actors, role players) acting as patients, generally following a script or a defined role and does not cover other forms of simulations (eg computer-based systems). Also, please note that the terms ‘simulated patients’ and ‘standardised patients’ are often used interchangeably but in this paper only ‘simulated patients’ is used.

† In February 2008, the BMA wrote to the 32 UK medical schools requesting information on clinical placements and real patient contact, the use of simulated patients, the use of patients in assessments, and the involvement of patients in a broader context. Responses were received from 12 medical schools.
the end of the first day.\textsuperscript{27} The number of whole-day equivalents spent with patients varied from four days to 65 days in years one and two combined.\textsuperscript{27}

Real patient contact during the undergraduate medical degree also occurs outside of a clinical or community-based setting. This includes patients taking part in a lecture demonstration, a teaching seminar, or patients being brought into the education centre of the hospital to speak to the students about their condition. For further information on patients having an active role in medical education, see Section 4 Active patient involvement: patient-centred learning.

Contact with simulated patients also occurs in undergraduate education (see Case study 2). Medical students generally encounter simulated patients more frequently during the earlier stages of medical school and real patient contact tends to increase as undergraduate education progresses. Simulated patients are often involved in the teaching of a number of areas including communication and consultation skills, physical examination and non-invasive procedural skills.\textsuperscript{24} For further information on the use of real and simulated patients, see Section 3.2 Integrating the use of real and simulated patients.

\textbf{Case study 2: simulated patients at Keele Medical School}

Keele Medical School uses simulated patients throughout the five years of the undergraduate curricula. Their current usage includes all five years of the extensive ‘Communications Skills Courses’ (adapted from Manchester Medical School courses), which consists of basic consultation skills, history taking, explanation and planning, and breaking bad news. Simulated patients are also used in the ‘Ethics in Action’ course, ‘Care of the Dying’ course and are involved in some clinical skills work. Keele Medical School manages the use of simulated patients with a bank of approximately 30 simulated patients. The simulated patients are paid on a sessional basis and there is currently one specific administrator to manage the simulated patient coordination. Simulated patients are also regularly used in objective structured clinical examination (OSCE) assessments, with the numbers used depending on the requirements of the assessment.

\textbf{2.2 Postgraduate training}

Under the current structure of postgraduate training, medical school graduates enter into a two-year foundation programme, which bridges the gap between medical school and postgraduate specialist training.\textsuperscript{1} On successful completion of the foundation programme, doctors continue training, in either a specialist area of medicine or general practice. Postgraduate training is delivered ‘on-the-job’ with

\textsuperscript{1} The 2008 Independent Inquiry into Modernising Medical Careers (MMC) led by Sir John Tooke has recommended a number of changes to the structure of postgraduate training in the UK. This includes the introduction of a period of core specialty training that would replace the current foundation year 2 and the first two years of run-through specialty training. For further information please see Aspiring to excellence – final report of the independent inquiry into Modernising Medical Careers (MMC Inquiry 2008).
competence acquired through supervised and graduated experience working directly with NHS patients. As such, the majority of patient contact is with real patients.

2.3 Continuing professional development

Patients may be involved in CPD or continuing medical education activities. Guidance from the General Medical Council (GMC) states that ‘The ultimate purpose of CPD is to contribute to high-quality patient care. As a result, CPD should take into account the needs and wishes of patients’. The guidance also recommends that patients and the public should be involved in developing CPD schemes, setting standards and monitoring quality. There is an abundance of CPD programmes available and it is commonplace for patients to be involved in CPD courses relating to specific conditions (see Case study 3). The role of patients in CPD can also be extended beyond direct involvement in CPD courses. The Royal Colleges of Physicians for example, has lay involvement as part of its CPD Policy Committee (see Case study 4).

Case study 3: patient involvement in CPD courses

The National Organisation on Fetal Alcohol Syndrome UK (NOFAS-UK) regularly hosts CPD registered conferences about fetal alcohol spectrum disorders (FASD). These conferences combine theoretical and practical information about FASD. On the one hand, presentations on the cause, prevention and management of FASD are provided by medical professionals and experts in the field. Teachers and carers of children with FASD, as well as patients with FASD, are also invited to share their experiences. Their involvement enables attendees to obtain a patient’s perspective, including acquiring an insight into the life of an individual with FASD and gaining a better understanding of their condition.

Case study 4: lay involvement in CPD in the Federation of Royal Colleges of Physicians

The Federation of Royal Colleges of Physicians’ CPD Policy Committee appoints two lay representative members, who are typically involved with patient groups such as the London College’s Patient and Carer Network. The principle behind this is that as well as obtaining input from physicians the committee should call on the expertise of individuals who are outside the sphere of healthcare delivery. The lay representatives offer an insight into the views of patients, the general public and other external groups. The role of the lay representatives involves commenting on a range of CPD policy areas including the links between CPD and revalidation, CPD credit requirements, and any changes in the criteria for CPD approval. In addition to this, the lay representatives audit a number of CPD approval applications per year. They refer to the applications in making suggestions about the approval criteria, and ensure that the current criteria are being applied appropriately.

4 The BMA produced a report on Fetal alcohol spectrum disorders (2007). This report focuses on the adverse health impacts of alcohol consumption during pregnancy, and in particular the problem of FASD. The report aims to raise awareness of FASD by examining the incidence, cause and outcomes of the range of disorders associated with alcohol consumption during pregnancy.
2.4 NHS appraisal

NHS appraisal is a structured two-way process involving reflection on an individual’s performance; it can be used to identify personal, educational and professional development needs. Patients can be involved in a doctor’s appraisal process through providing feedback on their performance. There are a number of ways to collect evidence for appraisal; an example is the 360-degree survey, which is used to get evidence from those who interact with the doctor – including patients. Another example is the General Practice Assessment Questionnaire (GPAQ), which can be used to gain feedback from patients on individual GPs for use in personal appraisal and for GP surgeries as a whole.

2.5 Remedial training

Patients may also be involved when a doctor is practising under supervision as part of a remedial training programme. ‘Remedial training’ and ‘remediation’ are terms used to describe specific or targeted training or supervision following the identification of serious or complex concerns about a doctor’s performance. An example of an area of remediation that would require patient involvement is in the retraining of a doctor’s patient-communication skills. In this case, simulated patients could be used as part of the completion of a communications skills course and real patient contact could be used during the video recording of consultations and direct observation of practice. It is important to note that the systems for remediation in the UK are currently under development and have yet to be fully implemented.

2.6 Patient involvement in assessments and examinations

It is common practice for real and simulated patients to be used in assessment and examinations. This is seen as a means to validate such assessment as it allows specific skills to be assessed and provides the opportunity to evaluate the way a student or trainee interacts with patients. Real and simulated patients can provide feedback, whether formal or informal, to the student, trainee or doctor involved in a particular assessment. They can also provide marks which may contribute to the overall summative assessment (GP trainees for example, are required to use patient satisfaction questionnaires as part of their summative assessment).

A common format is the OSCE which is used for assessing clinical competence in controlled representations of professional practice. In an OSCE, candidates rotate sequentially around a series of structured case stations; potential tasks include taking a history or examining a patient. This type of examination can involve the use of real or simulated patients (see Case study 5). Another example of an assessment method involving patients occurs in the workplace setting. Video consultation with real patients are commonly used as a tool for analysing and improving consultation skills and may form part of the assessment to obtain a Certificate of Completion of Training (CCT) in general practice. Video consultations may also be used for personal development and in consultation peer review. Further

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¹ The BMA has produced a Q&A web resource ‘Supporting doctors in difficulty’, which looks at remedial training. The resource is available at www.bma.org.uk
information on the range of assessment methods used in undergraduate and postgraduate training can be found in Appendix 1.

**Case study 5: patients used in assessments and examinations at the University of Aberdeen**

The School of Medicine at the University of Aberdeen uses volunteer simulated patients, volunteer real patients and actual patients in its clinical exams (OSCEs). The type of patient required is generally determined by the exam question. A simulated patient, for example, would be used for an exam question where the patient is required to learn a specific script, such as for history taking. A volunteer real patient may be used when a student is examining a patient, such as demonstrating how to examine a patient’s abdomen. Informal feedback is encouraged and patients’ scores contribute two marks to the assessment of questions for OSCE exams. Volunteer simulated and real patients make up the majority of patients used by the School of Medicine. In final year assessment however, actual patients are used. These can be inpatients or outpatients and are recruited for their specific signs/conditions such as a heart murmur or a diabetic foot.
Section 3: Challenges to patient involvement in medical education

Patients have tended in the past to have a passive role in medical education; often they were seen simply as a ‘disease’ or ‘an interesting case’, rather than being an autonomous and informed partner in healthcare or education. By only having a focus on the clinical and scientific aspects of a disease or condition; the student, trainee or doctor would often miss the patient’s emotional and personal responses, as well as the patient’s self-knowledge and knowledge of their disease. With the shift in emphasis towards patient-centred care, patients also have a more prominent role in education and training. There are potential barriers to this patient-centred focus, however, including the existing medical culture, a lack of interest in the topic, curricula pressures, service pressures, insufficient evidence of effectiveness and lack of an effective mechanism to spread good practice. There are also a number of challenges to the involvement of patients in the various stages of medical education including organisational and practical considerations, as well as matters relating specifically to the patient including consent and confidentiality.

3.1 Practical considerations relating to patient contact on clinical placements

The practical organisation of clinical placements is a substantial task, which is complicated by the need to coordinate appropriate placements for large (and increasing) numbers of students. The structural and practical problems faced by many clinical placement organisers in the UK were highlighted in the 2006 ASME survey. The results indicated that in both hospital and general practice NHS settings there are significant threats and pressures affecting the quality of placements and/or the arrangements of placements. All of the hospital respondents, for example, reported that placements are threatened by shorter inpatient stays, which reduced learning opportunities. Eighty-nine per cent of general practice respondents reported that in teaching practices, managing NHS changes were being prioritised over the teaching of medical students. Full details of the survey results can be found in Appendix 2.

There are a variety of problems relating to the availability of real patients for medical students on clinical placements. These can act as barriers to learning due to the fact that patients may:

- not match the specified learning needs of students on site at the time
- be too transient, sick or frail
- be inaccessible because they are asleep, have visitors or are being seen by other medical or allied health staff – the rapid turnaround of care means contact time for students is minimised
- have problems that are too complex, particularly for students in early stages of medical education
- not wish to participate. This can be due to cultural reasons, patients feeling distressed or when intimate examinations are required.

Barriers to patient contact relating to staff matters are also a potential problem and reasons include staff:

- not having enough time or capacity to identify, inform and pre-consent patients
- not being aware of the need to facilitate patient contact with students
- not encouraging patients to see students
• not creating a good learning environment for patients and students to interact.\textsuperscript{34}

Barriers to patient contact resulting from organisational factors include:
• a Trust or practice not promoting its learning mission to patients and staff
• too many learners being placed in the same setting at any one time
• adequate information and space/time not being made available for staff input to placements
• a lack of physical space and confidential areas for learners to see patients (often a barrier to community placements and ward-based learning)
• systems not allowing for learners in their work practices.\textsuperscript{33, 34}

It has been recognised that many of the threats outlined relate to inherent features of the healthcare system and thus flexible solutions will be required if the quality of clinical placements is to improve. Measures to improve clinical placements include appointing clinical placement leads (who are contractually supported);\textsuperscript{35} improving awareness that students ‘need to belong somewhere’ and feel part of a team;\textsuperscript{35} and making funding more transparent.\textsuperscript{36}

Responsibility for ensuring that students have adequate opportunities for patient contact rests with a number of different organisations. \textit{Tomorrow’s doctors} (GMC, 2003) requires the health service to work in partnership with medical schools to facilitate such opportunities. The UK health departments should ensure that NHS organisations and medical schools work together in order for students to receive appropriate clinical training. The UK health departments also need to ensure that NHS hospitals and other premises are available for students to receive clinical training and to decide how students may have access to patients on NHS premises.\textsuperscript{2}

\begin{table}

\centering
\begin{tabular}{|l|}
\hline
\textbf{Recommendations} \\
\hline
\textbullet{} A clinical placement lead who is contractually supported should be appointed with responsibility for ensuring: \\
\hspace{1cm} - there is adequate time and resources for staff input into clinical placements \\
\hspace{1cm} - all staff are aware of the need to facilitate patient contact with students \\
\hspace{1cm} - the learning mission is promoted to patients and staff \\
\hspace{1cm} - that premises have suitable space and amenities for education, and that these are incorporated at the planning stage for new buildings. \\
\textbullet{} That the UK health departments work in partnership with medical schools and NHS organisations to ensure resources and systems are in place for adequate patient contact on clinical placements. \\
\hline
\end{tabular}
\end{table}
3.2 Integrating the use of real and simulated patients

As outlined previously, the use of real and simulated patients provides considerable educational benefit. There are however, advantages and limitations associated with the use of both types of patient (see Table 2) and a number of factors need to be considered when deciding which to use. These include the learning objective or assessment need; the level of standardisation required; the logistics (including costs and availability); the context (eg practice-based or controlled workplace-based); the level of realism required; and local circumstances. There is therefore a need to ensure that the use of real and simulated patients is carefully coordinated and integrated.

Table 2: advantages and limitations of using real and simulated patients

<table>
<thead>
<tr>
<th>Table 2: advantages and limitations of using real and simulated patients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Real patients</td>
<td>Simulated patients</td>
</tr>
<tr>
<td>Advantages</td>
<td>Limitations</td>
</tr>
<tr>
<td>They are readily available in many situations.</td>
<td>They may be less available in some situations.</td>
</tr>
<tr>
<td>They can clearly show abnormal findings.</td>
<td>Participation may cause harm, distress or embarrassment for the patient.</td>
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<tr>
<td>They are likely to require less additional resources and organisational support.</td>
<td>Their behaviour may be unpredictable and their condition and physical signs may change.</td>
</tr>
<tr>
<td>They may incur no cost other than travelling expenses for outpatients.</td>
<td>They may be difficult to standardise.</td>
</tr>
<tr>
<td>They may tolerate being seen by more students compared to real patients.</td>
<td>Simulated patients will only be able to act within the brief given to them, as well as responding according to their own preferences and their individual learning or acting skills.</td>
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</tbody>
</table>
While student contact with real patients provides validity to learning and assessment exercises, the use of simulated patients is advantageous in a number of circumstances. Patients are no longer unquestioning and there is a greater expectation and an ethical imperative that students will have a certain level of competence before being directly involved in real patient care.\textsuperscript{41, 42} The use of simulated patients is therefore useful in preparing learners for real patient contact. This is particularly valuable where a student is undertaking an examination or procedure that is sensitive (eg genital and rectal examinations) or that is emotionally difficult.\textsuperscript{37} In situations where communication skills are being assessed, it is often best to use well-trained simulated patients.\textsuperscript{43} It may also be beneficial to use simulated patients in situations where there could potentially be risks to real patients. A study of UK medical schools, for example, found that 19 out of 20 respondents who had used real patients in the assessment of undergraduates had experienced an ‘adverse or unexpected event’ (eg a patient’s existing condition deteriorating) during student clinical assessments.\textsuperscript{38} In light of the advantages and limitations outlined, it is essential that both simulated and real patients are used for the purposes of learning and assessment in medical education. This should commence from the first year of the undergraduate medical course.

It is important to note, however, that the use of simulated patients can be resource heavy as they require training, re-training, monitoring and substantial organisation. These factors are essential in ensuring the simulated patient provides a consistent performance, which in turn, contributes to the reliability of the assessment.\textsuperscript{43} A database of simulated patients is an effective tool for managing the record of simulated patients (see Case study 6).\textsuperscript{28} The costs associated with simulation-based learning (eg the cost of clinical skills facilities or simulation centres) also need to be considered.\textsuperscript{28, 37} In some cases, the cost, time and resource implications associated with simulated patients may limit their use.

Case study 6: simulated patients – Patients as Partners programme, Queen’s University Belfast

Patients as Partners is a programme launched in 2006 at Queen’s University within the School of Medicine and Dentistry. Simulated patients are recruited through public advertisement, interviewed and trained to enable them to take part in examination and teaching sessions throughout the five-year curriculum. Their simulated patient pool, now in excess of 60, offers students opportunities to practise their skills in history taking and examination. Simulated patients are recruited from all walks of life and they bring a variety of experiences with them. The value of using simulated patients in developing good training practice has been noted by students, staff and the simulated patients alike.

Recommendation

The use of simulated patients and real patients for the purposes of learning and assessment should be integrated from the first year of the undergraduate medical course. The decision to use real or simulated patients should be determined by local circumstances and the requirements of the learning or assessment process.
3.3 Patients with long-term conditions

While clinical placements have been found to provide significant benefit to medical students, they may not provide sufficient learning opportunities in relation to patients with long-term conditions. An education programme on long-term conditions requires a longer time period than experienced on clinical placements, and should focus on the condition, how it impacts on daily life, the use of healthcare, and self-management (see Case study 7). Learning from and having contact with a patient with a long-term condition is important, with an estimated 17.5 million adults in the UK living with a long-term condition and with the current shift toward self-care and patient empowerment. In these situations, learning from a patient’s carer may also provide valuable educational benefits. A carer of a patient with a long-term condition will have knowledge of the condition and be able to provide further insight into the day-to-day life and treatment of the patient.

Case study 7: Dundee University Medical School ‘Doctors, Patients and Communities’ programme

The undergraduate degree delivered by Dundee University Medical School includes community-based teaching, known as the ‘Doctors, Patients and Communities’ programme. As part of the undergraduate degree, medical students visit a patient with a long-term condition in the patient’s home at intervals for the duration of the first three years of the curriculum. A small qualitative evaluation of the programme found that benefits to students included:

• gaining an understanding of patients managing long-term conditions in a home context
• having an understanding of patient-focused medicine
• meeting patients early, which brought reality and continuity to their careers and a greater understanding of the patient’s condition
• finding it an enjoyable method of learning.


Recommendation

Medical schools should ensure that teaching of long-term medical conditions is integrated into the undergraduate medical course through dedicated educational programmes. These should allow students to experience patient contact and continuity of care over a suitable length of time and in appropriate settings.
3.4 Patient diversity in medical education

Equality and diversity are crucial aspects of healthcare service provision. Doctors need to be able to interact effectively with patients from a diverse range of backgrounds and with differing needs. There is some evidence, for example, that the teaching of cultural diversity in the UK is inconsistent and that there is uncertainty over what constitutes cultural diversity teaching. As highlighted in the joint 2007 BMA Equal Opportunities Committee and Medical Education Subcommittee briefing, equality and diversity education should be incorporated throughout undergraduate and postgraduate medical education. Active patient involvement in medical education through curricula design and teaching will also improve equality and diversity. For further information on how patients can have an active role in medical education see Section 4 Active patient involvement: patient-centred learning.

There is also a need to ensure that students and trainees have the opportunity to interact with a diverse range of patients in order to develop an informed professional attitude on equality and diversity. There may be potential barriers, however, for medical students having contact with a diverse range of patients. This can result from a lack of access to certain groups, and from some groups of patients being reluctant about medical student participation. A 2006 study by Choudhury et al, found that older patients, patients born in the UK and patients with previous experience of medical students were more positive towards medical student inclusion. The non-white British population were found to be less receptive towards medical student participation compared to the white British population. A 2007 study by Shah-Khan et al looking at patient attitudes to medical student participation, found there were differences in patient agreement to medical student participation based on the patient’s gender, race, and severity of disease, but not the patient’s age, level of income, or education. Differences in the receptiveness to medical students based on the gender of a patient may also be affected by the gender of the student, the social background of the patient, the type of examination being undertaken and the gender of the attending physician. Further research is required into the factors that affect patients’ willingness to be involved in medical education.

It is essential that in today’s diverse society, medical students and trainees have exposure to, and are adequately trained in treating and communicating with, patients from a wide range of backgrounds in order to reflect the working environment that they will be exposed to as doctors.

<table>
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<th>Recommendation</th>
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<tr>
<td>Further research should be undertaken into the factors that affect patient attitudes to, and acceptance of, medical student participation.</td>
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9 The BMA Equal Opportunities Committee and Medical Education Subcommittee have jointly produced a briefing on equality and diversity education in medicine. This briefing provides information on how equality and diversity education is being incorporated in undergraduate and postgraduate training, and considers areas for further development. The briefing can be accessed on the BMA website at www.bma.org.uk.
3.5 Opportunities for patient contact during postgraduate training

The training of junior doctors has been greatly affected by the introduction of Modernising Medical Careers (MMC). The original aim of MMC was ‘to improve the quality and safety of patient care by the introduction of more structured, competency-based training, focusing on both clinical and generic skills designed to meet the needs of service’. The 2007 Independent Inquiry into MMC identified a number of problems with the structure of MMC, including that clinical rotations in the second year of the foundation programme were considered to be too short, which is likely to reduce the learning opportunities provided by patient contact during that placement.

The Inquiry also looked at the impact that the implementation of the European Working Time Directive (EWTD) has had on postgraduate education for junior doctors. The EWTD is a directive from the Council of Europe which aims to protect the health and safety of workers in the European Union (EU). It sets limits on working hours for all employees and requirements in relation to rest periods, annual leave and working arrangements for night workers. The way in which the EWTD has been implemented in the UK – with trainees moving to a service pattern based more on shift working to ensure the maximum hours are not exceeded – has contributed to a reduction in the opportunity for exposure to clinical training for junior doctors. The review found that trainees were ‘much less likely to have the opportunity to follow through with patients in a way that allowed them to participate in, and understand, the end to end sequence of a disease or a patient’s care’. It is important to note that the reduced opportunities for patient contact resulting from these changes in the way in which junior doctors work are unavoidable; therefore flexible solutions will need to be considered.

A key area identified at a 2008 Postgraduate Medical Education and Training Board (PMETB) seminar on training in partnership with patients was the teaching of communication skills in postgraduate medical education. The 2004 BMA paper Communication skills education for doctors: an update also highlights the benefits of good communication skills and the barriers to effective communication. Communication skills now form a part of all undergraduate curricula, but there is debate over their role in postgraduate curricula. This centres on whether specific communication skills should be taught based on a trainee’s clinical setting or specialty, or if trainees should be taught the same set of communication skills. Postgraduate deans have identified that they often have to deal with trainees with communication problems, suggesting that the continuation of training and the involvement of patients in this area is essential.

Recommendation

The PMETB should work in partnership with the GMC, the royal colleges and faculties, and the postgraduate deaneries to ensure communication skills teaching is integrated throughout postgraduate medical training.

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5 Following a recommendation in the 2008 Independent Inquiry into MMC, the Department of Health has announced plans to merge the PMETB with the GMC.
3.6 Ethics, confidentiality and consent

The general ethical principles that guide all medical practice are central to any contact with patients at all stages of medical education. Patients may have concerns over their involvement in medical education including matters of consent and confidentiality, and a lack of information about student and trainee involvement. Not meeting these concerns can have an impact on patients and on the learning outcomes for medical students, trainees and doctors.

Consent

An inherent ethical dilemma is that educating doctors is critical to society, yet patients may not benefit directly from medical students participating in their care, and in some cases may even be harmed. It is therefore essential that specific consent must be obtained for student contact. Medical ethics today (BMA, 2004) emphasises that in order for consent to be valid, patients must be aware of who will be present, why they will be present and what their level of involvement will be.

Specific aspects of consent that need to be addressed for medical students include ensuring consent is obtained before students are introduced (ie not in their presence) and that patients are informed of the gender and level of proficiency of the student before being asked for their consent. Asking for a patient’s consent in the presence of the medical student can increase pressure on the patient to give consent and can result in the patient and student feeling uncomfortable. Patients are generally willing, however, to allow medical students to be involved, provided that they are given the appropriate information and have a choice about participation. Research has also shown that the majority of patients will allow students to perform minor procedures (eg intravenous placement or splinting), even when informed of a student’s inexperience. It is important to consider, however, that having a student present can affect the nature of the doctor-patient encounter. A patient, who has originally given consent to the participation of a medical student or doctor in training, may wish to alter their decision. In these situations, the patient should be able to request to end the medical student’s or trainee’s participation. Consent that has been obtained beforehand should ideally be confirmed at the learning or assessment encounter.

Consent is also an important consideration with the use of video recordings of patients in medical education. Consent should be sought before and after recordings are made, however, consent is not required for those images from which it is impossible to identify the patient. Further guidance on the audio and visual recording of patients can be obtained from Medical ethics today, Taking and using visual

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1 The BMA Medical Ethics Department has produced the publication Medical ethics today (2004) which provides a comprehensive overview of the key ethical considerations in relation to the teaching of medical students and patient contact, including consent and confidentiality (pg 661-665).
2 The requirement to obtain informed consent for medical student participation is set out in Good Medical Practice (GMC, 2006), Tomorrow’s doctors (GMC, 2003), Consent: patients and doctors making decisions together (GMC, 2008), Medical students: professional behaviour and fitness to practice (MSC & GMC, 2007) and Generic standards for training (PMETB, 2006). The BMA has also produced a consent tool kit, which includes information on obtaining consent from patients involved in education (the toolkit is available on the BMA website www.bma.org.uk).
and audio images of patients (BMA, 2007) and Making and using visual and audio recordings of patients (GMC, 2002).

As junior doctors progress through training and gain experience they are always under (though not necessarily directly) the supervision of a senior doctor. Research has shown that the majority of patients are content to be seen by a junior doctor under consultant supervision, but would want to be notified of their name and status. For patients to be fully informed, the level of experience and the identity of the doctor should be made known.

Confidentiality

Good medical practice (GMC, 2006), Medical ethics today and Tomorrow’s doctors all highlight that patients have a right to expect information about them to be treated confidentially.

Confidentiality can be a major concern and is a potential barrier to patients being willing to take part in medical education. Problems include patients being unsure about the information that students might retain, with whom this would be shared and what it is that patients have a right to know. Patients may also have a concern over students’ access to notes – this cannot be assumed and consent must be obtained from the patient. Patients should be informed that necessary information will be shared with students as part of the learning process and that these students have a duty to ensure this information is treated confidentially.

Meeting the concerns of patients

Patients may have concerns relating to their participation in medical education. They can be concerned over the quality of care they may receive from a medical student or a junior doctor. The majority of apprehensions, however, tend to be over matters such as insufficient provision of information, consent and confidentiality.

Detailed procedural guidance is limited on the participation of patients in medical education, which may lead to patients not receiving appropriate information or may result in failure to obtain informed consent. The public should be made aware that medical education and teaching takes place in a range of healthcare settings and information explaining this should be available to patients who are present or who will be present at a healthcare setting where students or trainees are taught. Patients who have agreed to participate in education or assessment should be provided with the necessary advice and information and be fully informed of their roles in advance. To meet the concerns and needs of patients, it is essential that students, doctors and individuals and organisations with responsibility for teaching are aware and have access to guidance on matters relating to consent and confidentiality. The Newcastle University Faculty of Medical Sciences, for example, has produced guidance for students and teachers titled Patients and undergraduate medical students: consent for involvement in teaching/medical education. A summary of the key points of this guidance document can be found in Appendix 3.
Patients must be given the opportunity of refusing student observation or participation and should be reassured that doing so will not affect the care they receive. The experiences of patients who participate in medical education will be particularly dependent on the level of information that they receive, how this is communicated, and therefore, the level of understanding they have about the teaching situation to which they are being asked to consent. Perceiving they have a lack of choice about their involvement and an unfamiliarity of current practices in medical education and clinical training are also potential concerns to patients. Steps that need to be implemented include ensuring patients are aware of their right to refuse (and that this will not affect the care they receive), and are educated on the value of clinical teaching. A study in 2003 by Howe and Anderson identifies a number of aspects aimed at providing patients with a positive experience from their learning encounter, including:

- developing guidelines for patients, teachers and students
- managing implications for staff time and training
- recruiting and preparing patients before the learning encounter
- providing advice to students including appropriate dress and behaviour, how to implement good practice, how to deal with problems and difficult situations
- obtaining feedback on the effects of patients’ participation
- increasing patient empowerment through patients having sufficient, easily understood information; the opportunity to communicate; their consent asked for; and their feedback valued.

By ensuring that patients have access to these, there is an increased opportunity for patients to improve their own experience in medical education and to enhance the learning outcomes of the students and trainees involved.

Remedial training may potentially be a specific area of concern to patients, and to doctors. Patients may have concerns over their participation and doctors may be worried that information about areas of concern will be shared with patients. The Back on track framework, however, indicates that as long as a doctor is under an appropriate level of supervision and is clear about the level and limits of their role, it will be reasonable to invite patients to consent to being seen ‘by a practitioner who is undertaking a period of further training’.

**Recommendations**

The GMC should work in partnership with UK medical schools and healthcare organisations with responsibility for training to:

a) ensure patients, learners and individuals involved in teaching are provided with clear guidelines on participating in medical education. This should include information on what is expected of the patient, what is expected of the student, trainee or learner, and matters relating to consent and confidentiality

b) share good practice approaches to patient involvement, consent and confidentiality among medical schools, NHS Trusts and healthcare institutions.
Section 4: Active patient involvement: patient-centred learning

Increased levels of patient and public involvement in healthcare have arisen from a growing appreciation of the expertise patients have when it comes to their own care, and from an increased emphasis on patient-centred care. This concept is discussed further in the 2008 BMA briefing paper Public and patient involvement in the NHS. Patient-centredness is a key component of education and training programmes and as such, students, trainees and doctors need to be trained to work in partnership with patients. In line with this, there are a number of ways in which the expertise and insight of patients can be utilised within medical education, including using patients in a formal role as a teacher, involving patients in curriculum development, and having lay representation on selection panels. The Picker Institute has called for greater partnership with patients in medical education including, for example, greater use of patients as teachers. There is also an extending scope for patients to be actively involved in other areas including having involvement in admissions selection procedures and sitting on appeals committees.

4.1 Developing curricula

Patients have a role to play in contributing to curricula design for medical education. Most areas of the curriculum involving clinical practice could benefit from a patient perspective on the outcomes which are set for students, however, areas such as managing long-term conditions, equality and diversity, ethical dilemmas or areas of doctor-patient communication may be particularly important (see Case study 8).

The joint 2005 publication from the GMC and PMETB, Principles of good medical education and training, outlines the principles required for curricula in medical education, with reference to input from patients:

‘Learning outcomes should be developed jointly within the specialty or discipline concerned and, wherever possible, with students, trainees, patients, the public and colleagues from other professions. The outcomes should be regularly updated in line with current research and evidence, and as medical practice changes (taking account of patients’ expectations). The methods used to set outcomes should be clear, flexible and available to the public.’

Case study 8: Patients’ Council at the University of Sheffield

The University of Sheffield’s School of Medicine has established a ‘Patients’ Council’ with the primary aim of advising the medical school on its curriculum, and whether it is meeting the needs of patients. The Patient’s Council is a group of about 15 members of the public drawn from volunteer members of Governing Councils of five acute NHS Trusts in and close to Sheffield. The Council is in a relatively early stage and is still in the process of recruiting members from some of the Trusts. Members have commented on the personal characteristics and qualities they wish doctors to have and on the methods of selection of medical students.

With the increased focus on improved patient self-care over recent years, patient involvement in curricula design in regards to long-term conditions is an important consideration. A 2005 research paper, for example, asked the question ‘what should undergraduate medical students know about psoriasis?’ and
used group discussion to involve patients with psoriasis in developing a relevant curriculum. In this particular study, a questionnaire was sent to a panel of healthcare professionals who worked in dermatology or who taught medical students. A separate questionnaire was sent to a panel of patients with chronic psoriasis; much of this was similar to the healthcare professional questionnaire but it also included specific items relating to the patient’s experiences of living with psoriasis. There were a number of areas of consensus from both groups on what students should know, including knowing about the different forms of psoriasis and being aware of the physical and psychological impact of psoriasis on patients. This research concluded that the views of patients had been particularly helpful in developing the curriculum about psoriasis, and the authors felt that this technique could be utilised further in curriculum development for chronic disease.

Other sections of the curriculum relating to equality and diversity can also benefit from involvement of patients from those groups who have experience of healthcare. Research suggests, for example, that lesbian, gay and bisexual (LGB) people have specific health needs; that homophobia and discrimination can impact on how they are treated by some healthcare providers; and the health sector needs to deliver targeted care to patients which recognises and reflects their sexual orientation. Results from a 2006 BMA medical students’ welfare survey showed that only just over half of the medical students surveyed felt their medical school prepared them for treating patients of different sexual orientations. This suggests that there may be some benefit from involving LGB people in curricula design.

**Recommendation**

Patients should be actively involved in the development, review and implementation of undergraduate and postgraduate medical curricula. This process should be monitored and patients should receive adequate training, resources and support.

### 4.2 Patients as teachers

Changes within the NHS and in the delivery of care to patients, have resulted in patients generally having shorter stays in hospitals and clinics. This has affected the opportunities for medical students and trainees to experience patient contact and to learn from patients directly. The use of patients as teachers, both real and simulated, has a key role in providing opportunities and benefits for learners.

A 2002 literature review on the role of patients as teachers found that undergraduate and postgraduate learners’ experiences were all positive, with many acquiring insights and confidence from practising skills with, and learning from, patients in a teaching role. The review concluded that as well as there being educational benefits for learners, patients in a teaching role can also experience positive outcomes. These include the development of new skills, improved confidence and the ability to positively affect attitudes towards patients. The benefits to learners, patients and trainers from involving patients as teachers are summarised in Table 3.
Table 3: the benefits of involving patients as teachers

<table>
<thead>
<tr>
<th>For learners</th>
<th>For patients</th>
<th>For trainers</th>
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<tr>
<td>• Enables access to personal knowledge, including experiences of the condition and use of services.</td>
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<tr>
<td>• Provides constructive feedback.</td>
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<td>• Improves acquisition of skills.</td>
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<tr>
<td>• Increases respect for patients.</td>
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<tr>
<td>• Places learning in context.</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• Uses their disease or condition positively.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Uses their knowledge, experience and creates a sense of empowerment.</td>
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</tr>
<tr>
<td></td>
<td>• Provides an opportunity to help future patients.</td>
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</tr>
<tr>
<td></td>
<td>• Increases their knowledge and provides new insights.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Improves their understanding of doctors.</td>
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<tr>
<td></td>
<td></td>
<td>• Provides additional teaching resources.</td>
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<tr>
<td></td>
<td></td>
<td>• Improves quality of teaching.</td>
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<tr>
<td></td>
<td></td>
<td>• Offers alternative teaching opportunities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Develops mutual understanding.</td>
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<tr>
<td></td>
<td></td>
<td>• Provides value for money.</td>
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The roles of patients as teachers can take different forms. These include patients as experts in their condition, as exemplars of their medical condition and as facilitators of students’ professional skills and attitudes (see Case study 9). A number of studies have looked at the teaching and assessing of musculoskeletal clinical skills and examination techniques by patients. It was found that adequately trained patient educators can provide significant benefits including an improved understanding for the learner of the psychological, emotional, social and familial aspects of their condition.

As highlighted in the 2007 BMA report Disability equality within healthcare: the role of healthcare professionals, patients with an impairment can offer value to learners through having a formal teaching role. At the University of Bristol, for example, medical students participate in a four-day programme, Enabled by disabled people, in which trainers with impairments deliver and evaluate the course. Students are required to use a problem-solving approach to develop understanding and an appreciation for the different communication skills that are needed.

At postgraduate level, it has been mandatory since 2005 for psychiatric trainees to receive training directly from patients and their carers. Patients and carers have a unique understanding of mental health problems and are able to help assess trainees’ social and communication skills. A 2008 study by Babu et al, found that the majority of psychiatric trainees (84 per cent) felt that the involvement of service users and carers would be beneficial for their education. The Royal College of Psychiatrists (RCPSYCH) however, has found that existing training is still uneven and under-funded. In response, they are developing training materials with examples of good practice to be adopted by psychiatric trainers across the UK.
Case Study 9: ‘Patient as Educators’ programme at the University of Sheffield

The University of Sheffield has a programme entitled ‘Patients as Educators’. The programme aims to:

- ‘Provide a high quality learning experience, using the unrivalled knowledge of a patient’s personal experience in dealing with their particular illness or complaint.
- Ensure that students have a broad understanding of the implications of illness and disease.
- Ensure the students appreciate variations in patients’ experiences.
- Ensure the students can show appreciation of inter-professional management of disease from a patient’s perspective.’

There are around 550 patients enrolled in this programme. The most common reason patients give for volunteering is the altruistic notion of wanting to give something back to the health service. Patients are provided with a standardised training session which includes a video demonstration of an OSCE, the process of history taking, teaching and giving constructive feedback, communicating with students, confidentiality, and health, safety and consent issues. If a patient is to be involved in a particular teaching session or assessment, specific training is provided by a range of academics and clinicians.

Students meet with patients from the ‘Patients as Educators’ programme throughout the MBChB programme. The volunteer patients use their own experiences to teach students about their medical conditions and bedside manner. Patients are also able to discuss their illness and the impact it has had on them and the family. As part of the programme, volunteer patients also may assist in the assessment of students through the provision of informal feedback and in formal examinations through the contribution of marks to a student’s performance.

For more information on the ‘Patient as Educators’ programme see the University of Sheffield website at www.shef.ac.uk

Patients as teachers can be a valuable resource, particularly in the face of expanding numbers of medical students. The capacity of the patient teachers in these circumstances can include discussions about the effects of their disease on their daily lives and history-taking and communication skills. Matters such as expenses, teaching honoraria, indemnity and honorary teaching contracts need to be considered if patients’ roles as teachers are to be developed and formalised.

Recommendation

Patients should be actively involved in teaching during undergraduate and postgraduate training. This process should be monitored and patients should receive adequate training, resources and support.
4.3 Patients as assessors

Patients can potentially increase their role in assessment and examinations through acting as assessors. The 2005 joint publication from the GMC and PMETB, *Principles of good medical education and training*, states that ‘Providers of assessments should have a procedure for involving patients and the public in developing assessment tools’. In the UK, examiners and assessors tend to be clinicians or other healthcare professionals, at both undergraduate and postgraduate levels. The benefits of having a doctor examiner include their ability to judge holistically and to apply their extensive medical knowledge and other factors that may be difficult for non-medical professionals. By watching their own students, doctors are able to motivate them and provide immediate feedback about their teaching. Research from the USA has shown however, that the holistic judgements provided by physician examiners can be similar to aggregate scores from trained standardised patient assessors (in the case of assessing a general entry-level physician). In particular, aspects of communication, especially those that are non-verbal, are well assessed by the patient or the person trained to be the patient.

King’s College London has recently undertaken a pilot study consisting of a 360-degree patient evaluation of student interaction. The pilot study involved around 60 students in year three recruiting 10 patients to complete a 360-degree evaluation form anonymously. The results from these patient evaluations will be analysed and fed back to the student and compared with their self-evaluation. If the pilot is successful, it is hoped that this process will be extended to the whole undergraduate year.

**Recommendation**

Consideration should be given to the use of patients as assessors in undergraduate and postgraduate assessments. This process should be monitored and patients should receive adequate training, resources and support.
Recommendations

Patient contact is an integral component of medical education, training and assessment. It provides students and doctors with an opportunity to learn and to develop their professional skills, attitudes and identity. Patients can also benefit from involvement in teaching and training, by increasing their own knowledge, and indirectly through improved training of the medical workforce. The shift in emphasis towards patient-centred care, has also led to patients having a more prominent role in education and training. The BMA recognises the importance of patient involvement in medical education and particularly in having more active roles, such as acting as a teacher. There are, however, a number of associated challenges and it is important that these are met and flexible solutions considered. The paper makes a number of recommendations to meet some of these challenges and to promote active patient involvement in medical education.

Challenges to patient involvement in medical education

Practical considerations relating to patient contact on clinical placements

- A clinical placement lead who is contractually supported should be appointed with responsibility for ensuring:
  - there is adequate time and resources for staff input into clinical placements
  - all staff are aware of the need to facilitate patient contact with students
  - the learning mission is promoted to patients and staff
  - that premises have suitable space and amenities for education, and that these are incorporated at the planning stage for new buildings.

- That the UK health departments work in partnership with medical schools and NHS organisations to ensure resources and systems are in place for adequate patient contact on clinical placements.

Integrating the use of real and simulated patients

- The use of simulated patients and real patients for the purposes of learning and assessment should be integrated from the first year of the undergraduate medical course. The decision to use real or simulated patients should be determined by local circumstances and the requirements of the learning or assessment process.

Patients with long-term conditions

- Medical schools should ensure that teaching of long-term medical conditions is integrated into the undergraduate medical course through dedicated educational programmes. These should allow students to experience patient contact and continuity of care over a suitable length of time and in appropriate settings.
Patient diversity in medical education

- Further research should be undertaken into the factors that affect patient attitudes to, and acceptance of, medical student participation.

Changes to the structure of postgraduate training

- The PMETB\(^1\) should work in partnership with the GMC, the royal colleges and faculties, and the postgraduate deaneries to ensure communication skills teaching is integrated throughout postgraduate medical training.

Ethics, confidentiality and consent

- The GMC should work in partnership with UK medical schools and healthcare organisations with responsibility for training to:
  a) ensure patients, learners and individuals involved in teaching are provided with clear guidelines on participating in medical education. This should include information on what is expected of the patient, what is expected of the student, trainee or learner and matters relating to consent and confidentiality
  b) share good practice approaches to patient involvement, consent and confidentiality; among medical schools, NHS Trusts and healthcare institutions.

Active patient involvement: patient-centred learning

Developing curricula

- Patients should be actively involved in the development, review and implementation of undergraduate and postgraduate medical curricula. This process should be monitored and patients should receive adequate training, resources and support.

Patients as teachers

- Patients should be actively involved in teaching during undergraduate and postgraduate training. This process should be monitored and patients should receive adequate training, resources and support.

Patients as assessors

- Consideration should be given to the use of patients as assessors in undergraduate and postgraduate assessments. This process should be monitored and patients should receive adequate training, resources and support.

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\(^1\) The 2008 Independent Inquiry into Modernising Medical Careers (MMC) stated that the ‘PMETB should be assimilated in a regulatory structure within GMC that oversees the continuum of undergraduate and postgraduate medical education and training, continuing professional development, quality assurance and enhancement’.
Appendix 1: Assessment methods used in medical education and training

There are two different formats commonly used for assessing clinical competence in controlled representations of professional practice:

- **objective structured clinical examination (OSCE)**
  
  An OSCE is a common form of examination in which candidates rotate sequentially around a series of structured case stations, and are required to perform different tasks at each. These skills might include taking a history, examining a patient or a practical skill. Both simulated patients and real patients can be used for this sort of examination in medicine. This examination format is commonly used in undergraduate assessment and in membership examinations for the medical royal colleges. The OSCE was developed with an emphasis on patient involvement and aims to attain reliability and validity in assessment.

- **objective structured long case examination record (OSLER)**
  
  An OSLER has a structured approach and all candidates are assessed on identical items. It consists of 10 items, including four on history, three on physical examination and three on management and clinical insight. It is based on a candidate taking a formal history and completing an examination on a patient. The suggested time for the OSLER examination is 30 minutes. For each item, examiners decide on a grade for the candidate and discuss with their co-examiner to agree on a joint grade, as well as a joint overall grade.\(^{32, 43}\)

There are a number of different methods of assessment based on observation in a clinical setting, of which real patient involvement is essential for assessment. For example, there are four recommended methods as part of the foundation programme for England, Wales and Northern Ireland:

- **mini-clinical evaluation exercise (mini-CEX)**
  
  Mini-CEX is a brief observation of a trainee’s interaction with a patient and aims to assess the clinical skills, attitudes and behaviours required for providing a high standard of patient care.\(^{79}\) Feedback is provided immediately after by the assessor and trainees are able to identify strengths and areas for improvement.

- **direct observation of procedural skills (DOPS)**
  
  In the DOPS assessment, the trainees are observed with real patients and are assessed and provided with feedback on procedural skills.\(^{79}\) As with mini-CEX, feedback is given by the assessor immediately after the assessment.

- **case-based discussion (CbD)**
  
  For the CbD assessment, the trainee chooses two case records from recently seen patients in whose notes they have made entries. The assessor will then select one of these for a case-based discussion.\(^{79}\) This process assesses clinical decision-making and medical knowledge in the care of the trainee’s patients and enables the assessor to assess the reasons for the trainee’s actions and choices.
• multi-source feedback (MSF)

The mini-peer assessment tool (mini-PAT) and team assessment behaviour (TAB) are the two available MSF tools used in the foundation programme. In MSF, trainees nominate assessors to fill out a questionnaire, as well as self-assessing themselves. The trainee and education supervisor then discuss the collated feedback and identify strengths and areas that need developing. Areas for assessment as part of the mini-PAT questionnaire include ‘Ability to diagnose patient problems’ and ‘Communication with patients’. The TAB is similar to the mini-PAT, except the trainee does not provide a self-assessment.

The foundation programme also requires that trainees complete an educational portfolio. Portfolios are collections of information that provide evidence of the achievement of trainees and there can be a number of different versions.

Presently, there are a range of tools used for assessment throughout FY1 and FY2 in Scotland. These include MSF, workplace assessments (WPA) and significant event analysis (SEA). For further information on the Scottish assessment methods for the foundation programme see www.nes.scot.nhs.uk/medicine and www.mmc.scot.nhs.uk
Appendix 2: Threats to clinical placements

An ASME survey in 2006 looked at the role of, and threats to, clinical placements in medical student education in the United Kingdom. The tables below show the greatest threats in the hospital and general practice settings, as reported in the survey.

Hospital – percentage of clinical placement organisers reporting actual/impending threats

<table>
<thead>
<tr>
<th>Threat</th>
<th>% of respondents (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shorter inpatient stays reducing learning opportunities</td>
<td>100</td>
</tr>
<tr>
<td>Pressure to meet waiting list targets</td>
<td>95</td>
</tr>
<tr>
<td>Change in junior doctors hours has had a negative impact on teaching</td>
<td>84</td>
</tr>
<tr>
<td>Loss of continuity in following student progress</td>
<td>83</td>
</tr>
<tr>
<td>Fragmentation of firms within hospitals</td>
<td>80</td>
</tr>
<tr>
<td>Competition with foundation year 1 (FY1)/foundation year 2 (FY2) and postgraduate training</td>
<td>79</td>
</tr>
<tr>
<td>Increased number of students allocated to each teaching unit</td>
<td>67</td>
</tr>
<tr>
<td>New consultant contract has reduced the time that consultants spend on teaching</td>
<td>65</td>
</tr>
<tr>
<td>Increasing specialisation reducing numbers of patients suitable for medical student education</td>
<td>63</td>
</tr>
</tbody>
</table>


General practice – percentage of clinical placement organisers reporting actual/impending threats

<table>
<thead>
<tr>
<th>Threat</th>
<th>% of respondents (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More travel and residences away from home base</td>
<td>89</td>
</tr>
<tr>
<td>Teaching practices prioritising managing NHS changes over teaching</td>
<td>89</td>
</tr>
<tr>
<td>Lack of physical space</td>
<td>83</td>
</tr>
<tr>
<td>Competition with F1/F2 and GP registrar training</td>
<td>79</td>
</tr>
<tr>
<td>Teaching practices reducing teaching activity because of better paid alternative opportunities for non GMS work</td>
<td>72</td>
</tr>
<tr>
<td>Shortage of GP principals and non-principals</td>
<td>71</td>
</tr>
<tr>
<td>Increase in number of students allocated to each practice</td>
<td>65</td>
</tr>
<tr>
<td>Poor remuneration for practice-based teaching</td>
<td>63</td>
</tr>
</tbody>
</table>

Appendix 3: Consent and confidentiality guide from the Newcastle University Faculty of Medical Sciences

The Newcastle University Faculty of Medical Sciences has produced guidance for students and teachers titled Patients and undergraduate medical students: consent for involvement in teaching/medical education. The following is a summary of the key points raised in the guidance.81

Gaining consent is more than simply providing information. It is about working in partnership with patients, giving them information in a way they can understand, listening and responding to their concerns and preferences, and helping them make decisions about their care.

- Written information about the presence of medical students should be given to patients in advance wherever possible.
- The information should state the likely role the student(s) may play, including access to notes if appropriate.
- Written information should be supplemented by notices in areas used by patients.
- Patients should be reminded of the presence and role of students by staff at the time of their clinic appointment or admission.
- Verbal consent should be gained prior to the clinical encounter, ideally by someone other than the student.
- Whilst verbal consent is valid and wholly appropriate for most situations, it may be necessary to gain consent in writing in certain situations, namely where intimate examination is proposed, either with a conscious patient or under anaesthesia.
- If a patient is unable to give informed consent due to their mental or conscious state, or the physical effects of their problem, agreement should be sought from a relative if possible.
- For children and young people, informed consent should be sought from an adult who has the legal power to give it; mother, married father, a birth father on whom parental responsibility has been bestowed or a social worker if the child is in the care of the local authority. Verbal agreement is valid and appropriate in most situations but written consent is mandatory for intimate examination, or when the child is under anaesthetic.
- If it is not possible to gain consent, involving the patient in teaching is still acceptable if the clinician believes it to be appropriate.
- Written consent must be obtained for any recordings or data used for teaching purposes from which the patient can be identified; oral consent is sufficient for recordings from which the patient cannot be identified.
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5. Medical Schools Council and General Medical Council (2007) Medical students: professional behaviour and fitness to practice. Available at www.gmc-uk.org
30 Personal correspondence from Dr Ian Starke, CPD Director, Federation of the Royal College of Physicians, 21 January 2008.
tent attitudes toward medical students in an outpatient


Making and using visual and audio recordings of patients (2002). Available at www.gmc-uk.org


76 www.shef.ac.uk (accessed May 2008).
81 Personal correspondence from Professor John Spencer, Newcastle University, 24 June 2008.
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