

## Summary points

The four new UK medical schools are implementing key reforms in medical education; they show considerable similarities in their approaches to curricular design and learning methods

Key features are integrated curriculums with patient contact throughout the course

Academic training of research methods through student options is central

Altered selection criteria is leading to a different student mix, even in non-graduate entry programmes

These four new medical schools aspire to be the pioneers of 21st century medical education, driven by the enthusiasm of local champions and the need to expand the national workforce. Their shared vision suggests a common set of educational principles, firmly grounded in best current practice but seeking to discover new routes to the goal of quality teaching and learning. The benefits should come to all—when we need the help of one of the next generation of doctors.

Since this article was written, JS has become dean at Griffith Medical School, Griffith University, Australia.

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help from all in further revisions. The sources of data are largely from the experience of the authors as senior faculty at these schools comparing their approaches to other institutions, and referencing this to the literature.

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## Commentary: Promises and delivery—a research imperative for new approaches to medical education

David Prideaux

Howe et al describe the approaches to medical education in the four new medical schools in the United Kingdom.<sup>1</sup> The new programmes embrace wider selection procedures, spiral curriculums, fitness to practise, integrated clinical experiences, and comprehensive assessment processes. The reforms are part of wider changes throughout British medical education, and Britain is not alone in this endeavour. In Australia there have been similar changes in existing and new medical schools.<sup>2</sup> Indeed, the past 20 years have seen worldwide reforms if measures such as adopting problem based learning and creating medical education units are to be taken as key indicators.

Several external factors have been driving the reforms, and their importance was apparent in my study of four international medical schools that were changing their education programmes or creating new ones (unpublished data). In both Britain and Australia the external forces have come through funding from governments with clear agendas to change both the quality and quantity of future entrants to the medical workforce.

External support does not come without obligations. External sponsors want to know if the programmes they support have the desired impacts on the healthcare system. Providing the answer to this type of question is not easy, as some writers on medical education reforms in North America have shown.<sup>3</sup> Determining which attributes of graduates from innovative medical schools are important and how long they are retained as careers progress are complex problems. But therein lies an opportunity for staff in the new or changed medical schools.

Funding for workforce reforms frequently targets teaching initiatives without investing in research. Howe et al outline some of the difficulties of conducting medical education research at the same time as establishing new education programmes and the implications of this for the scholarship of medical education where programmes are located in otherwise research-rich environments.

There is at least one profitable direction for research in new or changed medical schools. Impact or outcome research may provide external sponsors with

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the information they need, but, if rigorously conducted, it will also provide generalisable findings for the wider medical education community. It will require the construction of tracking databases and associated research designs. Such work is not necessarily new and has been successfully applied at single institutions.<sup>4</sup> However, it has the potential to provide more powerful findings if conducted collaboratively, with medical schools combining data on different approaches and their outcomes. The Australian medical schools have laid the foundations for such an approach though the Committee of Deans Medical School Outcomes Database Project. It remains to be seen whether it and future projects involving other innovative schools can

provide the research evidence that Murray, for example, suggests can be generated in this time of change in medical education.<sup>5</sup>

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## The ethics of medical education

Reshma Jagsi, Lisa Soleymani Lehmann

Medical students and doctors in training need to hone their clinical skills on patients to make themselves better doctors, but patients may not benefit directly from such attention. Jagsi and Lehmann consider this ethical dilemma and suggest ways to minimise the potential harm to patients

Participation of trainees in patient care is an integral part of medical education. Although educating doctors is critical to society, an ethical dilemma results from the fact that patients may not benefit from doctors in training and medical students participating in their care, and may even be harmed by it.<sup>1,2</sup> However, this dilemma has received little attention—political,<sup>3</sup> institutional,<sup>4</sup> or academic.<sup>5,6</sup> Professional societies advise only generally, noting that participation should be voluntary without providing specific procedural requirements. As a result, patients may be misinformed about the qualifications and experience of their care givers.<sup>7</sup> This situation is objectionable in its own right, but it also provides a problematic example at a critical point during trainees' moral development.

In contrast, the ethics of medical research on human subjects have been the subject of much analysis and policy development.<sup>8</sup> A compelling analogy exists between such research and medical education.<sup>9,10</sup> In both cases doctors ask patients to participate in an endeavour whose primary aim is to benefit society as a whole, not the individual. In both cases doctors must

also balance the good to society and potential benefit to individual participants against potential harm to those participants, avoid the unfair distribution of risks and benefits, and maintain respect for patient autonomy. Although education and research have different goals, their similarities are sufficient to allow for fruitful discussion based on this analogy.

In this article we apply three principles of research ethics—respect for individuals, beneficence, and distributive justice—to medical education in order to review current practice and guide further research and policy.

### Respect for individuals

Western philosophers have long argued that human beings have an inherent personal dignity that merits respect for its own sake. To use people only as a means to an end—as is the case when patients are the objects of medical education or research without meaningful consent—violates that fundamental principle.

Evidence suggests that the current practice of medical education does not always accord adequate respect to patients. In one US survey, only 38% of responding teaching hospitals claimed that they informed patients that students would be involved in their care.<sup>11</sup> Other studies show that students and their supervisors sometimes misrepresent or inadequately explain students' status.<sup>12</sup> Moreover, student conscientiousness about disclosing their status seems to decay over the course of training.<sup>13</sup> Patient surveys confirm that they receive inadequate information about trainees' roles.<sup>14</sup>

Procedures to ensure meaningful consent from patients to participation in medical education are therefore necessary. Patients must be fully informed of the training status and experience of all staff caring for them and must comprehend the risks, benefits, and alternatives. The proximity of consent to individual procedures is crucial, and a "blanket" consent at admission is insufficient.

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