How do you make a good doctor? The BMJ asked four educationists for their views

Graduate students are more challenging, demanding, and questioning

Peter McCrorie is director of the graduate entry programme at St George's Hospital Medical School

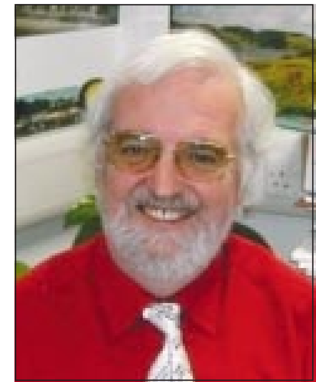
Are good doctors born or made?
Both. Some students have a natural gift that can serve as a grounding for focused training, while others can be nurtured into becoming good doctors. Some students, however, will never make good doctors, no matter how people try to help them.

What do you look for when selecting students?
A number of factors are important in our selection process: an understanding about what being a good doctor entails, from both the profession's point of view and the patient's point of view; a significant, meaningful experience of working in a healthcare environment or with disabled or disadvantaged people; an understanding of the importance of research in medicine; and an awareness of the ethical issues associated with medical research. Good oral communication skills and evidence of flexible and critical thinking are also important, as is an awareness of the need for doctors to have strategies for dealing with stress.

Are graduate medical students any different from non-graduate students?
Definitely, although there may be less difference between graduates and older, more mature non-graduates. Graduate students are highly motivated and committed. They are much more self directed, challenging, demanding, questioning, and mature than non-graduate medical students. Graduate students also come with a good deal of content knowledge, although that knowledge will vary widely according to the degree taken. They can therefore help each other in their learning. This is ideal for problem based learning.

Does undertaking medical training as a graduate have any bearing on being a good doctor?
If the course they undertake is little or no different from the school leaver course, it would make little difference. However, if the graduate programme is tailormade specifically for graduates, and it builds upon their strengths, motivation, and prior learning, then it will make a difference. Also, if the pool of students is widened to include non-science graduates, then that will influence the end product of the medical school through the broadening of the intake. I believe that mature students, whether graduates or not, are sooner and better able to handle the responsibilities of being a doctor. They are simply more ready for it than the many 18 year olds who don't understand what being a doctor is about.

Do you think that medical education needs to be altered in any way, and if so how?
From 30 years' experience of teaching both school leavers and graduates, patients would be better served by doctors entering medical school after the age of 22. Entrance to medical school should be by a specially designed entrance examination that tests reasoning rather than factual recall. It follows that learning should also be through reasoning and logic, rather than by rote. □



Good communication skills can mask deficiencies

Dr Allan Cumming is associate dean of teaching at the University of Edinburgh

Are good doctors born or made?
The innate characteristics of a good doctor are beneficence and the capacity to engage with the knowledge necessary for informed practice. Beyond this basic level I believe that good doctors are made. Education should enable students to bridge the gaps between their ability and their "unconscious competence." The increasing emphasis on generic clinical skills in undergraduate curriculums is highly appropriate. But there is a risk that students who learn to communicate superbly are deficient in other respects that may not be detected. Bad communication can be immensely harmful. However, medical schools must also ensure that graduates are equipped to provide good, safe patient care across a broad range of competencies.

What do you look for when selecting medical students?
Equal weighting is given to academic and non-academic criteria. Academic criteria involve achieved or predicted grades and academic potential. Non-academic criteria are derived from the applicant's application and consider evidence of career exploration, appropriate work experience, and non-academic achievements and interests. The university takes the issue of widening access very seriously.

In what way do you think that medical education needs to be altered?
Future doctors in the new NHS should not be educated in isolation from other health professionals, and the clinical governance agenda must be reflected in undergraduate education. The continuing growth of complementary and alternative medicine and the demands of multicultural medical practice must also be appropriately recognised. Accelerated medical degree courses for suitably qualified graduates may aid the process of matching future manpower needs.

How do you know that your methods of assessing students are the best ways to recognise potential good and bad doctors?
Practice related assessment has become part of the curriculum at Edinburgh. New ways of testing clinical skills, communication, attitudes, and core clinical understanding are being widely implemented, and their reliability and validity are currently being measured.

"Fitness to practise" committees have been established, although to date few students have been disqualified purely on non-academic grounds. Most medical schools, including Edinburgh, now ask students to maintain reflective diaries or portfolios, records of achievement, results of peer assessment, and other indicators of personal and professional development. These are incorporated into formative and summative assessments. □