What is already known on this topic

A recent review of admissions to UK higher education emphasised the need for a fair and transparent system

This is particularly necessary for entry to medical school, where demand exceeds supply and there is a growing pool of highly qualified candidates

What this study adds

There is no single process for selection at English medical schools and too little evidence to develop one

Developing a clear definition of suitability for medical training is the first priority, whether locally or nationally

statement is lacking,[11] and while there is evidence that a structured interview format and the use of trained and experienced interviewers may improve the reliability and validity of the interview, controversy remains as to whether the costs required by this process justify the end point.[12 13] This is relevant as schools in the survey reported difficulty in the training and recruitment of staff for interview purposes.

A way forward?

One option to reduce differences between schools in selection processes is the implementation of a centralised admissions system. Such as scenario is not that far fetched: as noted, the use of standardised cognitive tests is already in place at some schools in this survey. Moreover, two schools conduct joint interviews for graduate students, and we understand there are discussions among northern medical schools about devising a shared bank of interview questions. But crucially, the present paucity of evidence on which to base selection cautions against the implementation of a single process based on present procedures. Rather, in the era of evidence based medicine, there is a case for developing a system after a process of experimentation and evaluation, the first stage of which is to clarify what type of student we want to select and why. In principle three or four assessment processes could be established nationally with applicants randomised to each and outcomes tracked over time. If a centralised approach is rejected because medical schools want to retain a local system allowing them to recruit a distinctive type of student, however, there is no less a need to more stringently assess the validity of their selection methods in identifying students that meet their local criteria.

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Commentary: Standardising the process versus improving the methods

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Parry and colleagues surveyed 22 English medical schools to determine their approach to admissions.[1] Their major concern is the lack of uniformity across schools, and their solution is the implementation of a centralised admissions process.

This may make good economic sense as there is little point in individual schools trying, for example, to create a standardised cognitive test to supplement or replace A levels. But if the goal of centralisation is simply to create greater uniformity, I think the effort may be misspent. In reviewing their paper, my sense is that there is, in fact, more commonality that difference across schools within England, and, for that matter, in most countries, where a combination of grades and some kind of "non-cognitive" measure is the norm. I am not particularly concerned with the individual variations they identified.

I do, however, have concerns about the admissions process, though these are different from those of the authors. I think we all have the cognitive-academic component pretty well in hand. While grade inflation,

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whether in A levels in the United Kingdom or undergraduate GPA (grade point average) in Canada, is a concern (the average GPA at McMaster last year was 3.74/4) the "fix" is straightforward, through the development of some standardised cognitive tests like the MCAT in the United States.

But I do not think that we are doing an acceptable job on the "non-cognitive" side, and I do not think it is simply an issue of training and standardisation of interviews. Measures like the personal interview are not nearly as defensible as the authors claim.[2] One interview, like one patient case, is a seriously restricted sample, an insight that led directly to new approaches like the multiple mini-interview.[3] Some believe that personality measures are a viable alternative to interviews, but in my view the evidence of reliability and validity to date is pretty inconclusive.[4]

So where do we go from here? It seems to me that some diversity of selection is expected and desirable because of the different educational cultures in different schools. I cannot see any compelling reason to insist on further uniformity of selection. After all, the standard assessment of student outcomes will ensure that the products are similar enough. We must do a better job of assessing the non-cognitive domain. I have no illusions that a better admissions process will identify all the potential "bad apples," as some reformers hope. But we can all agree that both cognition and compassion matter and both should be assessed equally and well.

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Predicting the "strugglers": case-control study of students at Nottingham University Medical School

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Abstract

Objective To identify potential predictors of undergraduate students who struggle during their medical training.
Design Case-control study. Cases were students who had experienced academic or personal difficulties that affected their progression on the course ("strugglers"). Controls were selected at random from the corresponding year cohorts, using a ratio of four controls for each struggler.
Setting University of Nottingham Medical School.
Participants Students who entered the course over five consecutive years.
Main outcome measures Likelihood ratios for independent risk factors for struggling on the course
Results 10-15% of each year's student intake were identified as strugglers. Significant independent predictors of students being in this category were negative comments in the academic reference (likelihood ratio 2.25, 95% confidence intervals 1.44 to 3.50), lower mean examination grade at A level (2.19, 1.37 to 3.51), and the late offer of a place (1.98, 1.19 to 3.30). Male sex was a less significant risk factor (1.70, 1.09 to 2.65) as was a lower grade at GCSE science (2.13, 1.12 to 4.05). In UK students whose ethnicity was known, not being white was a significant predictor of struggling (2.77, 1.52 to 5.05) but the presence of negative comments was not. Age at entry to the course and the possession of a previous degree were not predictive.
Conclusions Our results support retention of existing selection practices relating to academic achievement and critical review of students' references. We plan to undertake further investigation of the reasons why some students, including males, those with late offers and those from ethnic minority backgrounds, may do less well on the Nottingham course.

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Introduction

Selecting the "right" students is a challenge for medical schools and the subject of much debate.[1–3] Most medical schools no longer select solely on the basis of high academic qualifications but include varied non-academic criteria. The aim is to identify personal qualities in potential students that will allow them to cope with the rigours of the medical course and to become globally competent as practising doctors.[4] At Nottingham, there is regular review and development of the admissions process, which currently comprises four stages: review of academic ability, scoring of a validated questionnaire that focuses on personal attributes and attitudes, review of the statements on the application form from UCAS (the Universities and Colleges Admissions Service), and a semistructured interview by two trained interviewers.

A subanalysis of strugglers is on bmj.com.

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