

# Editorial

## How to select health professional students: A recurrent debate

As the academic year draws to a close, our minds collectively turn to selection and the next cohort to enter our programs. With this in mind, we reflect on the drivers, assumptions and tools of selection.

At frequent and regular intervals over the past 70 years, since a landmark paper appeared in the *British Medical Journal* (Smyth, 1946), a debate has continued in the literature on how to better select medical students—the implication being that an unacceptable number of “inappropriate people” were being admitted to medical school. Though the underlying problems have rarely been articulated, the tacit agreement has been that choosing an intake on the basis of superlative academic ability alone is inadequate. In recent years, there has been general acceptance that selection criteria should be extended to include a range of other personal qualities alongside the superior academic achievement imperative, and attempts have been made by medical schools to address the presumed inadequacy. These issues are, of course, not limited to medicine, and similar debates exist for other health professional programs.

There are two particular issues in question here: what additional qualities should be sought in applicants and how best to measure these qualities? Clearly, for each institution, the first question needs to be answered fairly comprehensively before addressing the second, but this sequence and imperative has not always been applied in practice. In many cases, a method of measurement has been incorporated into the selection procedure without clarity as to what the method was intended to measure. For example, in many medical schools, an interview with academically well-qualified applicants forms part of the selection procedure, but what the interview is designed precisely to measure is often ill-defined. If the objective of the interview is to assess personal and professional attributes, it is essential to determine whether an interview is actually capable of reliably and objectively measuring the particular attributes in question. A recent refinement of the interview has been the so called multiple mini-interview (MMI), which is better focused on specific qualities than traditional interviews as well as being more reliable and potentially more objective. An MMI format has been adopted by a range of health professional programs on this basis. However, although an interview or an MMI can measure some qualities, and some of these better than others, it cannot provide information on all personal qualities of potential importance in an intending health professional student and prospective practitioner.

Additional tests are increasingly being incorporated into selection procedures to provide supplementary information to selectors, such as UMAT and GAMSAT in Australasia, MCAT in North America and UKCAT in the United Kingdom. The form of additional information provided by these non-academic tests (often termed “aptitude tests”) has largely been in the cognitive domain, for example, how well an individual processes data and information. A few institutions have trialled the use of non-cognitive tests to measure applicants’ personality, values and attitudes, but these have not been widely adopted, though data are accumulating about what qualities are measured and what

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outcomes they are able to predict (Adam, Bore, McKendree, Munro, & Powis, 2012; Adam et al., 2015). Tests of non-cognitive qualities are quite widely used for personnel selection in the commercial world, the armed forces and the public service.

A technique that appears currently to have captured the attention of medical school admission committees in Australia, the United Kingdom and North America is the Situational Judgement Test (SJT) (See, for example, Patterson et al., 2016). As the name implies, these tests purport to measure the appropriateness of the applicant's response to a specific set of circumstances (for example, in the ethics domain), with the appropriateness or otherwise being determined by the expert constructor of the situation. SJTs have been devised purporting to assess teamwork, ethics and professionalism, for example. Of immediate concern is that these instruments are being incorporated into selection procedures without any clear idea of what they actually measure and how well they measure the quality in question. One cannot assume that because a question refers to a situation involving professional judgement, say, that the candidate's choice of an appropriate response is a measure of professionalism. The appearance or face validity of a test is not an indication of how accurately it predicts actual behaviour, or even predispositions.

It is timely, then, that health professional programs should return to basics and answer the two important questions in order. First, the qualities that need to be measured in applicants to ensure congruence both with their curriculum and with the profile of a competent and caring generic health practitioner need to be determined. Only then will selectors be in a position to suggest what type of selection instrument is most capable of providing information on the quality in question. Just as importantly, only instruments with a scientifically well-documented proven history of reliability and validity for measuring that quality should be used.

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**References**

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**In This Issue**

With increasing pressure on clinical placements, Mahoney & Boileau explore the benefits and barriers to using private care facilities. One consequence of increased pressure on learning resources might be an impact on work readiness. In response to our hope that our students gain appropriate and effective supervision when learning in the clinical environment, Merga relates the experience of a range of new graduate health professionals in one setting, and the impact of peer-mentoring for physiotherapy educators is described by Thomson et al. in their paper. Learning technologies also play an important part in the delivery and assessment of our students. Reid et al. explore the long-term impact of using clinical teaching associates to learn female pelvic examination, and in the setting of radiation therapy, Kane evaluates the use of treatment planning software for developing a more authentic assessment for students. In addition, Naumann et al. extend the pedagogy of learning through virtual patient cases to exercise physiology, including evaluation through the student portfolio, and the intercultural communication challenges for hospital doctors, which are the result of global mobility leading to an increasingly diverse patient and health professional population, are identified by Woodward-Kron et al. Finally, interprofessional education (IPE) is a growing aspect of many health professional curricula. Hall et al. seek out the markers of successful IPE implementation, from the perspective of the stakeholders. Please read on.

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