

Coping with increasing numbers of medical students in rural clinical schools: options and opportunities

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TO THE EDITOR: The article by Eley and colleagues clearly articulates challenges and solutions for providing quality undergraduate medical education in rural locations.¹ Simulation-based education (SBE) also helps meet the challenge of providing quality rural medical education. Simulation is an ethical means of supporting the development of technical and non-technical skills relevant for safe and competent clinical practice. SBE can be used creatively to prepare, supplement and enhance rural clinical placements.

Simulation is often used to support learning of clinical events that occur infrequently, such as medical emergencies. These simulations are immersive, placing the clinician in a scenario that reflects the physical, psychological and social fidelity of a real work environment. Similarly, immersive simulations can be used to acquire competence in common examination and procedural skills. Hybrid simulations include combinations of simulators (eg, benchtop models) and actors (simulated patients) in quasi-clinical environments.²

Simulation facilities are increasingly available in rural locations. In Victoria, Gippsland Medical School has a simulation centre with a range of clinical environments including reception, consulting rooms, a fully equipped ward and an emergency room. We provide graduate-entry medical students with an opportunity to develop clinical skills in simulation, aligning scenario complexity, content and context with their learning in real clinical settings. Scenarios are often based on real patients' experiences, exploring more than just the technical skills the student is learning.

Preliminary evaluation suggests this sequencing of skills development, authentic scenario creation and immersive simulations for commonly occurring clinical encounters maximises learning in real clinical settings. We have had strong local community engagement, evidenced by the easy recruitment of simulated patients and

support from medical practitioners who teach our students in clinical settings.

We are exploring a range of simulated rural clinical placement activities for the remaining years of the curriculum. We believe this approach will relieve some pressure on clinical placements, as students are well prepared to learn in such settings. Additionally, clinical nurse educators have taken on teaching roles in the simulation centre, relieving pressure on medical practitioners.

There are limitations to SBE. Specialist facilities are required, teachers and actors need to be trained, and curricula need to be developed and evaluated. However, our experience locally, and the rapid growth of SBE internationally, suggest that this approach to delivering high-quality medical education has relevance in all settings.

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1 Eley DS, Young L, Wilkinson D, et al. Coping with increasing numbers of medical students in rural clinical schools: options and opportunities. *Med J Aust* 2008; 188: 669-671.

2 Kneebone R, Nestel D, Wetzel C, et al. The human face of simulation: patient-focused simulation training. *Acad Med* 2006; 81: 919-924. □