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Short Communication

Distributed learning as a means of delivering socially accountable medical training

AUTHORS

Steven Lillis[1] (New Zealand European) PhD, Associate Professor * [https://orcid.org/0009-0008-5683-0325]

Rawiri Keenan[1] Associate Professor [https://orcid.org/0000-0001-8312-8525]

Joseph Scott-Jones[1,2] General Practitioner and Honorary Associate Professor

David McCormack[1] MBBS, Professor, Interim Dean of Medicine [https://orcid.org/0009-0008-3010-7526]

Ross Lawrenson[1] MBBS, Professor [https://orcid.org/0000-0003-0437-8839]

Lara Oertly[1] Research Assistant

CORRESPONDENCE

* Steven Lillis steven.lillis@waikato.ac.nz

AFFILIATIONS

[1] Te Wānanga Waiora, Division of Health, Waikato University, Hamilton, New Zealand

[2] Pinnacle – Opotiki, Ohope, New Zealand

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ETHICS APPROVAL

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Abstract

Aotearoa New Zealand faces an ongoing shortage of GPs (family physicians), disproportionately affecting rural and underserved communities. Although this issue is global, solutions must be context-specific. Traditional medical education pathways in New Zealand have not produced a workforce representative of or committed to serving these populations. This has created a situation where primary health care is increasingly difficult to access, particularly for rural and marginalised communities, with inevitable consequences of poor health outcomes and increased secondary care utilisation. Social accountability as a basic principle of undergraduate medical training has been suggested since the 1990s as a method of solving some of these issues. Distributed learning with a significant portion of experience and training in rural and provincial community primary care practices as well as utilisation of rural and provincial hospitals, embedded within a socially accountable framework, offers an innovative model of medical training. This short communication outlines the rationale for and structure of a proposed new graduate-entry, 4-year medical program in Aotearoa New Zealand that emphasises rural and provincial community-based training. We argue that this model is both urgently needed and potentially generalisable to other nations grappling with similar workforce inequities.

Keywords

Aotearoa New Zealand, distributed learning, general practice, medical education, social accountability.

Introduction

Aotearoa New Zealand is not alone in struggling to train and retain sufficient numbers of GPs. However, the challenges in this country are compounded by structural inequities affecting Māori, other Pacific Islander Peoples, and those in rural and socioeconomically deprived communities. The proposed model responds to these realities through a socially accountable, distributed learning approach. While similar initiatives exist internationally (eg Northern Ontario School of Medicine in Canada), this article highlights how such a model is particularly pertinent in the New Zealand context and could offer transferable lessons[1].

New Zealand's current medical training system has not significantly shifted graduate intent towards general practice despite initiatives by the two established medical schools to increase the number of graduates intending to pursue a career in general practice. International experience is that the 'hidden curriculum' in established medical schools can leave subtle yet significant negative impressions on medical students where general practice is considered a low-status, poorly remunerated option for those unable to train in a secondary speciality[2-7]. Persistent workforce shortages, coupled with poor access in rural regions and entrenched health inequities for Māori and other Pacific Islander Peoples, demand new solutions[8-10]. Good primary care has demonstrable effects in a medical system of preventing illness and death, reducing secondary care costs as well as being associated with a more equitable distribution of health[11,12]. While national health strategies acknowledge these disparities, tertiary training remains urban-centric, hospital-based, and misaligned with the healthcare needs of many communities.

Social accountability, as defined by WHO, requires medical schools to align education, research and service with priority health concerns[13]. Aotearoa's unmet needs in primary care, particularly outside metropolitan centres, make it a compelling site for implementing such a model. The distributed learning approach supports this by embedding students in diverse, real-world clinical settings, particularly general practices and peripheral hospitals across the country.

Internationally, distributed medical education has become increasingly common, particularly in response to rural workforce shortages. In Australia, all medical schools are now required to enrol at least 25% of students from rural backgrounds, and most universities operate rural clinical schools with varying degrees of community immersion. However, many of these programs remain structurally and culturally tethered to metropolitan academic centres, with rural exposure occurring predominantly in later years and often framed as a placement rather than a core educational identity. Similarly, while several international medical schools explicitly espouse and acknowledge the importance of social accountability principles, fewer have embedded these principles consistently across admissions, curriculum design, pedagogy and graduate outcomes[14,15]. This distinction is critical, as distributed learning alone does not guarantee alignment with local health needs or long-term workforce retention. It is critical that the curriculum prepares graduates for the very different work environment of the rural and remote practitioner as demonstrated in research on graduates from Universitas Pattimura's Faculty of Medicine[16].

Program structure and setting

The proposed program is a 4-year, graduate-entry degree delivered by the University of Waikato. It features accelerated learning with a strong place-based focus. Admissions will prioritise applicants from rural backgrounds, Māori and Pacific Islander applicants, and those committed to general practice. The first year will be campus-based, covering foundational knowledge and clinical skills. The second year will utilise regional hospitals for immersion in core specialties. The third year will be a Longitudinal Integrated Clerkship (LIC), with students embedded in a rural or provincial general practice for the full academic year. Learning hubs – located in rural towns across the North Island – will support simulation, teaching and blended e-learning with high-speed connectivity. The final year balances community and hospital settings to consolidate learning and prepare for the first postgraduate year.

Educational philosophy and pedagogy

The model uses constructivist principles, emphasising experiential learning, reflection and contextual relevance. The LIC structure ensures continuity with patients, supervisors and communities. Clinical reasoning, cultural safety and self-directed learning are integrated longitudinally. This contrasts with short rotations in metropolitan hospitals, which fragment learning and disconnect students from community realities. Distributed settings also develop digital literacy and interprofessional competencies through remote collaboration.

Generalisability to other settings

Although grounded in Aotearoa's specific demographic and geographic context, the model shares core principles with successful programs elsewhere. The Northern Ontario School of Medicine is a well-established example of a fully distributed medical school with a mandate aligned to regional health needs. In contrast, Australia's rural clinical schools represent distributed clinical education models embedded within otherwise metropolitan-focused institutions. While both approaches demonstrate the value of rural immersion, their structural positioning differs substantially, with implications for institutional culture, curriculum control and graduate outcomes. What this article adds is a region-specific case for implementation in a bicultural, colonised nation with an explicit commitment to health equity and social accountability. Other nations with rural–urban divides, Indigenous populations, or decentralised health systems may find aspects of this model useful.

Discussion

This proposal represents a shift in how medical education can serve societal needs. By training doctors in rural and provincial environments, the program aims to change not just the setting of education, but also its culture, values and outputs. The focus on general practice, continuity and health equity addresses well-documented gaps in New Zealand's workforce. Furthermore, by embedding medical students in underserved communities, the model reinforces long-term connections that may influence retention.

Pedagogically, the program integrates e-learning and simulation to complement clinical immersion. This hybrid model is particularly relevant for countries with dispersed populations and variable broadband infrastructure. Partnering with telecommunications providers will be critical. The approach also aligns with lifelong learning principles, positioning graduates for adaptive, reflective practice.

Conclusion

Aotearoa New Zealand requires transformative change in medical education to meet its current and future health needs. A distributed, socially accountable program, grounded in general practice and community responsiveness, is both necessary and achievable. This model represents a significant change to established medical schools in Aotearoa. It offers lessons for not just Aotearoa, but other health systems seeking equity-driven, sustainable workforce solutions.

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Conflicts of interest

The authors declare no conflicts of interest.

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