



Aligning medical education with the healthcare needs of the population

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‘To meet people’s needs, fundamental changes must occur in the healthcare system, in the medical profession, and in medical schools and other educational institutions’

This is the opening remark of the executive summary of a joint publication from the World Health Organisation (WHO) and the World Organisation of National Colleges and Academies of General Practice (WONCA) 1995.¹

Change in medical education will, to some degree, always lag behind change in population healthcare need. This is right and necessary, for medical education has to be based on a tradition, a proven track record. However providers of medical education need to adapt their product, so that the nature and skills of the medical workforce is aligned to healthcare needs.

Change in medical education requires not only changes in educators and their institutions, but also changes in the agencies that fund them. However, change has a price. Some old infrastructure may need to be discarded, and replaced by new. There is development work to be done, and changes to occur within the education workforce. There is a natural resistance to change, from funders down, but at some point it needs to happen. We are not suggesting that changes have not occurred over the years, but are suggesting that an even more fundamental change may need to take place to address the problems identified by WHO.

The nature of medical education undoubtedly influences medical students’ attitudes to career choices. A medical socialisation occurs, part of which confirms career choice. This can be seen in the status accorded to clinical disciplines in medical schools, and the exclusive nature of some subsequent postgraduate education and vocational pathways.

There is now an established body of evidence, which suggests that rural workforce issues can be ameliorated in part by educational interventions. These interventions include selection (at undergraduate entry) of applicants from a rural background,²⁻⁴ education based in rural health, and promoting rural health as an academic discipline.⁵

There need to be repeated educational interventions in rural health throughout undergraduate and postgraduate educational pathways. However it is important not to forget that medical education has the primary purpose of educating and training doctors to an acceptable standard. It needs to do this whilst training doctors whose skills and interests are relevant to current healthcare needs.

Primary care as a solution to New Zealand’s health inequalities is a feature of government strategy.⁶ Indeed, evidence suggests that community based medical education is as at least as successful as traditional hospital based education.^{7,8}

We suggest that the challenge facing funders and educators is to facilitate a substantial move to community-based medical education. This would clearly align

medical education with health policy in terms of strengthening primary care. Indeed, the latter is unlikely to truly succeed until there is an unashamed dominance of community-based primary care in the training of a substantial proportion of the medical workforce.

The changes which have resulted in reduced patient stays in hospital, increased use of technology to keep patients in the community, and increased day surgery or short stay surgery all mean that hospital-based students have less chance of seeing a broad range of patients and their illnesses. Care of patients with chronic conditions is being undertaken increasingly in the primary care setting, utilising a variety of hospital-based subspecialists for increasingly proscribed areas of care. Already it is impossible for students to satisfactorily experience the multiple diverse areas of subspecialist work. Hospital-based generalists are few and far between; generalist medicine now resides in the community. It is also emerging in the nascent discipline of rural hospital practice.

‘The first time I truly saw acute left ventricular failure was when I visited an ill patient with my rural GP teacher. I saw the clinical signs for the first time, and saw the initial treatment. Completely different from seeing the same patient on the hospital ward the next day, already treated and controlled. I was also able to see him after his discharge, and saw the impact of his illness on his life and family’

This paraphrasing of a medical student’s comments is typical of those heard from Dunedin fifth-year students on their rural health attachment. The full educational value comes when the student sees the patient for the hospital part of their illness as well as in the community.

Appropriate levels of student-patient contacts need to be maintained, to ensure that the students’ experience is broad. Students need to be exposed to an undifferentiated and comprehensive range of patient problems. They need to learn about the common chronic illnesses and the multitude of expressions of these and patient responses, which create the diversity of medical practice. They need to appreciate the place of continuity of care in good medical practice. They need to learn to differentiate the early presentation of serious illness from common self-limiting disease. A rich community experience is likely to increase their clinical knowledge and skills, as well as their understanding of patients and their contexts.

Naturally part of this learning will occur in the secondary and tertiary hospital setting where students follow through that 3% of patients who have serious disease.⁹ Our experience (of Dunedin School of Medicine’s rural health course) suggests that when students see patients at all stages of disease they not only become more involved with the patient but also hungry for knowledge, and can actively seek this out, engaging in lively sessions with specialist resource teachers.

The strategies showing some success for rural health could be applied to the healthcare of disadvantaged groups such as Maori and the Pacific Island population.

The emerging Primary Health Organisation (PHO) structure is set to offer communities the equivalent of our hospital health structures, and potentially an important framework for basing and targeting our medical education. An effective PHO should look to being a facilitator of education in addition to a purely service role. Educational investment paralleling service development would go along way to aligning medical education with healthcare strategy.

Funders of education and health must work more closely together and create mutual goals, and they need to develop and evaluate funding mechanisms that align medical education and healthcare needs. Universities and colleges also face the challenge of realigning their education programmes to meet these healthcare needs, while individual educators must adapt to changes brought about by this realignment.

Additional challenges include the development, evaluation, and research into new educational programmes, which meet both educational and healthcare needs—and the challenge for us all to ensure that the doctors we educate today are equipped to meet the demands of the health needs of our communities now and in the future.

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