

# Nature and nurture: shaping New Zealand's medical workforce

Phillippa Poole

**W**orkforce development is a useful concept in industry, in which selection, education and training take place with the future workforce in mind.<sup>1</sup> Given the cost, effort and time to produce a medical specialist, it is surprising that medicine is only recently moving towards a systemic approach to development of its workforce. In New Zealand, there are multiple stakeholders in the pipeline, not necessarily with missions aligned. Among these are universities, DHBs, Colleges, MCNZ, general practitioners and other private providers, the Ministry of Health and Tertiary Education Commission, communities, and, of course, trainees. The Medical Training Board (MTB) report of 2008 proved a significant turning point.<sup>2</sup> The Board recommended an increase of 100 medical students per year across New Zealand's two schools, Auckland and Otago, in order for New Zealand to be more self-sufficient in doctors. Shortly thereafter, the National Government doubled this to 200. Only now are the first of those students confirming their career choices and entering specialty training, with small increases in medical graduate numbers occurring each year until 2020. At the same time, there has been a major downturn in New Zealand medical graduates leaving for overseas permanently. As a consequence, house officer jobs and training positions are becoming more competitive. Additionally, there is a rapidly decreasing reliance on international medical graduates—formerly a mainstay of New Zealand healthcare delivery—particularly in regional and rural areas. Whether there will be an oversupply of New Zealand doctors remains moot, given that a large proportion of general practitioners will retire in the next 5 years,<sup>3</sup> and those who replace them may seek to work fewer hours on average.<sup>4</sup>

In 2009, Health Workforce New Zealand (HWNZ) was established to provide national leadership on the development of the country's health workforce. It has oversight of the medical training pipeline, with the capacity to signal priorities and provide incentives or disincentives to ensure the workforce is fit for purpose. The MTB had emphasised the importance of generalist skills in the New Zealand context, and stated that 50% of medical graduates would be needed in primary care. HWNZ has been working with the Royal New Zealand College of General Practitioners, DHBs, and the Medical Council of New Zealand to include a community placement as part of prevocational training. Furthermore, general practice training places have increased substantially. Messages on job prospects are filtering down via websites and careers fairs, and through providers of undergraduate and postgraduate training. There are encouraging signs of an increase in interest in general practice as the first choice of career.

Medical workforce development is about more than numbers; it is also about the qualities and experiences of doctors and how these interact to produce doctors for current and future health needs. Who are our doctors? What are their aspirations and why? How and where should they be trained? What will keep them maximally productive and working where they are most needed? It is pleasing to see three papers in this issue addressing such aspects.

The first reports on a survey of the workforce in rural hospitals, and trainees in the division of rural hospital medicine (DRHM) training scheme.<sup>5</sup> Building on a similar survey conducted six years ago, it contains encouraging results in workforce terms. Only two out of 28 rural hospitals

had stopped providing 24-hour care. Of the 26 remaining, 14 are in the North Island, with the largest number of rural hospital specialists in Northland. Hospitals report vacancies are far less of an issue than they were in 2009. Encouragingly, more New Zealand medical graduates are entering rural hospital medicine, with 46% of these being female, and 45% from a rural background—higher percentages than generally reported.

The authors attribute the improved situation to the new rural hospital scope and training scheme, rural origin pathways into Year 2 of New Zealand medical schools since 2004, and rural immersion options within medical programmes. Might other possible explanations be improving conditions for rural doctors relative to other specialties, or fewer job opportunities in urban centres or overseas? It's one thing to get doctors into rural jobs—quite another to keep them there. The authors of the present study recognise the importance of recognition and support of the existing senior rural workforce. Sorting out the relative effects of background factors versus curriculum and work experiences on medical careers is challenging. This is the subject of a prospective longitudinal tracking study in Australia and New Zealand.<sup>6</sup> This will provide some of the answers, but not all, underscoring the importance of repeated observational studies in specific priority areas, such the rural workforce.

A second paper proposes reflective professional supervision for all senior doctors.<sup>7</sup> Written from the perspective of a forensic psychiatrist, the paper explains the concept of vicarious trauma, “an experience that many doctors may be aware of, but not be able to name.” Supervision aims to reduce the build-up of secondary traumatic stress on individuals, thus improving their interactions with patients and others, through a process that is “formative, normative and restorative.” As the author points out, communication issues are common causes for complaints. Further, there is an increased emphasis on healthy and safe workplaces, with loss of tolerance for toxic work and training cultures. The paper outlines how supervision might be incorporated, as well as barriers to systemic implementation. An assumption is that poor performance or clinical risk is related to

vicarious trauma, and this is amenable to an intervention, such as professional supervision. Intuitively, this seems a good idea, but as with many good ideas, the approach needs to be shown in a medical context to be feasible, acceptable and to promote the desired changes. Nevertheless, this paper is a timely reminder that doctors are not immune from the situations they witness on a daily basis, even if they believe they are. Those of us still in the system may have a view that is distorted by survivor bias, yet may be working sub-optimally. This paper reminds us, as have others,<sup>8</sup> that the health of doctors is an important, yet under-emphasised, measure of health system function.

Medical students are our junior colleagues and doctors of the future. The disastrous Christchurch earthquakes in 2010 and 2011 provided an opportunity for university staff to study predictors of resilience in Christchurch-based students who were in the final 3 years of their programme.<sup>9</sup> Using an outcome measure of self-rated resilience scored on a validated scale, they found a range of factors, including student seniority, personality and mental health; a lack of exposure to the most severe earthquake; and feeling supported post-earthquake, associated with greater resilience. Many other factors were unrelated. Taken together, the authors' model explained about a third of the variance in resilience scores. Obviously such unpredictable events are rare, although extreme weather or large-scale terrorism events follow a similar power law.<sup>10</sup> Major external crises will arise and systems must be prepared to deal with them. Thus, there is considerable generalisability to the finding that institutional response is an important component of support. More controversial is whether or not information about an individual's personality or mental health status ought to be known in advance so as to better target support efforts post event. The authors believe this would be a step too far, and I'd agree. A prospective follow-up study might give important insights as to the burden of such events in the long run, what was most helpful, and how it is best provided.

Ideally, New Zealand medical school classes would be comprised of individuals who reflect the community, with the passion and ability to complete medical training, and go on to deliver quality care for a

working lifetime. Each cohort would be predisposed by the range of backgrounds and subsequent experiences to enter the broad spectrum of medical roles needed by communities across New Zealand. However, students and doctors are agents in complex organic systems which continually adapt and feedback upon those in the system. Actions in one part have positive and negative consequences, sometimes major,

in other parts of the system. The authors of these three papers shed light on individual and system factors that may help or hinder medical workforce development in New Zealand. Such evidence reminds individuals and institutions along the pipeline that every medical job is important, as is every doctor, and a little care of our workforce goes a long way.

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