The future of medical careers

How can we ensure that medical workforce supply matches population health need?

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The medical workforce in Australia is undergoing substantial changes. Oversupply of domestic medical graduates, coupled with growth in international entrants, has led to increased competition for internships and prevocational training positions.[1,2] In coming years, more applicants will vie for vocational training positions in their preferred fields and many doctors may be disappointed in their eventual career pathways.[3] Such challenges should have been foreseen when the new medical schools were established; however, the health system has reacted slowly.

The relative freedom historically enjoyed by doctors in choosing their vocational pathways has resulted in imbalances across geographic regions and between specialties. There is strong competition for those regarded as desirable (eg, high-status and highly paid specialties such as surgery[4]), while others continue to experience relatively low interest. Recent modelling suggests that the generalist specialties, including general medicine and psychiatry, as well as general practice, will continue to experience shortages.[5]

Should we and can we manage medical careers in a more proactive fashion, so that young doctors are ushered into geographic areas of need and are encouraged to specialise in clinical areas that will effectively meet population health needs? Should the regulation of practice location be changed, and what is the feasibility of changing the allocation of vocational training places across specialties? Can medical careers be made more flexible and generalist in their nature?

Governments and employers wish to shape medical careers in some of these ways.[6] However, a recent review found little evidence that this can be done.[7] Medical career choices are a complex mix of individual aptitudes, preferences and characteristics; the structure of, and experiences during, undergraduate and postgraduate education; and the expected characteristics of different medical careers and jobs. The literature is not clear as to which of these factors policymakers should focus on. Studies have considered the potential role of clinical supervision and mentoring[8,9] and career advice.[10] Providing information on the availability of specialty jobs may also be important.[11] Interventions may be most effective in early postgraduate years, when doctors generally make their career decisions.[12] Doctors from a rural background are more likely to choose rural practice, but there is much less evidence on the role of incentives to encourage practice and retention in rural areas or areas of socioeconomic disadvantage.[13] There is evidence that the characteristics of specialties play a role, including flexibility of working hours and earnings; however, these may be more difficult to change.[14] To improve the evidence base, we need better study designs and more capacity to undertake health workforce research. Although the Productivity Commission recommended more research almost a decade ago, little has changed.[15]

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Longer term solutions require us to consider the economics of the medical labour market. The 20-year boom–bust cycles of the health workforce involve relatively rapid expansions and contractions of supply and demand that affect the health care system and patients.[16,17] However, governments have ignored the basic economics of demand and supply and have failed to manage these fluctuations strategically. Decisions to increase medical school places to meet increases in demand did not taken into account expected costs or benefits to the health system of employing more doctors, and failed to consider more potentially cost-effective ways of improving population health, such as changes in skill mix.

Although competition may help to keep wages down and quality high, oversupply can also lead to unemployment. Market imperfections and failures in health care mean that costs will not necessarily fall and that quality will not necessarily increase when supply increases. For example, bargaining agreements in public hospitals and fixed Medicare fees mean that doctors' earnings lack flexibility. Increasing the number of doctors does not necessarily improve population health, as issues of overdiagnosis and overtreatment are becoming more prominent[18] and suggest that we are already at or beyond the flat of the curve of effective medical care.

An evidence-based approach to managing medical careers to improve population health is a laudable goal, but there is insufficient evidence on how best to do this. Government interventions to manage the medical workforce have been largely ineffective, but this does not mean that market forces should rule without government intervention. As purchasers of medical labour, governments should focus more on strengthening relative price signals and improving flexibility and information in health care labour markets to nudge the market in the desired direction.

A number of new interventions may be appropriate. First, more national information about career options, vacancies and employment rates in specific specialties and specialty training programs could be provided, so that choices can be more informed, realistic and

unbiased. In such a competitive labour market, doctors will also want to be treated fairly and based on merit.[3] A second option is to begin to think seriously about altering the structure of medical training to promote flexibility and generalism.[19,20] Long periods of training and increasing subspecialism foster inflexibility such that, in times of shortage or surplus, doctors are unable to change specialties or unwilling to move to geographic areas in need. Is the nature and structure of medical training inhibiting the pursuit of improved population health? Health Workforce Australia has been abolished at a crucial time when new policies need to be developed. Maintaining the momentum is essential to produce a medical workforce that can continue to improve the population's health.

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