Postgraduate medical education: rethinking and integrating a complex landscape

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ABSTRACT

- A key responsibility of the healthcare system is to develop a sustainable workforce through education and training.
- The complexity of postgraduate medical education and training in Australia requires:
  - recognition that there are many stakeholders (junior medical officers, registrars, teaching clinicians, health departments, governments, colleges and society) with overlapping but competing interests and responsibilities;
  - a national dialogue to clarify the necessary resource investments and to assign explicit accountabilities; and
  - improved coordination and governance, while maintaining appropriate flexibility.
- In other countries, stronger mechanisms of governance for oversight of postgraduate medical education have emerged, and Australia can learn from these.

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Medical training is a complex, multistage process in which many organisations and individuals play important roles (Box 1). The many agencies and individuals involved in the education and training of doctors in Australia have, through their combined efforts and goodwill, produced an education and training system that is highly regarded internationally.

Postgraduate medical education — a fragmented landscape

The system producing the next generation of doctors relies upon many factors:

- clinical service contributions by doctors in training;
- the voluntary contributions of many clinicians who teach;
- the clinical colleges in setting exit standards, selecting trainees (for some colleges) and prescribing and delivering components of training; and
- resources to support education and training provided by the state/territory and federal governments.

The Australian postgraduate medical training sector has developed in an implicit and fragmented way, with limited collaboration and coordination between relevant groups. Box 2 shows the dispersed nature of the relationships within this system, as well as its great complexity. Although some of the relationships within the system are formalised, many are not, and the entire system is devoid of coordinated governance.

Much of the current business of postgraduate medical education and training operates at specific and idiosyncratic interfaces, and there is a lack of clarity about the roles and responsibilities of the various players in the postgraduate training system. Combined with the lack of overarching governance and coordination, this makes it difficult for the system to adapt to the demands of an ever-changing healthcare system. The complexity and lack of coordination also means that what many bodies believe is happening differs from what actually occurs at the frontline and for trainees.

Several factors have contributed to this complexity. The proliferation of biomedical knowledge, requirements for continuous professional development and recognition of the importance of lifelong learning have required new approaches to teaching and learning in medicine. Delivery of healthcare has also changed, with unanticipated consequences for training. The move towards day-only interventions, fiscal constraints, increasing demand for clinical services and, in some Australian states, rationalisation of public outpatient services, have placed additional strains on training environments. These changes, combined with the growth of government-subsidised private healthcare, have led to redistribution of some clinical activities away from public hospitals, where training has traditionally occurred. This has not been accompanied by a coordinated redistribution of training places or support for education. Furthermore, ongoing medical specialisation has resulted in more training programs and specialty-specific accreditation processes.

There is a clear need for a national dialogue concerning coordination and governance of medical education and training. As it represents the principal funding agencies, the Australian Health Ministers' Conference could initiate such a discussion.

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The international experience

Australia is not alone in facing a complicated landscape in postgraduate medical education and training. While no international approach can or should be replicated *in toto* in Australia, there is much to be learned from international experiences.

United States

The Accreditation Council for Graduate Medical Education (ACGME) in the US is a private professional organisation responsible for the accreditation of more than 7000 residency and fellowship programs covering 110 specialty and subspecialty disciplines.[1] A principal strength of the ACGME is that, in addition to the rigorous on-site, peer-based accreditation process for specific programs, accreditation is required for the institutions that sponsor the programs and employ trainees. Governed by a board of directors, which represents stakeholder groups, including train-

1 The roles of various groups in postgraduate medical education

Organisation	Principal responsibilities
Federal government and Australian Government Department of Health and Ageing	Funding grants to states to support hospital-based training as a part of Australian Health Care Agreements Direct funding of clinical, non-hospital practitioner services, which may include those involving presence of trainees Provides and regulates trainee access to Medicare benefits in non-public hospital settings Funds general practice training through the General Practice Education and Training Board
State/territory governments and departments of health	Policy frameworks for operating healthcare systems (including education and training as a part of their systems) Allocate funding to healthcare services, a portion of which will be used to support training Funding and empowerment of postgraduate medical councils to oversee early postgraduate training
Healthcare organisations (hospitals, local health systems, etc.)	Direct employers of trainees and clinician teachers Allocate funding for infrastructure to support education
Specialist colleges	Define program parameters and curriculum, including accreditation of teaching sites Establish exit standards and implement candidate assessments Selection of trainees (variable college involvement)
Committee of Presidents of Medical Colleges	Intercollegiate communications
Confederation of Postgraduate Medical Education Councils	Information sharing between postgraduate medical councils Intermittent specific projects related to education and training
University medical schools	Medical student education programs
Australian Medical Council	Accreditation of university-based medical student education programs leading to degrees registrable by state medical boards Accreditation of postgraduate vocational training programs Advice to Minister for Health and Ageing about recognition of new specialties and subspecialties
State prevocational medical education councils (eg, Postgraduate Medical Council of NSW)	Responsible for clinical training education standards and resources for new graduates (PGY1 and PGY2) working in public hospitals
Medical Training Review Panel	Examines supply and demand for training positions as part of the monitoring of the impact of the provider number legislation (*Health Insurance Amendment Act 1996*)

ees and the public, the ACGME derives additional power from its ability to withdraw accreditation of all specialty programs in an institution if a single program does not comply with core requirements.

A further emerging strength of the organisation is its commitment to accreditation standards that reflect educational outcomes in addition to structures and processes of training. In doing so, the ACGME emphasises broad issues related to patient care, medical knowledge, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based practice.

Canada

In Canada, postgraduate training operates under the Royal College of Physicians and Surgeons of Canada (RCPSC). The RCPSC sets standards for postgraduate education (some of which are common across specialties), certifies doctors for practice in all specialties, and accredits training programs, all of which are delivered through Canada's 17 medical schools.[2] The College of Family Physicians of Canada acts in a similar manner for general practice training.[3]

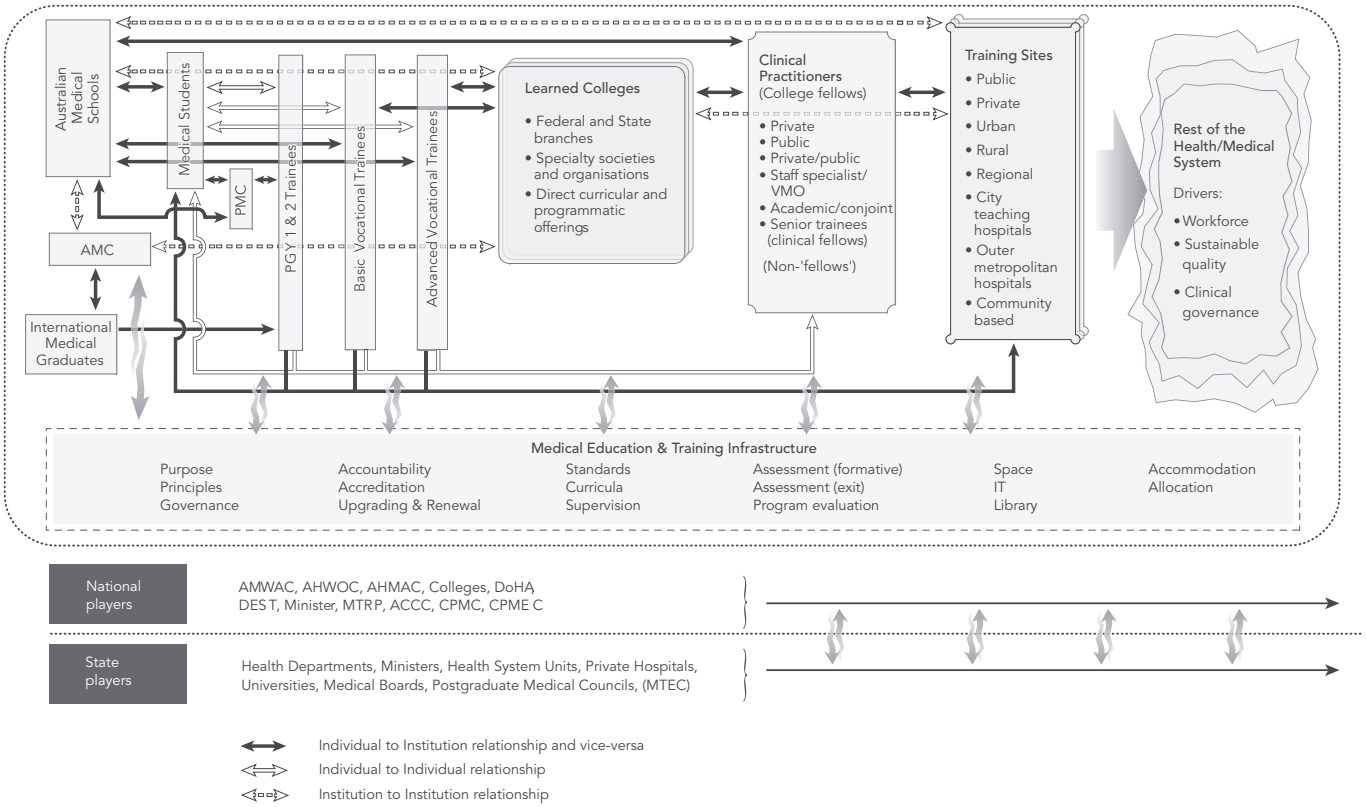
The RCPSC recognises the strong links between medical schools and their affiliated hospitals and insists that an integrated university-based organisational structure is in place to support all aspects of specialist education and training, including:

- organisational elements and committees of the university and their operation,
- the commitment of affiliated hospitals and organisations to education and training,
- evidence of functional liaison between the university and participating sites, and
- a range of matters pertaining to the training programs themselves, including administrative structures, goals/objectives, structure and organisation of the program, and resources (such as clinician-teacher numbers, patient mix, physical and technical infrastructure, clinical/academic and scholarly content of the program, and evaluation mechanisms).

New Zealand

New Zealand has separated training funds from clinical service budgets and introduced explicit funding for training posts. This is managed by the Clinical Training Agency (CTA), part of the Ministry of Health.[4] The New Zealand Medical Council has statutory oversight for training standards, which is delegated to the colleges. Although the Australasian vocational colleges' systems of standards and accreditation apply for most disciplines, the CTA has a separate, explicit training contract with the 21 District Health Boards that are the direct providers of training through their affiliated hospitals.

2 The complexity of the medical education and training system in Australia



Arrows indicate the different relationship types as follows: solid, individual to institution and vice versa; open, individual to individual; dashed, institution to institution. ACCC = Australian Competition and Consumer Commission. AHMAC = Australian Health Ministers Advisory Committee. AHWOC = Australian Health Workforce Officials' Committee. AMC = Australian Medical Council. AMWAC = Australian Workforce Advisory Committee. CPMC = Committee of Presidents of Medical Colleges. CPMEC = Confederation of Postgraduate Medical Education Councils. DEST = Australian Department of Education, Science and Training. DoHA = Australian Department of Health and Ageing. MTEC = Medical Training and Education Council of NSW. MTRP = Medical Training Review Panel.

United Kingdom

In the UK, the royal colleges are responsible for setting the standards of training in their respective specialties, while regional postgraduate deans fund, commission and manage the delivery of postgraduate medical training across all specialties.[5] The responsibility of the postgraduate deans is to ensure that systems and resources are in place to enable college training standards to be met.

A new statutory body, the Postgraduate Medical Education and Training Board (PMETB), is being established to supervise the education and training sector independently of government.[6] Its mandate is to raise training standards, improve the supervision of postgraduate education and training, and consolidate and strengthen the roles of the colleges and faculties. The PMETB will replace the Specialist Training Authority of the royal colleges, and is authorised to regulate specialist and general training under the same guidelines and, importantly, to provide strong and sustainable structures and processes to ensure that the interests of all stakeholders are considered and represented. The governing board of the PMETB includes representatives of key stakeholder groups, including royal colleges, postgraduate deaneries, trainees, clinical trainers, the General Medical Council, managers from the National Health Service, and patients. The establishment of the PMETB clearly signals a sea change in oversight of postgraduate medical education and training in the UK, with more centrist control seeming likely. The timelines for implementation are short and the evolving outcomes deserve our close attention.

Lessons for Australia

None of the systems described above can be simply transplanted into an Australian context. However, the trend towards a better-coordinated and better-governed approach is undeniable. Clearly, there are lessons to be learned.

Compared with international counterparts, the Australian system is disjointed, with fewer integrated mechanisms to draw together the interests of the stakeholders. There are 12 colleges covering more than 65 specialty training programs. These are delivered at hundreds of teaching hospitals and many community-based practices (especially for general practice) in a healthcare system funded by two levels of government across public and private sectors. Each college has its own standards for education, accreditation of training sites and certification of specialists. There is relatively little intercollegiate coordination and sharing of approaches to common areas of training. The Committee of Presidents of Medical Colleges provides a forum for the colleges to consider healthcare and related education, standards and quality issues, but evidence of real sharing across colleges on training is limited.[7]

In some states, postgraduate medical councils accredit hospitals in a variety of specialty terms for postgraduate year one (PGY1) and

PGY2 doctors.[8] For all other training programs, there are separate accreditation processes conducted by colleges (with variable influence of specialist societies). These generally provide poor feedback to healthcare services, which fund large parts of specialist training but have little direct involvement in how training operates within their institutions.

There is a lack of explicit accountability of healthcare service managers for education and training, even though they employ most of the teaching clinicians and the trainee medical workforce and their health services bear the accompanying risk. The leaders of hospitals and healthcare services must become more engaged in the education and training issues of their organisations.

For some time, Australia has had national targets for trainee numbers in the various specialties, monitored through the Australian Medical Workforce Advisory Committee.[9] The Medical Training Review Panel was established in 1996 to monitor demand for and supply of training opportunities.[10] However, there is no mechanism at national, state, regional or local levels to align decision-making and allocation of resources with contemporary and future needs. Furthermore, several isolated but important changes have occurred recently, including the Australian Medical Council's involvement in review of postgraduate specialty training programs,[11] the determination by the Australian Competition and Consumer Commission in response to the exemption application by the Royal Australasian College of Surgeons,[12] and the trainee recruitment and supervisory issues of the Campbelltown/Camden affair.[13]

The Medical Specialist Training Taskforce, which was established to examine the delivery of specialist training across a range of clinical settings, has recently submitted its report to the Australian Health Ministers Advisory Committee, and further work to develop training models will soon be undertaken. This is a welcome advance. In New South Wales, the government has formed the Medical Training and Education Council to assist in developing a more coherent state response to medical workforce development and sustainability for education and training.

Practical considerations

The discourse about coordinated governance for postgraduate medical education and training in Australia must consider practical aspects of managing training. These include:

- Reliable information management systems that link education and training with workforce planning;
- Sharing guidelines and benchmark information within and across disciplines and sites;
- Development of shared curricular expertise and systems across disciplines and especially between colleges and universities;
- System-wide standards for hospitals and community healthcare delivery settings for supervision, educational infrastructure, service/training balance, support for clinicians as teachers, as well as mechanisms for monitoring, evaluating and providing feedback;
- Programs for preparing all trainees as potential future clinical leaders and teachers;
- Particular attention to the needs of rural, regional and outer metropolitan areas in major capital cities;
- Further development of integrated education and training networks (some exemplary disciplines and programs have demonstrated strength in matching the demands of service and training needs in this manner); and
- Explicit development of opportunities for research during training (clinical, population, basic and health systems) through greater engagement with research organisations (universities and independent institutes) as well as through support for the National Health and Medical Research Council (NHMRC) practitioner fellowship scheme.

Effective leadership and governance of postgraduate training should include:

- Commitment to maintain the nexus between training and clinical service;
- Development of structures and resources to support a culture of learning at all levels and an environment that values, rewards, and indeed requires, the provision of high quality training, education and supervision in clinical service delivery;
- Greater clarity and transparency of roles and relationships between key stakeholders; and
- Improved coordination of and accountability for training at several levels. Even with greater national or regional coordination, strong local management of training is important to preserve educational quality and achieve a satisfactory balance between training and clinical service.

It is time to comprehensively review the oversight and governance of postgraduate medical education and training at a state and national level to ensure its vitality and durability — in the service of a sustainable healthcare system.

Competing interests

Philip Pogson has been retained at various times as a consultant to the NSW Medical Education and Training Council.

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