MONASH University

Department of Epidemiology & Preventive Medicine
Faculty of Medicine, Nursing and Health Sciences

Productivity Commission Health Workforce Research Study

Submission from Department of Epidemiology & Preventive Medicine, Monash University

Context

We are a teaching and research department of Monash University based at the Alfred Hospital in Melbourne. We have had substantial research involvement in several aspects being examined by the Productivity Commission.

Australia's health system is recognised as one of the best in the world. It rates well on international benchmarks and provides high quality services to most sections of the population through a mix of public and private funding and service provision.

However we believe that a combination of factors is likely to force a reappraisal of many aspects of our national approach to healthcare delivery. These most compelling of these factors are likely to include:

- **Workforce shortages**, with an increasing pace of change in levels of workforce adequacy that is not matched by system capacity to adapt – for example there is virtually no provision for re-training across different medical specialities.

- **Quality concerns:** Increasing expectations of quality of healthcare – both regulatory authorities and the community have heightened expectations of quality of care, will change the mode of delivery of some complex procedures

- **Cost Pressures**, are often poorly handled because of unsatisfactory ways of measuring cost-effectiveness, and by rigidities in workforce and industrial systems that are based on historical precedents rather than current needs.

- **Chronic illness**: Demographic changes leading to more chronic illnesses which are not matched by health systems (and professional training programs) designed for acute care needs.

- **Information technology**: the low level of reliance on modern systems of information technology is becoming detrimental to many aspects of patient care.

These changes are likely to require substantial changes in many fundamental aspects of the system, including funding, regulation, and role definition.

We would also like to criticise the low level of investment in Australia in the fundamental R&D needed to underpin our multi-billion dollar health system.

Workforce: must become more flexible

We believe that there is a pressing need to increase the flexibility and adaptability of the Australian health workforce.

Medical professionals:

At present training for medical professionals is characterised by:

- long training periods that leaves many individuals in their late twenty's or early thirty's before they are able to practice independently

- rigid programs that provide little opportunity for individuals to move from one specialty area to another, even when these are closely related. It also impedes the development of novel combinations of skills which in other professions are often drivers of innovation

- control of specialty training by bodies with a duality of interests ie existing members are advantaged by restricting opportunities for new entrants.

- financial incentives that direct the interest of trainees towards procedural activities rather than cognitive skills.

The present training schemes have been designed to provide highly skilled clinicians and have served us well in the past. . When qualifications are awarded for life, an extensive period of training became a fundamental guarantor of quality. However , the rationale for this approach has been undermined by a much shorter half-life of knowledge and rapid changes in the skill-mix needed to deliver modern healthcare. It may now be contributing to workforce shortages.

New approaches to training for healthcare careers should pay more attention to the need for flexibility. Ideally they should incorporate the following features:

- a common core curriculum which would form the basis for careers in a broad range of health related careers and would reduce the 'lead-time' required to respond to changes in workforce requirements. It would also facilitate retraining and provide students with greater appreciation of and respect for other disciplines

- the vesting of responsibility for specialty training in universities which are not subject to a duality of interests and which would be expected to develop innovative approaches towards training and retraining

- development of a more modular approach to training, similar to that existing in other industries. Hospitals should be encouraged to cater for individuals wishing to retrain in other specialities

- development of more objective measures of clinical competence to avoid the need for 'overtraining'

Remuneration: . In virtually all professions other than medicine low-level repetitive tasks have been identified and devolved down to lesser skilled individuals. However unless provided by a doctor many low-level tasks do not attract remuneration. This has lead to a perverse situation whereby highly skilled professionals are retaining many low-level responsibilities, simply in order to maintain income. It acts as a strong disincentive to change and contributes to dissatisfaction amongst the professionals involved

With an increasing focus on chronic diseases, an increasing proportion of healthcare will involve preventive activities, monitoring of chronic conditions and the following of guidelines and pathways. With a more appropriate approach to remuneration a substantial proportion of this work could and should be devolved to lesser skilled individuals who would be supervised and monitored by the more highly trained professionals. A high priority for the Australian Healthcare system is to develop new approaches to payment that will encourage the highest skilled professionals to manage the delivery of healthcare through supervision and monitoring of others, with their unique skills focussed on new or complex cases. This approach could make a substantial contribution towards remedying looming workforce shortages in primary healthcare and in some specialties

Non-clinical careers: at present the completion of an undergraduate degree in medicine is necessary to provide a comprehensive training in human health & disease. An increasing number of careers in the healthcare industry are advantaged by the detailed knowledge of the theoretical components of a medical degree but do not require the additional capacity to examine patients and formulate diagnoses & treatment regimens. This training could be accommodated within the generic undergraduate 'Health Sciences degree' referred to above.

The availability of this degree would greatly assist those wishing to develop unique combinations of skills (eg biomedical engineering) and those wishing to undertake non-clinical careers. At present these individuals spend additional years occupying positions and training in skills that are not utilised.

Allied health: problems are not confined to medical graduates. In other areas eg pharmacy and physiotherapy, graduates are still trained for employment settings which have undergone massive change since they were originally devised. In many instances the nature of the work is not commensurate with the intellectual capacity and training of the graduates.

Workforce planning: The need for a better information base for health workforce policy was recognised in the Productivity Commission Health Workforce Study Issues Paper. Some of the key problems currently with the information base include:

- Failure to monitor key dynamics of the health workforce system (which in turn is based on the lack of a systems perspective on the health workforce);
- Data gaps – especially in relation to longitudinally linked data; and
- Lack of sophistication in modelling approaches.

Quality: needs changes in training and service delivery

The focus on quality & safety in healthcare is likely to remain an important influence on the development of workforce and service requirements. Its impact may increase as better measurements of treatment outcomes are made available to service providers.

Although somewhat speculative it is likely that quality of care issues will influence healthcare in at least some of the following ways:

1 procedural services are likely to be concentrated amongst smaller numbers of proceduralists. This is a result of research that has established that outcomes of many complex procedures are best when undertaken by 'high volume providers'. As outcomes of treatment are subjected to more sophisticated measurement it may become evident that some procedures are best undertaken by specifically trained technicians

2 Improved methods for developing and assessing competence of clinical practitioners are needed as a part of quality improvement. However provision of adequate clinical training is under increasing pressure as a result of reduced hospitalisation, increasing numbers of students (including overseas students) and pressures amongst hospital administrators to restrict expenditure on matters apart from direct clinical care. New and innovative approaches to clinical training will be required such as the use of simulators and skills laboratories. A more systematic approach to skills assessment that is more objective and 'data-driven' will also be necessary.

3 an increasing proportion of medical care for the chronically ill will be systematised through treatment guidelines and pathways. An increasing amount of this care is likely to be provided by 'disease management organisations'

These changes will again call for greater flexibility in the training of the healthcare workforce with a common basic curriculum and an increasing capacity to cross existing professional boundaries when developing new treatment approaches.

Cost containment: better measurement, less inefficiency

Pressure from increasing costs are certain to increase over coming years as new innovations in diagnosis and treatment are introduced into healthcare at an ever increasing pace. Australia is not well equipped to address cost- pressures in a logical and equitable fashion. The supply of individuals capable of measuring cost-effectiveness and communicating effectively with clinicians and policy makers is seriously inadequate.

Another important aspect of cost-effectiveness is the elimination of wasteful expenditure. This will require attention to the inefficiencies that result from the separation of Commonwealth and State responsibilities. It will also mandate a re-examination of the professional boundaries that on occasions leads to inappropriate distributions of work and a wasteful use of high level skills.

Reduction of wasteful expenditure will also require a much greater investment in 'public good research'. At present a high percentage of private research expenditure is commercially driven with the aim of detecting advantages for a new and more expensive innovation. Strategic investment to determine whether existing cheaper approaches are as effective as newer more expensive ones is minimal in Australia. Without a strategic fund to support research in the public good the evidence base for healthcare will be largely determined by what is commercially advantageous

Aging Australia: more multidisciplinary care

The rate at which the Australian population is aging is greater than any other western country apart from Ireland. As the population ages the focus of the healthcare system will turn increasingly towards chronic care, prevention of hospitalisation, maintenance of quality-of-life etc. This type of care will be provided most effectively by multidisciplinary teams with strong and effective medical support.

New models for the delivery of such care will require skills from medical practitioners that have hitherto featured minimally in undergraduate medical curricula. These particularly include management , leadership and quality improvement, each of which will become essential components of new undergraduate medical curricula.

Information technology: investment needed for efficiency and quality

Routine medical practice has traditionally been a 'low-tech' industry, heavily reliant on experience and memory. Increasingly the volume of information and a reduced tolerance for errors are driving an increased need for clinical decision support throughout the healthcare system. In drug prescribing, for example, a rapid increase in knowledge about new drugs, combination products, generic versions, interactions

and contraindications has made it increasingly difficult to practice safely without electronic support.

Similarly, at a time when responsibility for clinical care is increasingly shared amongst a number of providers, the inability to access information through modern IT systems is a cause of major cause of risk to patients and a major driver of unnecessary expense. Many of the most intractable problems in quality/safety will not be addressed without a major investment in information systems.

Health system R&D: barely exists in Australia

A flourishing research base in health services research could provide an invaluable asset to the Australian healthcare system. Its role might include activities such as:

- monitoring developments overseas and assessing their applicability to Australia

- developing and extracting information from databases of healthcare information

- developing new methods for measuring and improving quality of care

- identifying risks to safe practice and developing approaches to mitigate them.

- projecting workforce needs

- developing new approaches for the organisation and monitoring of care

- developing new methods for integrating information technology into clinical practice

The existing national capacity in health services research is so low that it will take many years to establish. However increased funding for individuals to develop careers in this area is only a part of the problem that exist in this country. Equally important is the failure to invest in adequate data gathering, inappropriate constraints (often financial) on researchers gaining access to the limited data that does exist, rigid privacy laws that either prevent bona fide research or make it unnecessarily tedious and burdensome.

Without attempts to address these issues the amount of the Australian R&D effort directed towards improving the healthcare delivery system in Australia will continue to be minimal.

Summary

We see a strong rationale for:

1 Steps to increase flexibility & adaptability of the Australian Healthcare workforce including a common core curriculum for all health professionals, assumption by universities of responsibility for postgraduate specialty training and removal of barriers that impede retraining

2 Review of current modes of remuneration of medical practitioners that requires them to personally perform many low-level and/or repetitive tasks that could be performed by lesser trained individuals. These may include some procedural tasks

3 Provision of a three year degree in health sciences that will cover most of the theoretical components of a medical degree and allow students interested in non-clinical careers to bypass some aspects of clinical training.

4 Development of increasingly more sophisticated approaches to workforce prediction and modelling

5 Undertaking studies to determine the most appropriate delivery of procedures where optimal quality requires high volume providers.

6 Addressing the increasing shortage of suitable clinical training opportunities by increasing the use of simulation and skills laboratories prior to patient contact.

7 Invest more in 'public good research' to ensure that the data available reflects more than the research undertaken for commercial interests , especially where this might lead to a substantial saving of public funds

8 Develop new team –based approaches to the management of chronic disease in older patients.

9 Increase opportunities for medical practitioners to learn skills including management, leadership and quality improvement to better qualify them to lead healthcare teams.

10 Increase investment in IT to improve efficiency and to provide safer healthcare

11 Increase investment in healthcare R&D and reduce barriers to research into service improvement. This will require a review of the way in which career opportunities, data-access policies and privacy legislation impinge on health services research.

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