What Can We Expect of our Health Care System?

Options for expanding the health workforce

Peter M Brooks, Lynn Robinson and Niki Ellis

Abstract

Health workforce reform remains a major challenge for Australia. The recent Productivity Commission report provided some guidance, but, sadly, few of the recommendations have been implemented. Health economies (and with them the health workforce) will continue to expand as the burden of disease increases. The important issue is to expand the current workforce but provide for a generalist stream that allows flexibility and retraining. The future health workforce needs to be able to provide patient-centred care, to have a focus on public health and disease prevention, use information and the new communication technologies, to be able to work as part of a team and partner with a range of organisations and to be dedicated to quality improvement within the health system.

Muir Gray\(^1\) has defined the characteristics of modern health care as:

- Concern with health as well as health care (prevention as well as treatment)
- Concern with patient satisfaction and experience of care
- Evaluation of services in terms of effectiveness, appropriateness and of necessity
- Public involvement in health and health care policy making
- Commitment to continual quality assurance
- Emphasis on accountability.

The future of health care will be more devolved than it is now, technology influenced and with more community and individual participation.\(^2\) Health workforce reform is high on the agenda in Australia, driven in part by the recent Productivity Commission Report — Australia’s health workforce — which could serve as a blueprint for health reform in Australia and presents task substitution as one option in tackling what all acknowledge to be a very complex issue.\(^3\) The Productivity Commission Report presents economic arguments for changing the way we practise. This is often an anathema to health professionals, but to suggest that providers of health services in the twenty-first century have no economic responsibility for what they do is unacceptable. The issue is not specifically

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What is known about the topic?
The existing health workforce is not ill-structured to cope with the increasing burden of disease.

What does this paper add?
This paper discusses role extension and task substitution as potential solutions to the workforce issues.

What are the implications for practitioners?
The author supports the introduction of physician assistants and greater utilisation of nurse practitioners to address our workforce issues.

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THERE IS LITTLE ARGUMENT that delivery of appropriate health care to an increasingly aged population with chronic disease and disability is a major challenge facing countries. Developing countries face problems with infectious diseases such as HIV, malaria and other tropical diseases, and have to cope with cardiovascular disease, diabetes and other health problems. All countries have issues with a shortage of trained health workers and the challenges of adapting their health system to cope with the 21st century.

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about saving money; it is about using resources more efficiently to meet rising demand. The major recommendations of the Productivity Commission report, shown in Box 1, have been accorded only lip service by the federal government.

There is little alignment between the education sector (which provides the tertiary education training places) and the health jurisdictions which provide the clinical training positions. The continuum of education and training is fragmented, particularly medicine, between universities, health departments (postgraduate education authorities) and the specialist Colleges, with little incentive to disturb the status quo. Even the idea of national accreditation and registration authorities has become embroiled in debate on loss of autonomy of geographic (state) or professional groups. Another recommendation of the report, that the Medicare Benefits Scheme be expanded to encourage development of alternate models of health care delivery, including task substitution, has not been embraced by the current federal government.

Health workforce

It has been estimated that the health workforce in Australia constitutes just over 8.9% of the total workforce and is one of the largest workforce groups. The health workforce grew by 26% between 2000 and 2005; over twice the growth of other occupations (10.4%). Robert Fogel (Nobel laureate) recently predicted that economies in the developed world would be driven by an expansion in health care, which will account for 20%–25% of gross domestic product by 2025. With such issues as feminisation, changing attitudes towards working, the ageing population, chronic disease and increasing community expectations for health, we may need to have over 20% of the total workforce in health-related areas by 2025 if we are to maintain the delivery of services that we currently have. There are obviously a number of options for meeting this increasing demand, which include:

- Appropriateness of existing health workforce in relation to current scope of practice
- Extending the role of existing health professionals (nurses and allied health professionals)
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- Creating new types of health workers (clinical/physician/surgical assistants)
- Improving efficiency of health workers by using information and other technologies more effectively
- Placing more emphasis on prevention and health promotion in the community with development of models of self-management
- Changes in models of training.

Role extension and task substitution can involve the creation of new autonomous roles (nurse practitioners) or roles in which non-medical practitioners (physician assistants) work under the supervision of someone else (usually a medical practitioner) — a delegated care model. Supervision may be in person (e.g., a clinical assistant working in a primary care setting with a general practitioner) or remote (e.g., nurses or physiotherapists who may be running minor illness or injury clinics using video links for their medical supervision). There is no doubt that nurse practitioners have a significant and increasing role to play in the Australian health care system, but although they have been around for a number of years, there is still significant resistance by powerful lobby groups such as the Australian Medical Association. Part of this may be the concern about “independent” practice but part is due to the continuing “siloed” approach from many health professional groups within the system.7 The argument against nurse practition-

### 2 NHS Career Framework

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<td>9</td>
<td>More senior staff</td>
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<td>8</td>
<td>Consultant practitioners</td>
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<td>7</td>
<td>Advanced practitioners</td>
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<td>6</td>
<td>Senior practitioners/Specialist practitioners</td>
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<td>Practitioners</td>
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<td>Assistant practitioners/Associate practitioners</td>
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<td>3</td>
<td>Senior health care assistants/technicians</td>
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<td>2</td>
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<td>Initial entry level jobs</td>
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Nurse practitioners and physician assistants in the US work in a diverse environment including individual and group practices, urban and rural areas, hospitals, correctional institutions, inner-city clinics, migrant worker clinics, emergency medical departments and doctors' offices. They constitute one of the fastest growing areas of the health care system with over 11,000 graduating each year. There are nearly 140 accredited physician assistant programs in the US, the majority of them associated with medical or health science faculties. This is important as it provides the opportunity for interprofessional and multidisciplinary learning at an early stage, so that the graduates from these programs already have the experience of working with doctors in the interests of patient care. Of particular interest is the fact that the majority of the physician assistant programs in the US are generalist based and all physician assistants are required to pass a general examination every five years to continue their state and national registration. This is certainly a benchmark that other health professionals in Australia might look at.

The importance of a generalist training is that it allows much more flexibility of the physician assistant pool as, even though they may develop a speciality pathway and work in a focussed area, they can be rapidly retrained if the need or desire arises. This provides a significant flexibility to the health care system which is not apparent if physician assistant programs are specialty based from the start.

In an excellent review of the literature and of the development of extended practitioners in the UK, Buchan, Ball and O'May identified issues related to their introduction into the health system. These include scope of practice, legislative and regulatory requirements, supervision and working relationships and remuneration. Despite these issues, a number of US-trained physician assistants and others have been employed in pilot projects within the National Health System and several universities are developing training programs. These new health professionals are known by various terms (medical or surgical care practitioners, or in some cases physician assistants).

They are deployed in roles across the health sector, but already benefits in the primary care setting are being realised, such as reduced waiting times and improved access, better management of increasing workloads and improved job satisfaction.

As we continue to introduce the concept of physician assistants in Australia their training options need to develop. This will best be done (as in the US) within Faculties of Health Sciences where they can train with other health professionals with whom they will work after graduation. Given that much of their work will be in the area of chronic disease this training should espouse the five basic competencies required of the future health workforce outlined recently by the World Health Organization. These include:
- Patient-centred care
- Partnering
- Quality improvement
- Use of information and communication technology
- Adoption of a public health perspective.

There is significant and growing interest in the development of physician assistant programs in Australia but also pressure to develop specialty models of training driven in part by interests within the private sector. While we applaud the enthusiasm of this sector in embracing opportunities for workforce change it is our strong belief that the generalist model will serve Australia better in the long term and does not preclude the development of specialty interests once general competencies have been achieved.

**Conclusion**

The health workforce needs significant expansion to cope with the service demands of an ageing and chronic diseased population. Future models of health care delivery require a reorientation of the current workforce and development of new types of health workers. The recent report that nearly two-thirds of patients with non-urgent musculoskeletal conditions referred by GPs to an orthopaedic outpatient facility could be appropriately assessed and managed by physiotherapists is...
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a good example of the type of “task transfer” study that should be researched.

Similar projects where radiographers might report on x-rays in a delegated model have also been proposed, but have of course been opposed by powerful self-interest groups.

These new models of health care delivery should be trialled and assessed in the Australian context, and if clinical outcomes are equivalent or better they should be implemented, even though they might disturb the status quo. The introduction of physician assistants and nurse practitioners (particularly in the US) has been an important innovation within the health care workforce. Their emergence has stimulated review of health workforce policies and assumptions of care delivery that might otherwise have not been addressed, and their presence in the system has promoted new opportunities for organisational efficiencies.

As Australia faces significant challenges in health care reform there is an urgent need to explore the role of physician assistants in the Australian context and to evaluate them appropriately. The opportunity exists to experiment with various models of task substitution through education, service delivery and consumer partnerships which would add significantly to our knowledge. If we are going to seize the opportunity to provide, in this country, learning-centred health education, patient-centred health care and a consumer-focused but provider-friendly health system, then we need to work together to ensure its success.

Competing interests
The authors declare that they have no competing interests.

References