

Chapter 7

Health service models

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Learning objectives

- Describe the relationships and respective roles of the Australian, state and territory governments in the funding of health care in Australia.
- Recognise how a health service model that permits flexible work practices can contribute to the recruitment and retention of rural health professionals.
- Understand the roles of medical specialists in rural communities and how these may differ from metropolitan-based specialists.
- Identify the relationships between doctors, nurses and allied health professionals in new primary health care models.
- Appreciate how the population size and distribution in a region will affect the type of health service model that can be implemented.

Introduction

This chapter presents a selection of the range of different health service models that have been developed in rural Australia in response to local community needs, historical conditions and workforce composition.

In 1975, the current Medical Benefits Schedule (MBS) was developed to support universal health care for all Australians. The MBS set the relative values of medical procedures and consultations, which were then used as the basis of the funding available to support the different types of medical practices. At that time, the usual type of medical health service was based on solo or small-group private medical practice. This medical care funding has not changed substantially in Australia over the last 30 years. State and territory governments are responsible for hospital care and the Australian Government is predominantly responsible for outpatient or community care.

In many cases, the traditional model of clinical practice may not be viable in many rural communities (AHWAC 2004). As doctors leave or retire from clinical practice in small

communities, the burden of service delivery on doctors who remain increases. As a result, in the last decade, a health professional workforce shortage has developed in rural areas (Joyce et al 2006). However, the workforce crisis has led to the development of innovative health service models, based on population characteristics and remoteness of local communities (Wakerman et al 2006). Some of these are described in Table 7.1.

Table 7.1 A range of health service models that operate in rural Australia

Location	Health service model	Examples
Towns with populations greater than 5000	Discrete services Local specialist services Diagnostic services	Visiting medical officers Private general practitioners and allied health providers Public hospital and community health facilities
Small or defined catchment populations	Integrated services Comprehensive primary care services	Multipurpose service Primary health care team Indigenous community-controlled community health services
Small rural or remote areas	Outreach or telemedicine services Hub-and-spoke model of service delivery Fly-in-fly-out services	Royal Flying Doctor Service Allied health service (NWQld model) Telepsychiatry Teledermatology Teleotscopy

Source: modified from Wakerman et al (2006)

A rural town with a population of more than 5000 people is likely to have discrete health services, which might include a state-funded public hospital providing acute care and a range of diagnostic services. In the community there will be private GP services, private or public specialist services and a range of allied health and support services.





Case study 7.1 Apple Health Care

Apple Health Care was established in 2005 by the division of general practice in Tamworth, a regional NSW town with a population of approximately 43 000. Creation of the infrastructure was made possible by contributions from the Australian Government and the regional council. Apple Health Care is a not-for-profit organisation that reinvests profits into improving local community health care. Tamworth has a large number of rural specialists, so there tends to be less GP involvement with the hospital compared with other towns.

The doctors working at Apple Health Care derive a percentage of their earnings from a traditional fee-for-service model. The practice entity is responsible for the administrative components of the medical practice, which enables the doctors to focus on delivering medical care. This managed practice ‘Easy entry, gracious exit’ model (Boucher and Lynch 2003) manages the practice, employs staff and negotiates a package with the doctor which might include annual leave, accommodation, transport and a predictable income. The practice charges private fees except for those clients entitled to a concession health care card.

Apple Health Care employs salaried practice nurses who provide support services, including:

- aged care assessments
- immunisations
- blood pressure and chronic disease management
- Pap smears
- antenatal assessment
- triage and acute care.

Allied health professionals co-located in the practice also provide a range of health care services, such as podiatry, clinical psychology and specialist psychiatric services. By promoting this interprofessional team focus within a fee-for-service environment, the practice was able to recruit four full and part-time GPs and two practice nurses in the first 12 months of operation.

Discussion

The development of any new health service model requires:

- a supportive government policy framework
- collaboration between Australian, state and territory governments on funding
- support from the local community for change in the mode of service delivery.

The most common example of a discrete service is a general practice that is owned and run by one or more GPs, employing office and practice support staff. Discrete general practices require large capital infrastructure investment by GPs to purchase an existing practice or to set up a new practice. This style of service is becoming less economically viable or practical because of declining populations in many rural communities, increased

costs and the lack of a rural GP workforce. Recent data confirm that GPs see themselves as staying in rural communities for shorter periods of time, and are therefore sometimes reluctant to invest in private medical infrastructure in rural areas (ARRWAG et al 2006). Practice models such as Apple Health Care address these issues for GPs.



Case study 7.2 Specialist care in a rural practice

Tamworth Rural Referral Hospital has a busy general paediatric unit with more than 10 000 children presenting to the emergency department and more than 3000 admissions to the children's ward each year. In 2001, there were two private practice Visiting Medical Officer paediatricians who were required to work on call every other weekend. They had no support other than one junior medical officer. The paediatric service in the town was teetering on the brink of collapse. A staff specialist model was proposed, with recruitment directed towards specialists attending at the hospital for an average 40-hour week.

By 2006, there were five staff specialist paediatricians, two full-time and three part-time, making a total workforce of 3.9 full-time equivalent paediatricians. In addition to providing the acute care roster, the paediatricians provide outpatient consultations. The hospital is able to receive funding from Medicare and insurance funds to help offset the cost of employing staff specialists for these consultations. This has resulted in no overall net cost to the NSW State Government to establish this larger workforce. There has been a transfer of responsibility for the running of several small individual private practice entities to the state health service, to cover the infrastructure costs of running the outpatient clinics. The impact on the paediatricians who have moved from private practice has been a minimal drop in income, but a large reduction in workload, an improvement in working conditions, and access to paid annual and study leave compensates for the income loss. In addition, this rural regional specialist workforce has been stable for over three years.

Discussion

Across rural NSW in 2005, 28 out of 55 rural paediatricians were working as staff specialists. Furthermore, 70% of paediatric trainees in Australia are women and many are in their mid-30s at the beginning of their careers. In order to boost recruitment, health service models need to allow for more flexible employment options. This service model at Tamworth Rural Referral Hospital offers a way to provide services in regional hubs, including local 24-hour care and outreach to rural and remote areas beyond (Jones 2004), but this model may not be applicable to all specialist groups. 'Easy entry, gracious exit' models of service delivery draw on the lessons learnt in the rural GP and paediatric health service models to look at sustaining rural health services in the future.

The bulk of the literature surrounding the health professional workforce shortage has focussed on the GP workforce (Wilkinson 2000a). However, in large rural centres where there are public and private hospitals providing specialised care, there is an obvious need for a rural specialist workforce. Only 10% of specialists reside in the regional and rural communities of Australia where 30% of the population lives (Productivity Commission

2005). Specialists who practice in rural and large regional settings need to have generalist skills.



Case study 7.3 Boggabri multipurpose service

Boggabri, a small rural town of 1500 people, is 40 km from Gunnedah and approximately 100 km from Tamworth where there is a large regional hospital providing specialist services. All health services in Boggabri are co-located, including a two-doctor general practice, the local ambulance service and the Boggabri Health Service, a multipurpose service (MPS).

The MPS provides an emergency service, and four acute care beds, a remote X-ray service and a 16-bed residential aged care facility that provides both respite and community health services. The workforce employed by the MPS includes nursing staff, community health staff and the two GPs. In addition, visiting allied health, community health and specialists from surrounding centres provide care at the MPS.

The two GPs based in Boggabri provide 24-hour medical cover for the community. They are employed by a medical company that provides housing assistance, a motor vehicle and income with guaranteed locum and holiday relief.

The Australian Department of Health and Ageing funds the aged care beds and other primary care services, and NSW Health provides the acute care hospital services. There is a single management structure and funds are allocated on the basis of local need.

The MPS Program is funded jointly by the Australian and state/territory governments. These services are appropriate for towns with populations that are too small to sustain either an aged care facility or an acute care hospital facility (catchment 1000–5000 people). Health services are co-located within a designated area, funding sources are pooled and reallocated according to locally defined needs, and a single management structure is established.

Discussion

There are advantages in co-locating health services in small communities, including:

- improved coordination and integration of services
- improved communication, both formal and informal, between services and professionals
- roster sharing between staff (eg a remote area nurse, a GP and an ambulance officer) for first response calls
- a single management structure to better dictate local priorities.

However, ensuring adequate funding and infrastructure to maintain small facilities is a constant challenge, and funding formulas have been slow to take account of the added costs of recruitment and retention of staff in small communities. Even with the efficiencies achieved through new service models, health care is more expensive to provide in rural and remote communities than in large capital cities.

Many communities in Australia are just too small to sustain the full range of health professionals required to deliver modern health care. Outreach services (eg fly-in, fly-out services funded by the Medical Specialist Outreach Program [NRHA 2004]), and the Royal Flying Doctor Service may operate in these locations. It is increasingly difficult to recruit professionals to work in isolated or solo practice due to factors such as after-hours and on-call commitments, and limited access to professional development and locum support. An outreach service enables a critical mass of health professionals to be employed in a larger 'hub' location, to provide services to smaller 'spoke' communities.

Virtual outreach services have enormous potential in service provision to remote areas. The use of telemedicine (eg teleradiology, telepsychiatry and video-otoscopy) are allowing diagnostic and support services to be provided by practitioners who may be thousands of kilometres away. Other potential virtual services are specialist or generalist telephone triage services.



Case Study 7.4 Community-controlled health service model: the Indigenous Medical Service model

Since the establishment of the first Aboriginal Medical Service (AMS) in 1971 at Redfern in New South Wales, there are currently at least 130 Aboriginal Community Controlled Health Organisations (ACCHOs) operating across Australia. AMSs are diverse in their composition, ranging from very large services employing medical practitioners and an assortment of nursing and allied health staff to smaller services relying primarily on Aboriginal and Torres Strait Islander Health Workers (AHW) and nurses to provide the bulk of the primary care.

AHW have a unique professional role in ensuring the delivery of culturally safe health care to Indigenous people. The role of the AHW also includes advocacy, liaison and representation, along with a proactive approach to health care. AHW are key advocates for Indigenous clients and help ensure that complicated treatment plans can be followed by Indigenous clients who often have difficulties with literacy and do not feel culturally safe in hospital health services. The success of AHW is due to their knowledge of the communities and the people in them. They can facilitate the delivery of health care with their understanding of how health problems affect the clients in a broader social context of disease. This also assists in making issues of cultural security less challenging.

Discussion

The advantages of the community-controlled AMS model are numerous. Service delivery, including emergency care, outreach services, acute health services and counselling is complemented by a variety of health education and preventative programs. The guiding principle behind the model is the provision of comprehensive primary health care that goes beyond medical care and addresses holistically the wellbeing of Indigenous communities.

Each service is culturally and socially unique to the area and responsible to a local community-based board, which in turn is supported by a state, territory and national

network, the National Aboriginal Community Controlled Health Organisation (NACCHO) network. The AMSs operate on the following philosophy:

Aboriginal health is not just the physical wellbeing of an individual, but is the social, emotional and cultural wellbeing of the whole community, in which each individual is able to achieve their full potential, thereby bringing about the total wellbeing of their community. It is a whole-of-life view and includes the cyclical concept of life-death-life. (NAHSWP 1989)

A collaborative model ensures that key linkages occur between mainstream health providers and AMSs to maximise socially and culturally appropriate service provision. By adopting a more comprehensive and collaborative working model in primary health care delivery, the health system can meet the needs of the Indigenous community more effectively.



Key points

- Health services vary in their structure and workforce composition depending on the size of the surrounding community.
- New health service models require integration and collaboration between the Australian and state/territory governments, and local communities.
- Successful new models of health service delivery allow for flexible work choices for the health professionals they employ.
- Community-controlled AMSs offer a strategy to enable Indigenous people to access culturally secure health care.



Recommended readings and resources

- Australian Health Workforce Advisory Committee (2004). *Annual Report 2003–2004*, AHWAC Report 2004.3, AHWAC, Sydney.

Provides data on the health workforce and the ratio of health professionals living in each geographical zone in Australia.

- Health Workforce Queensland (2005). *Solutions to the Provision of Primary Care to Rural and Remote Communities in Queensland*, HWQ, Brisbane.

Details some of the strategies being used to support rural practice in Queensland and describes alterations to existing models that may address workforce shortages.

- Productivity Commission (2005). *Australia's Health Workforce*, Research Report, Canberra.

A key planning paper exploring future health workforce needs, organisation and effectiveness in Australia.

- Wakerman et al (2006). *A Systematic Review of Primary Health Care Models in Rural and Remote Australia 1993–2006*, Australian Primary Health Care Research Institute, Canberra.

Describes the relationship between the organisation of primary health care services in rural Australia and the size of the community they serve.



Learning activities

The following tasks may be done individually or in groups. For many of these activities there is no current correct answer, so the next generation of health professionals should try to think through their own solutions.

1. Identify and describe what infrastructure and staff you would need to run a model primary health care practice.
2. What tasks do you think each of the health professionals working in the practice should be doing?
3. How could you use information and communication technology in modern health care delivery?
4. List three differences and three similarities in health care between clients in a capital city and clients in a small rural town with a population of 15 000.
5. How do you think doctors, nurses and allied health professionals should work together in primary health care?
6. As a group, research:
 - the role of hub-and-spoke regional health services in providing care in dispersed communities
 - the difference in practicing as a nurse, allied health professional or doctor working in a general hospital in a large country town compared with a metropolitan hospital
 - the differences and challenges that face Aboriginal and Torres Strait Islander Health Workers involved in a community-controlled health service
 - why specialists in obstetrics, orthopaedics, radiology and psychiatry are difficult to recruit, even to large country towns
 - a design of an ideal health service that incorporates GPs, nurses, allied health professionals and medical specialists working in a rural setting and compare this ideal with what occurs in the real world.