

# Physician assistants: employing a new health provider in the South Australian health system

Phyllis B Ho and Guy J Maddern

A pilot trial of introducing physician assistants (PAs) into the South Australian health care system, sponsored by SA Health, was recently conducted. Six United States-trained PAs were employed across three sites — Queen Elizabeth Hospital (QEH), Royal Adelaide Hospital and Flinders Medical Centre. QEH employed two PAs from October 2008 to October 2009. In this article, we document the experience of introducing this new type of health professional at QEH and highlight problems that arose during the early stages of the trial.

## The need to trial a new health professional

The Productivity Commission's report on the Australian health workforce in 2005 advised of future workforce shortages due to: decreasing working hours, more women in the workforce, an ageing population and workforce, and increasing case complexity. It recommended a need to explore alternative models of health care and health professional roles.<sup>1</sup> The Journal ran a series of articles on task transfer in 2006, in which it was noted that the development of the PA profession could help to improve access to health care, enhance efficiency and skill mix in clinical practice, and increase workforce supply.<sup>2</sup> In 2008, a Parliamentary Library report recommended that the PA role, adapted to suit the Australian health care setting, may be required in the future in Australian health care.<sup>3</sup> As outlined in Box 1, PAs were envisaged as health professionals who would work closely with a physician (doctor) and therefore improve the quality and quantity of medical service.

SA Health's 2007–2016 health care plan includes creating “new roles to free up the time of highly skilled professionals to care for those most in need”.<sup>8</sup> Queensland Health is also looking at creating new roles — it conducted a pilot trial that concluded in May 2010, in which five US-trained PAs worked at four sites over 12 months.<sup>9</sup>

## Planning the physician assistant pilot trial

The SA Physician Assistant Steering Committee was formed as a result of meetings held by the SA Workforce Reform Committee, which saw the PA as a possible new health role that could be introduced to address workforce shortage issues. The Steering Committee's role was to provide oversight in the development, implementation, governance and management of the trial, to maximise clinical outcomes and safety and to advise the Chief Executive of SA Health and SA's Minister for Health on the applicability of the PA role.<sup>10</sup> Its first meeting was held in mid September 2007.

The Department of Surgery at QEH had started to explore the idea of trialling US-trained PAs before the Physician Assistant Steering Committee's official call for expressions of interest in November 2007.<sup>10</sup> In early November 2007, QEH appointed a Project Officer who assisted in establishing contact with a number of US universities that train PAs.

In January 2008, official advertisements were placed for two PA positions as part of the QEH trial, specifying credentials that were detailed on the National Commission on Certification of Physician

## ABSTRACT

- New health roles and models are needed to address future workforce shortages in Australian health care.
- A pilot trial of introducing two United States-trained physician assistants (PAs) at Queen Elizabeth Hospital, from October 2008 to October 2009, demonstrated difficulties in introducing PAs into the South Australian health system.
- Unforeseen delays in planning and implementing the trial occurred. This led to a loss of personnel and a second round of recruitment.
- The PAs' scope of practice was limited, and they could not demonstrate their work as they do in the US. Full use of their prescribing licence was not allowed until 3 months into the trial, and their authority to order radiology tests was limited.
- The issues faced at Queen Elizabeth Hospital could be avoided in future trials, ensuring a smoother trial period.

MJA 2011; 194: 256–258

Assistants website (<http://www.nccpa.net>). Face-to-face interviews were conducted in the US by the hospital's PA supervisor, and two PAs were recruited by mid January 2008. The hospital's human resources department helped with the application process for the PAs to obtain Subclass 457 visas. This required extensive communication with the Department of Immigration and Citizenship as the PA was not a recognised profession in Australia. (This process commenced in March 2008, once the two PAs were recruited.)

The trial was due to start in March 2008, but the Steering Committee required another 6 months to obtain more information about the PA role, including information from overseas sources. The start of the trial was therefore delayed until October 2008, and a second round of recruitment was required during February 2008 to replace one of the previously recruited PAs who was no longer available.

The Steering Committee ensured that interested parties were involved in the formation of the SA Physician Assistant Evaluation Committee, whose main focus was to oversee the evaluation process. This committee consisted of members of the Steering Committee and representatives of the Australian Medical Association. In addition, the SA Salaried Medical Officers Association and Australian Nursing Federation were consulted regarding the parameters of the evaluation. Furthermore, independent evaluators were recruited via a tender process and appointed in September 2008.<sup>11</sup>

Before the two PAs arrived at QEH, the hospital formed a trial-site implementation group that consisted of interested parties from the hospital. They included medical, nursing, allied health, human resources and administration staff, as well as representatives of the Royal Australasian College of Surgeons. Information regarding the trial was disseminated to the implementation group by the Project Officer at QEH and opportunities for asking questions were

## 1 What is a physician assistant (PA)?

The American Academy of Physician Assistants defines PAs as ... health professionals who practice medicine as members of a team with their supervising physicians. PAs deliver a broad range of medical and surgical services to diverse populations in rural and urban settings. As part of their comprehensive responsibilities, PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and prescribe medications.<sup>4</sup>

Since the profession originates from the United States, the term "physician" is used rather than "doctor" to maintain consistency.

The PA profession emerged in the US in 1965 in response to a shortage in the health workforce and an excess of skilled corpsmen trained in the medical support role but who had no recognised civilian health qualifications. The founder of the profession, Eugene Stead, envisaged a health professional who would work closely with the physician and therefore improve the quality and quantity of medical service.<sup>5</sup> He founded a 2-year PA course at Duke University. Today, PA programs in the US are still based on this set-up, with about half the course dedicated to preclinical studies and half to clinical terms. The programs are postgraduate and many institutions require their applicants to demonstrate 45 months of health care experience (in addition to their first degree) before commencing training.<sup>6</sup> Currently, graduates from most PA programs in the US are awarded a masters degree. Before entering practice, graduates need to pass the Physician Assistant National Certification Examination. To ensure that they maintain their general medical knowledge, PAs are also required to complete 100 hours of continuing medical education every 2 years and to pass a recertification exam every 6 years.<sup>7</sup> ◆

provided. The important functions of these meetings were to educate the implementation group, address the group's concerns, and create an environment where the trial was viewed as a trial rather than a turf war.<sup>12</sup> A timeline that summarises the planning and implementation of the trial is shown in Box 2.

## Implementing the physician assistant pilot trial

The trial at QEH commenced with a 5-day orientation period in late October 2008, which covered clarification of contracts, payroll processes and health insurance arrangements and familiarisation with the Australian health system. The two PAs were employed in the Department of Surgery, one in the division of upper gastrointestinal surgery and the other in colorectal surgery. A PA practice plan — detailing authority to prescribe medications, authority to order radiology and pathology tests, and level of supervision — was created and signed by the PAs and their supervisors in November 2008.<sup>13</sup> There was no issue with obtaining authority for the PAs to order pathology tests as covered in the existing schedule between QEH and SA Pathology. However, obtaining authority for PAs to prescribe medications and order radiology tests was difficult; the PAs needed to arrive in Australia before authority for these tasks could be given.

**Authority to prescribe medications.** The PAs were authorised to prescribe medications as allowed by Section 18 of the *Controlled Substances Act 1984* (SA). This licence was authorised on 23 October 2008 and allowed the PAs to possess, prescribe and administer Schedule 4 drugs.<sup>13,14</sup> The application for the licence was submitted in July 2008 by the Project Officer on behalf of the PAs.

For the first 3 months of the trial, there was a formulary list at the hospital pharmacy from which the PAs could prescribe, which was not extensive. Further negotiations between the PAs, the Department of Surgery and the Department of Pharmacy resulted in additional prescribing rights, as allowed by the licence. To accommodate these developments, the Department of Pharmacy altered its regulations to allow pharmacists to dispense medications ordered by the PAs. This amendment occurred in December 2008. However, governance arrangements that placed patient safety first prohibited the PAs from prescribing Schedule 8 drugs of dependence or signing for highly specialised drugs that required medical specialist authority. They were, therefore, not authorised to prescribe common postoperative medications such as oxycodone, morphine and fentanyl, which limited their efficiency in the team. When ordering medications, PAs were required to sign and then stamp the order stating that they were the PA for their supervisor.

**Authority to order radiology tests.** The process of obtaining authority to order radiology tests was commenced by the Project Officer in July 2008, with assistance from the Steering Committee. However, special permissions were required. Authority to order plain x-rays similar to exemptions granted to nurse practitioners was granted by the Environment Protection Authority (EPA) of SA on 13 November 2008.<sup>15</sup> The EPA was lobbied (during a meeting held between the EPA, one of the PAs and the PAs supervisor) to give the PAs authority to order computed tomography (CT) scans. The initial response from the EPA was encouraging, but the request was eventually declined. The result of this restriction was that when PAs were directed by a senior registrar or consultant to order a CT scan, the PA would need to fill in a form and then find a team member to sign it — a disappointing outcome.

## Role of the physician assistants at the trial site

The PAs assisted in daily ward rounds, unit meetings and outpatient clinics. They were also involved in running obesity and liver clinics that are usually run by one consultant. In addition, they conducted audits of pathology reporting, compiled weekly pathology results, and compiled gentamicin usage data over the 12 months of the trial. Employment of the two PAs enabled QEH's Department of Surgery to schedule additional clinics, such as a preadmission clinic for patients scheduled for colonoscopy and a rectal bleeding clinic.

The PAs had authority to order pathology tests, and limited authority to prescribe medications and order radiology tests. They were prohibited from carrying out certain medical duties that were outside of their assigned roles unless an assigned medical supervisor was present or immediately available by electronic communication.<sup>10</sup> They were also prohibited from signing some forms, including death certificates, private prescriptions and workers compensation forms.

## Lessons for the future

At QEH, it took 13 months to establish policy that allowed the introduction of PAs — 6 months longer than expected. Unforeseen issues arose mainly because the PA is a new health profession in Australia. Few personnel working in the health sector and organisations such as the EPA and Department of Immigration and Citizenship were aware of the training and qualifications of a PA, which resulted in understandable caution. In addition, the PAs could not exercise the full scope of practice consistent with their US qualifications; it took 3 months from when they commenced work at QEH for them to be allowed full use of their prescribing

## 2 Timeline for planning and implementing the physician assistant (PA) pilot trial at the Queen Elizabeth Hospital (QEH)

Month	Event
September 2007	First South Australian Physician Assistant Steering Committee meeting
November 2007	Project officer appointed at QEH, to establish contact between QEH and United States PA institutions
November 2007	Steering Committee's official call for expressions of interest in the pilot trial
January 2008	Job advertisements placed for two PA positions at QEH for the trial, and face-to-face interviews held in the US. Two PAs recruited
February 2008	Three sites for the trial endorsed by the Steering Committee, with six PA positions (two at each site): QEH, Department of Surgery; Royal Adelaide Hospital, Department of Anaesthesia and Intensive Care; and Flinders Medical Centre, Paediatric Unit
February 2008	Commencement of trial at QEH deferred to October 2008, instead of March 2008
February 2008	Second round recruitment required for QEH trial, to replace one of the previously recruited PAs who was no longer available
July 2008	Request submitted to Environment Protection Authority (EPA) to gain authority for PAs to request radiological tests
September 2008	Physician Assistant Evaluation Committee formed at QEH
September 2008	Independent contractors appointed to evaluate the PA role and its fit into the SA health system using data from the three SA trial sites
September 2008	Trial-site implementation group formed at QEH
October 2008	Beginning of trial at QEH
November 2008	Authority given by EPA for PAs to request plain x-rays only
November 2008	Practice plan signed
December 2008	PAs able to use full prescribing rights as allowed by their Schedule 4 drugs licence
October 2009	Conclusion of trial at QEH

licence, and they were not able to request CT scans during the trial. This limited the trial site's experience with the PA profession.

In future, timelines for PA pilot trials should be established before recruitment, to prevent loss of personnel. Similarly, barriers such as limitations on authority to prescribe and to order radiology tests need to be addressed before the commencement of a trial, so that the PA role can be demonstrated fully and so that confusion and frustration are prevented. Future trials should, therefore, be able to avoid the issues faced at QEH and factor in expected delays to ensure a smoother trial period.

### Conclusion

The PA role and its fit into the SA health system is currently undergoing evaluation by independent contractors (Healthcare Management Advisors). In addition, practice, safety, quality and efficiency data from the QEH pilot trial (yet to be published), as

well as data from similar pilot trials in SA and Queensland, will provide further insight into how the PA role can be introduced to the Australian health system.

### Acknowledgements

We thank Dawanda Pesicka and Amy Schafer (the PAs who took part in the pilot trial at QEH) for their enthusiasm and cooperation in the PA trial, Sally Lauder (Project Officer) for assisting in providing the documentation of correspondence and Sue Stack (Principal Consultant, Workforce Reform and Information, Workforce Development, SA Health) for clarifying the various committee structures involved in the development of the SA health PA trials.

### Competing interests

Guy Maddern was the leader of the PA trial and is Head of the Department of Surgery at QEH. Phyllis Ho independently collected data from the QEH trial and is the recipient of a research scholarship from the QEH Research Foundation.

### Author details

**Phyllis B Ho**, MB BS, Master of Surgery (Research) Candidate  
**Guy J Maddern**, MB BS, PhD, FRACS, RP Jepson Professor of Surgery  
 Queen Elizabeth Hospital, University of Adelaide, Adelaide, SA.  
**Correspondence:** [guy.maddern@adelaide.edu.au](mailto:guy.maddern@adelaide.edu.au)

### References

- 1 Australian Government Productivity Commission. Australia's Health Workforce. Productivity Commission Research Report. Canberra: Productivity Commission, 2005. [http://www.pc.gov.au/\\_data/assets/pdf\\_file/0003/9480/healthworkforce.pdf](http://www.pc.gov.au/_data/assets/pdf_file/0003/9480/healthworkforce.pdf) (accessed Mar 2009).
- 2 Hooker RS. Physician assistants and nurse practitioners: the United States experience. *Med J Aust* 2006; 185: 4-7.
- 3 Jolly R. Health workforce: a case for physician assistants? Parliamentary Library: information, analysis and advice for the parliament. 25 March 2008, No. 24, 2007-08. <http://www.aph.gov.au/library/pubs/rp/2007-08/08rp24.pdf> (accessed Jan 2009).
- 4 American Academy of Physician Assistants. About physician assistants. <http://www.aapa.org/about-pas> (accessed Mar 2009).
- 5 Carter R, Ferrell K, Germino V, Scott P. In the beginning: a PA history roundtable. *JAAPA* 2005; 18: 26-30.
- 6 Jones P. Physician assistant education in the United States. *Acad Med* 2007; 82: 882-887.
- 7 National Commission on Certification of Physician Assistants. Certification Process Overview. <http://www.nccpa.net/CertificationProcess.aspx> (accessed Jan 2010).
- 8 SA Health. South Australia's health care plan 2007-2016: the South Australian government's plan for health care over the next 10 years. Adelaide: SA Health, 2008. <http://www.publications.health.sa.gov.au/spp/3/> (accessed Jan 2011).
- 9 Kurti L, Rudland S, Wilkinson R, et al. Evaluation of the Queensland Physician's Assistant Pilot — final report. August 2010. Brisbane: Queensland Health, 2010.
- 10 Government of South Australia, Department of Health. Committee Structure and Reporting Relationships SA Health – Physician Assistant Trial. Terms of Reference – SA Health Physician Assistant Steering Committee, July 2007.
- 11 Minutes from South Australian Workforce Reform Committee and South Australian Physician Assistant Steering committee.
- 12 Reines HD, Robinson L, Duggan M, et al. Integrating midlevel practitioners into a teaching service. *Am J Surg* 2006; 192: 119-124.
- 13 South Australian Health Physician Assistant Steering Committee. Standards for the recruitment and management of physician assistants version 17 2008. SA Health, 2008.
- 14 Government of South Australia, Department of Health. Drugs and poisons licences. <http://www.health.sa.gov.au/pehs/drugs-poisons-licences.htm> (accessed Jan 2010).
- 15 Baldry K. *South Australian Government Gazette* [internet] 2008; Nov 20 (No.66): 5169. [http://www.governmentgazette.sa.gov.au/2008/november/2008\\_066.doc](http://www.governmentgazette.sa.gov.au/2008/november/2008_066.doc) (accessed Jan 2010).

(Received 26 Oct 2009, accepted 22 Sep 2010)

□