

# “If it wasn’t for OTDs, there would be no AMS”: overseas-trained doctors working in rural and remote Aboriginal health settings

Marisa T Gilles, John Wakerman and Angela Durey

## Abstract

Australian-trained doctors are often reluctant to work in rural and remote areas and overseas-trained doctors (OTDs) are recruited to practise in many rural Aboriginal medical services. This paper focuses on recent research carried out in Australia to analyse factors affecting OTDs’ professional, cultural and social integration and examine their training and support needs. Ten case studies were conducted throughout Australia with OTDs, which also included interviews with spouses/partners, professional colleagues, co-workers, and Aboriginal and Torres Strait Islander community members associated with the health service.

Key themes emerging from the data across all informants included the need to better address recruitment, orientation and cross-cultural issues; the importance of effective communication and building community and institutional relationships, both with the local health service and the broader medical establishment.

**Aust Health Rev 2008; 32(4): 655–663**

AUSTRALIA CONTINUES to experience medical workforce shortages, especially in rural and remote areas.<sup>1,2</sup> Despite various government and rural health workforce programs,<sup>3,4</sup> and numbers of doctors increasing at a rate faster than population growth, the number of rural and remote full-time-equivalent primary care practitioners is falling.<sup>1,2</sup> Australian-trained doctors are reluctant to leave the cities,<sup>5,6</sup> so rural medical services rely heavily on overseas-trained doctors (OTDs), who currently comprise about 31% of the overall medical workforce.<sup>7</sup> There are no national data available on OTDs working in Aboriginal health services (AHSs) or in rural and remote areas, but jurisdictional data, and increases in temporary

## What is known about the topic?

Aboriginal Community Controlled Health Services (ACCHSs) rely heavily on overseas-trained doctors (OTDs). Issues related to recruiting and retaining OTDs have been well documented.

## What does this paper add?

This study builds on existing research by providing the perspectives not only of the OTDs, but also those of ACCHS staff and community members. Findings unique to this study are that OTDs working in Aboriginal health services need to understand the complexity and diversity of Indigenous cultural, historical and political issues; the different structures of services; and the different status doctors hold within ACCHSs.

## What are the implications?

The variability of orientation programs indicates the need for consistency across different jurisdictions. This paper suggests policy areas, such as systematic cultural, historical and political orientation at a local level, dedicated resources for mentoring and training, better “matching” of OTDs, their spouses and children to locations and support for OTDs to complete fellowship training, that need to be addressed as a matter of urgency to meet ongoing medical workforce needs.

**Marisa T Gilles**, BSc, MB ChB, MPH, MAE, FAFPHM, Public Health Physician  
Population Health, Western Australia Country Health Service, Geraldton, WA.

**John Wakerman**, MB BS, MTH, FAFPHM, FACRRM, Director  
Centre for Remote Health, A Joint Centre of Flinders University and Charles Darwin University.

**Angela Durey**, PhD, MAA, BA(Hons), Lecturer  
Combined Universities Centre for Rural Health.

Correspondence: Dr Marisa T Gilles, Population Health, Western Australia Country Health Service, Shenton Street, Geraldton, WA 6530. [marisa.gilles@health.wa.gov.au](mailto:marisa.gilles@health.wa.gov.au)

resident doctors working in “areas of need”, indicate that at least 38% are OTDs.<sup>8</sup>

A substantial health status gap exists between Indigenous and non-Indigenous Australians.<sup>9</sup> Aboriginal Community Controlled Health Services (ACCHSs) were established to close this gap by improving access to primary health care for Aboriginal and Torres Strait Islander (Indigenous) Australians. ACCHSs are governed by boards elected from the communities they serve. Many ACCHSs rely on OTDs,<sup>5</sup> whose pivotal role in helping resolve medical workforce issues needs greater recognition.<sup>10</sup> In ACCHSs doctors are part of a multidisciplinary team with governance arrangements whereby the doctor is not necessarily a dominant player. This model differs from private general practice where the general practitioner often owns the service and controls how it is structured and operated. Issues related to recruiting and retaining OTDs have been well documented,<sup>4,11,12</sup> and knowledge about ACCHSs is well established<sup>13</sup> but little is known of OTDs’ experiences working in AHSs.

A more complex analysis of overseas-trained doctors’ understanding of the roles that they are to play in rural and remote health — particularly in Aboriginal communities — and their projections for their personal and professional lives in Australia is essential for further development of policy in this area. Recognition of the dynamic nature of the workforce, with an emphasis on orientation and support, balanced supply and attrition, rather than retention per se, is a desired outcome.

In response, a national qualitative research project was conducted exploring socio-cultural issues influencing OTDs’ professional integration into AHSs. This paper presents findings on three aspects of the research project: 1) Indigenous community and peer perspectives regarding OTDs; 2) ongoing gaps in orientation, training, and learning needs; 3) policy implications of these findings.

## Methods

The methodological framework for this study was based on findings from Arkles’<sup>12</sup> literature review

of OTDs in Australian Indigenous health services. We carried out a qualitative study using a case study approach. Cases were purposefully sampled to ensure diversity in gender, geographical location, type of health service, and countries of origin. A case was defined as: an OTD providing public, private or primary care services where a substantial proportion of the practice population were Aboriginal and/or Torres Strait Islander people, together with OTDs’ partners, co-workers, and Indigenous community members associated with the health service.

Selection of regions was based on location of researchers and resource availability which resulted in case studies being conducted in three jurisdictions: Queensland, the Northern Territory and Western Australia (Box 1).

The research team was selected for their experience and knowledge of OTDs working in Indigenous health. They included four OTDs, three Indigenous and four non-Indigenous researchers and three Australian-trained doctors working in Indigenous health settings.

Ethical approval was received from the Central Australian Human Research Ethics Committee, Queensland Health, the Aboriginal Health and Medical Research Council of New South Wales (AH&MRC), and the Western Australian Aboriginal Health Information Ethics Committee. Letters of endorsement were received from the National Aboriginal Community Controlled Health Organisation, the Queensland and Islander Health Forum, the Aboriginal Health Council of Western Australia, and Geraldton Regional Aboriginal Medical Service.

Each OTD’s employer was contacted for permission to speak to the selected OTD. The OTD was then approached by a member of the research team, as were other participants in the case study. Verbal and written information about the project was provided before written consent.

Questions for semi-structured interviews were informed by the findings of the literature review.<sup>12</sup> For OTDs, this covered motivation to work in Australia and in Indigenous settings, expectations of Indigenous health, previous experience, orientation, training and support

**I Overseas-trained doctor (OTD) case study characteristics, 2006**

	1	2	3	4	5	6	7	8	9	10
<b>Type of service</b>	Hospital	CH	ACCHS	Private	Private	ACCHS	ACCHS	ACCHS	ACCHS	ACCHS
<b>Location*</b>	4	6	4	4	4	6	6	6	5	4
<b>Sex</b>	M	M	M	F	M	F	F	M	M	M
<b>Married</b>	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
<b>Spouse interviewed</b>	no	no	yes (OTD)	no	yes	yes (OTD)	yes	no	yes	yes
<b>Age (years)</b>	45	49	41	35	43	43	41	44	37	52
<b>Cross cultural experience</b>	yes	yes	yes	no	yes	yes	yes	yes	yes	yes
<b>Religion</b>	U	SDA	C	U	U	C	U	U	C	C
<b>Ethnicity of OTDs</b>	S Afr Ind	S Pac Isl	Nig	Eur	Afrikaans	Sri Lankan	Eur	Zimb	Chin/ Malay	Nig
<b>Arrival in Australia</b>	2001	1991	2004	1998	1996	2001	1999	2002	2006	1999
<b>Motivation</b>	Safety	Study	Prof	Rejoin family	Safety	Kids	Join partner	Opp; financial security	Opp; kids	Opp; family
<b>Children &lt;18 y</b>	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Location of family</b>	400 km away	Away sometimes	With him	n/a	Away	With them	With them	500 km away	With them	500 km away
<b>Cultural orientation</b>	None	None	Good	Minimal	None	Excellent	A little	Excellent	A little	None
<b>Length of service</b>	3 y	4 y	1 y 8 m	1.5 y	6 y	3 y	3 y	4 y	<12 m	<12 m
<b>No. OTDs in service</b>	2	1	2	3	sole	>3	>3	>3	3	3
<b>Registration</b>	P	NR	P	P	R	P	P	P	P	P
<b>Visa</b>	TRV	Perm	TRV	Citizen	Citizen	Citizen	Citizen	TRV	TRV	Perm
<b>Future plans</b>	Go home	Stay Private	Go home	Stay Private	Stay ACCHS	Stay Private	Stay? Re work	Stay Private	Stay Private	Stay Private
<b>No. doctors in service</b>	6	>3	0	2	1	>3	>3	>3	3	3
<b>No. additional OTDs</b>	0	0	1	0	0	2	0	0	1	4
<b>No. Indigenous</b>	2	2	5	0	0	2	1	0	2	2
<b>No. non-Indigenous</b>	4	1	3	2	1	0	1	0	2	2
<b>Total no. informants for each case</b>	7	4	10	3	2	5	3	1	6	9

\* RRMA classification. ACCHS = Aboriginal Community Controlled Health Service. CH = community health. C = Christian. U = unknown. SDA = Seventh Day Adventist. S Afr Ind = South African Indian; S Pac Isl = South Pacific Islander; Nig = Nigerian; Eur = European; Zimb = Zimbabwean; Chin = Chinese. Opp = opportunities. P = provisional. NR = not registered. TRV = Temporary Resident Visa. Perm = permanent.

needs, difficulties faced, contribution to capacity building, and future options. Questions for co-workers focused on their perceptions of OTDs' professional and social integration.

Interviews were recorded and transcribed. Each researcher analysed their cases and presented their findings to the group for discussion and further analysis. One researcher independently conducted a thematic analysis of all case studies which was disseminated to the research team for comparison and further discussion. This iterative process identified key themes emerging from the data.

## Results

Ten case studies were conducted in rural and remote Qld, the NT and WA involving a total of 49 participants: ten OTDs, six spouses (two of whom were OTDs), six peer OTDs, 12 other non-Indigenous colleagues and 15 Indigenous staff or board members. Of the ten index cases, the average age of OTDs was 42; seven were men and all were married, all except one with children; ethnic origins included South African Indian, European, South Pacific Islander, African, Chinese Malay and Sri Lankan (Box 1).

Key themes emerging from the data across all informants included recruitment; orientation; cross-cultural issues; communication and community and institutional relationships, both with the local health service and the broader medical establishment (Box 2).

### Recruitment and retention

All ten OTD index cases had migrated in the previous 10 years. Migration motives included the perception of better opportunities for themselves and their children, and security from politically unstable environments. Six OTDs were Australian citizens or permanent residents and four held temporary resident visas. Two planned to return to their country of origin and the rest intended to stay in Australia.

Five of the 18 OTDs interviewed specifically chose to work in Aboriginal health settings, though only one planned to remain in an ACCHS on gaining unconditional registration. During the

recruitment process, all OTDs communicated with multiple private and public agencies and professional groups, often resulting in no clear pathway, inconsistent advice and "too much confusion". OTDs were usually recruited to a specific rural town, though no identified strategies matched location to social needs such as religious amenities, ethnic group, spouse employment or children's education. This adversely affected retention in a rural AHS.

One of the difficulties that I got was the schools for the kids and I eventually had to move my family to [a regional centre 500 km away] and put my children in better schools. The break up of my family in that respect is not very good. — 8/OTD-case/m/Afr

While financial issues were not a significant factor in recruitment, they affected ongoing retention, with some stating that current remuneration did not compete with the mainstream GP market. ACCHS staff views reflected awareness of these factors:

I think the overseas-trained doctors come to this country for a better life and for a better lifestyle and a better income, it may be safety, and it may be education for their children. It may be a lot of issues but they are certainly not coming here to come and work in our AMSs [Aboriginal Medical Services], not specifically. — 10/Co-worker/fj/Aus

### Orientation

Orientation to the Australian health care system (Medicare, the Pharmaceutical Benefits Scheme and referral pathways), Aboriginal health services, cross-cultural matters and information technology was generally found wanting. Many OTDs felt inadequately prepared for practice in Aboriginal health settings where social and historical issues, and the model of health care differed from their previous experience.

What I wasn't quite trained for was just the despair of the patient and sometimes the lack of compliance ... or the disinterest of patients in their own conditions and self care. — 8/OTD-case/m/Afr

OTDs, ACCHS staff and community members identified cultural orientation as critical to working in Indigenous health settings. Implementation was variable, with 14 of the 18 OTDs receiving

minimal orientation and training before commencing practice. All Aboriginal and Torres Strait Islander staff and board members emphasised the need for local orientation to Indigenous health, culture and diversity:

#### Key for quotes

Number of the case study from which quote is taken (1–10)

Position in organisation:

OTD-case – case study overseas-trained doctor

OTD-co-worker

OTD-spouse

Co-worker

Colleague

Community member

f=female; m=Male

Country of origin:

Indig = Indigenous; Aus = Australian; Ind = Indian;

Afr = African; Eur = European.

I know we get a lot of doctors come through here without any formal training in regards to Aboriginal culture and they come here and they don't last too long ... I think it is one of the main reasons ... is because they just don't understand our way of life and the way we live, the issues that we have and the health problems that we have. — *1/community member/m/Indig*

Some OTDs were frustrated at limited opportunities for training in local computer systems before taking on a heavy clinical load in an Aboriginal health setting.

## 2 Major themes identified in overseas-trained doctor (OTD) case studies

Theme	Total no. quotes	OTDs	ACCHS staff/ colleagues	Community members	OTD spouse
Navigating cross-cultural issues	25	4	11	10	na
Institutional relationships					
Positive	4	4	na	na	0
Between	7	6	na	na	1
Negative	13	12	na	na	1
Communication	23	5	15	3	0
Relationships with staff	17	4	13	na	na
OTD perspective	17	17	na	na	na
Relationships with local community	15	7	3	3	2
OTD/spouse relationship	13	9	na	na	4
OTDs specific cultural challenges	9	9	na	na	na
Relationships with local medical community	9	3	na	na	
Relationships with patients intersecting with cultural/professional expectations	8	4	2	1	na
ACCHS staff perspective	7	1	5	1	na
Not specific to OTD but maybe more an AMS issue	6	2	4	0	0
Social integration	5	3	na	na	2
Racism	5	3	0	1	1
CEO cultural/professional expectations	5	1	4	na	na
Nurses tensions	3	na	1	na	2
Cultural identity	2	2	na	na	na

ACCHS = Aboriginal Community Controlled Health Service. AMS = Aboriginal medical service. na = not applicable.

One day, you know, I was told about computer literacy for about fifteen minutes and then from the next day I was supposed to see the patients. — 10/OTD-coworker/m/Afr

### **Cross-cultural issues**

Excellent orientation was available in one setting where OTDs were briefed on socio-political issues affecting Indigenous communities and received cultural mentoring from Indigenous colleagues. Organisational support, such as professional and cultural mentoring, were commonly identified needs. Relationships were strengthened when staff and OTDs met socially and discussed cross-cultural issues, thereby establishing effective relationships within the Indigenous community.

He is not treated as a doctor, he is treated as a person, and he comes up and talks to you in the street and the shops to say hello and if he sees me he asks how is your sugar level this weekend? ... He is a person and he is genuinely interested in your health. — 1/Community member/m/Indig

Although few OTDs discussed racism in the workplace, racial considerations were voiced and led two African OTDs to work in an Aboriginal community.

As soon as we were told it was an Aboriginal community, we knew they were black, we thought that would be a good place to work, just you know, being black. — 3/OTD-spouse/f/Afr

### **Communication**

All cases identified communication as an issue. Doctors with an empathic, enquiring approach became "... part of the family", and those demonstrating individual resilience and optimism integrated well professionally. However, language difficulties were occasionally problematic, requiring interpreting services which were often unavailable:

The communication between practitioners and client is very important. We get a lot of overseas-trained doctors who are also learning English as well, communicating with people who have English as a second or

third language. Communication and language are vital to clinical medical practice. I find it so hard that we don't have any translators or health workers who can speak language to help us ... Australia boasts that it has translators available but when it comes to Indigenous languages it is a joke. — 7/OTD-case/f/Eur

Understanding accents and different cultural norms were important for OTDs' successful professional integration and their acceptance by the Indigenous community:

Well, communication is always a problem between the social groups and between ethnic groups. Every conversation we have makes so many assumptions of each other's knowledge and the shorthand that we talk. I know a lot of overseas-trained doctors come and tell me that they find it hard to understand what these people are on about and the people come to me and say they don't understand what was going on. — 4/Colleague/m/Eur

Nevertheless, the development of relationships between OTDs and their patients often mitigated language difficulties.

One of the overseas-trained doctors I know attends every training and every workshop, and he has gone from being the doctor that nobody could understand, to being the doctor nobody can really understand but they love going to him because he's a great doctor. — 3/Colleague/m/Aus

### **Institutional relationships**

Institutional barriers featured prominently in the integration process. Medical registration was sometimes problematic. Some medical organisations were criticised for not recognising prior medical experience, often leaving OTDs feeling undervalued. Annual renewal of provisional registration and the need to prove their competence exacerbated these feelings and generated uncertainty about the future.

During this whole process I have been feeling controlled, totally not empowered in my

career and my life ... It is an extremely frustrating, depressing and never ending story of proving myself over and over again.

— 7/OTD-case/f/Eur

This lack of assistance for longer term career planning, and sometimes collegiate support, hampered professional integration.

Really they don't look after you well, they don't orientate you well and then there is a lot to be said about the doctors. We are not there to steal anything off them. I have come here for a better life and I think after a few years they should mellow to us but they don't. — 1/OTD-case/m/Ind

OTDs' inability to access Medicare for themselves and their family exacerbated this further.

Yes [Medicare] is very costly. Since we are living here, we are living in this community, we are working, we should be counted as part of the community especially as we are contributing our fair share to the community. I think the foreign doctors and their families should be able to have access to Medicare. — 9/OTD-case/m/Afr

### **Aboriginal health services**

Tension sometimes ensued when OTDs' notions of their status as a doctor were not met. One OTD had settled easily into a metropolitan private practice. When transferred to a rural AHS he had difficulties with expectations of the doctor's role within the health team, wherein "... you don't change the community, you have to change".

Something's wrong ... it must be something that I am doing wrong here or maybe it is because of the orientation was not put in place properly that is making me appear funny to them and that gives me some stress.

— 9/OTD-coworker/m/Afr

OTDs faced with cultural and communication issues, and working in a new paradigm, took longer to build the relationships with the service and its patients.

Well it takes a longer time to be confident in the AMS for most doctors than it might be in

another practice, because in another practice the patients are educated upon the value of doctors. Here the doctor is just someone who is going to treat my sickness. So you see we have to build the trust and the confidence in patients which takes longer, much longer than ... in another practice. — 10/OTD-coworker/f/Ind

Nevertheless, there were examples of an understanding of these challenges, and Indigenous staff were often supportive of OTDs.

[OTDs] are willing to come and work here and they are willing to put up with the difficulties of working in an Aboriginal setting, whereas a few Australian doctors in this setting find it very frustrating.

### **Discussion**

This study adds to existing research<sup>1,11</sup> by documenting for the first time the perspective not only of the OTDs, but also those of ACCHS staff and community members. OTDs working in Aboriginal health services need to understand the complexity and diversity of Indigenous cultural, historical and political issues; different structures of services; and the different status doctors hold within ACCHSs. Complex communication issues and variable support with respect to training and career advice were also identified. These findings are consistent with those of Alexander and Fraser, and Pilotto et al.<sup>14,15</sup> The variability of experience regarding orientation indicates a need for consistency across different jurisdictions, especially when better orientation, induction and support systems do exist.

Some experiences were similar to those of OTDs in Australia generally. OTDs wanted to better understand the Australian health care system, were confused at the plethora of agencies relating to their immigration, recruitment and registration, and articulated the importance of spouse employment and education for children.<sup>15,16</sup>

Rural and remote areas rely on OTDs to maintain services. Institutional practices disregarding OTDs' prior knowledge, experience and skills

cause tension and constrain their professional integration. This is not going to improve until a transparent national system of medical accreditation is implemented.<sup>17</sup> Indigenous Australians need to be confident that they are receiving a high standard of medical care. Lower financial remuneration for employees in AHSs highlights their perceived “second class status” and jeopardises retention rates in rural and remote Indigenous health settings.<sup>17</sup>

Some issues identified in our study are relevant to all rural and remote health services. Health service management systems need strengthening<sup>18</sup> to include formal performance review and career planning (including an Indigenous health pathway) for all staff, not only OTDs. Work-based and GP Division-led professional development should include OTDs’ ongoing medical education and fellowship training needs.<sup>14,15</sup>

Policy implications of these findings include the need for:

- Systematic cultural, historical and political orientation at a local level.
- Dedicated resources for mentoring and training: both professional, from other GPs; educational for professional development, including exam preparation; and cultural, from Indigenous staff or community members.
- Better “matching” of OTDs, their spouses and children to locations. Evidence from the United States demonstrates that if this occurs, retention of doctors improves.<sup>19</sup>
- Consistent information to potential immigrants including: immigration and registration processes; Australian Medical Council examination requirements; fellowship training options; and an introduction to the Australian health care system from a general practice perspective.
- Support for OTDs to complete fellowship training.
- Reducing our over-reliance on OTDs by enhancing strategies to attract Australian-trained doctors to work in rural and remote areas.

Rural and remote Aboriginal health services will continue to rely heavily on overseas-trained doctors for a long time. There is now

growing evidence that consistently highlights areas for action. Timely implementation of these health system improvements and attention to recruitment, orientation, integration and career planning is critical to meet ongoing medical workforce needs in these important services.

## Acknowledgements

The OTD research team also consisted of Peter Hill, Rachelle Arkles, Katia Petersen, Lisa Jackson-Pulver, Vanessa Lee, Condry Canuto, Susan Wearne, Anna Whelan, Anthony Zwi and John Boffa. We appreciate support from the National Aboriginal Community Controlled Health Organisation, the Queensland and Islander Health Forum, the Aboriginal Health Council of Western Australia, the Aboriginal Medical Services Alliance of the Northern Territory and Geraldton Regional Aboriginal Medical Service.

## Competing interests

The authors declare that they have no competing interests.

## References

- 1 Australian Institute of Health and Welfare. Medical labour force 2004. (National health labour force series no. 38.) Canberra: AIHW, 2006. (AIHW Cat. No. HWL 39).
- 2 Health Workforce Queensland. ‘Sinking deeper into the abyss’: a concise overview of current and future trends in the Australian urban, rural and remote general practice workforce. Brisbane: HWQ, 2006. Available at: <http://www.healthworkforce.com.au/main.asp?NodeID=27677> (accessed Sep 2007).
- 3 Rural Health Workforce Australia. Supports available to current and future GPs in rural and remote Australia. Melbourne: RHWA, 2007. Available at: [http://www.rhwa.org.au/site/index.cfm?PageMode=indiv&module=DOWNLOADS&page\\_id=71214](http://www.rhwa.org.au/site/index.cfm?PageMode=indiv&module=DOWNLOADS&page_id=71214) (accessed Sep 2007).
- 4 Australian Rural and Remote Workforce Agencies Group Limited. Recruitment, recognition and retention of overseas trained doctors for the rural and remote medical workforce in Australia. Policy Position Paper. Melbourne: ARRWAG, 2005. Available at: <http://www.rhwa.org.au/site/index.cfm?display=32639&PageMode=indiv&Action=archives&leca=184> (accessed Sep 2008).
- 5 Boffa J. Is there a doctor in the house? *Aust N Z J Public Health* 2002; 26: 301-4.



- 6 Western Australian Health Department (M Kamien, Chairman). Report of the Ministerial Inquiry into the Recruitment and Retention of Country Doctors in Western Australia. Perth: Western Australian Health Department, 1987.
- 7 Productivity Commission. Australia's health workforce. Research report. Melbourne: 2005.
- 8 General Practice and Primary Health Care Northern Territory. The Darwin statement on sustainable general practice in Aboriginal primary health care in the Northern Territory. 2005. Available at: <http://www.gpphcnt.org.au/www/index.cfm?itemid=136> (accessed Sep 2007).
- 9 Australian Institute of Health and Welfare. Australia's health 2006. Canberra: AIHW, 2006. (AIHW Cat. No. AUS 73.)
- 10 Van der Weyden M, Chew M. Arriving in Australia: overseas-trained doctors. *Med J Aust* 2004; 181: 633-4.
- 11 Arkles R, Hill P, Jackson-Pulver L. Overseas-trained doctors in Aboriginal and Torres Strait Islander health services: many unanswered questions. *Med J Aust* 2007; 186: 528-30.
- 12 Arkles R. Overseas-trained doctors in Aboriginal and Torres Strait Islander Health Services: a literature review. Muru Marri Indigenous Health Unit. Monograph series. MMIHU and the Cooperative Research Centre for Aboriginal Health, 2006.
- 13 Hunter P, Mayers N, Couzos S, et al. Aboriginal community controlled health services (Chapter 8). In: General practice in Australia: 2004. Canberra: Department of Health and Ageing, 2005.
- 14 Pilotto LS, Duncan GF, Anderson-Wurf J. Issues for clinicians training international graduates: a systematic review. *Med J Aust* 2007; 187: 225-8.
- 15 Alexander C, Fraser JD. Education, training and support needs of Australian trained doctors and international medical graduates in rural Australia: a case of special needs? *Rural Remote Health* [Internet] 2007; 2: Article No. 681. <http://www.rrh.org.au/articles/defaultnew.asp?IssueNo=7> (accessed Sep 2007).
- 16 Han G-S, Humphreys JS. Overseas-trained doctors in Australia: community integration and their intention to stay in a rural community. *Aust J Rural Health* 2005; 13: 236-41.
- 17 Birrell B, Schwartz A. Assessment of overseas-trained doctors the latest chapter. *People Place* 2007; 15: 67-75.
- 18 Wakerman J, Humphreys J, Wells R, et al. A systematic review of primary health care delivery models in rural and remote Australia 1993-2006. Canberra: Australian Primary Health Care Research Institute. [http://www.anu.edu.au/aphcri/Domain/RuralRemote/Final\\_25\\_Wakerman.pdf](http://www.anu.edu.au/aphcri/Domain/RuralRemote/Final_25_Wakerman.pdf) (accessed Sep 2007).
- 19 Pathman D, Konrad T, Ricketts TC. The comparative retention of National Health Service Corps and other rural physicians: results of a 9-year follow-up study. *JAMA* 1992; 268: 1552-8.

(Received 12/02/08, revised 25/05/08, accepted 12/08/08) □