EDITORIAL

Fly in/fly out health services: the panacea or the problem?

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The current Australian Parliamentary Enquiry into fly in/fly out (FIFO) services highlights an area of growing concern for the Australian health system. Does our increasing reliance on FIFO or drive in/drive out (DIDO) health professionals work to improve equity of access to services for those people in the most remote parts of the country?

There will always be a need for visiting services to settlements where population size does not enable a full range of primary and specialist services. These services will vary according to need in different communities. For example, a remote Aboriginal community will have quite different needs to a remote mining community. However, the FIFO/DIDO label covers a multitude of sins. The non-resident workforce required to meet community healthcare needs can be categorized in a number of different ways:

1. Specialist outreach services.
2. Hub-and-spoke or outreach arrangements for various allied health and specialist programs, such as women's health educator or mobile dental service.
3. 'Orbiting staff' who spend significant periods of time (12 months or more) in one or two specific communities, self-regulate stress levels and work elsewhere for periods, then return to the same communities where orientation is not required.
4. Long-term shared positions, such as month-on/month-off, where the same practitioners service the same communities.

5. Short-term locum or agency staff who move from place to place or as a one off.

There are very effective models of periodic or visiting services. Gruen and Bailie describe the effectiveness of a visiting surgical specialist service that improved access, improved cost-efficiency, and decreased hospital in- and out-patient occasions of service[1]. They caution that 'specialist outreach is however dependent on well-functioning primary care'. The effectiveness of specialist and other visiting services depends on an 'adequately resourced and staffed' primary healthcare (PHC) service and 'a multidisciplinary framework centered in primary care and not dominated by specialists'[2]. The resident PHC team needs to know and have strong relationships with rural and remote residents.

This is a common theme in publications on this matter. In an analysis of FIFO services and medical evacuations by the Royal Flying Doctor Service (RFDS) in far-west New South Wales, Garne et al concluded that evacuations could be decreased by '…best-practice, comprehensive and continuous' care provided by a multidisciplinary team[3]. Indeed, an effective non-resident service relies on a number of factors. These include not only a functioning, adequately resourced resident team, but arguably also:

- adequate infrastructure: accommodation, information & communications technology
- prior knowledge of or orientation to the remote community and residents
- spending an appropriate period of time on the ground
- being supportive to local PHC teams[2]
- monitoring and evaluation of performance, quality and sustainability.

Over the last decade, as government has invested in more health professional education and training *in* rural areas and *of* rural and remote residents, there has been a concomitant trend of increasing numbers in the last category of short-term locums and agency staff. Whilst the need for short-term locums is legitimate and should be met, the problems with a situation where the resident team is partially or largely replaced by short term staff include:

- Strong anecdotal evidence from service providers that total expenditure on locum nursing and medical staff has risen greatly. For example, in one very remote area, the FTE salary cost for a locum doctor is $750,000. Another doctor who applied for a part-time FIFO job in a remote setting was informed by the potential employer that he could earn a higher rate if he went through a short-term locum agency.
- Strong anecdotal information about the decreased effectiveness of localities with high turnover of staff. We know that a resident registered nurse and/or midwife is more in tune with the local community and better placed to actually do this work than the visiting non-residential teams[4]. Ultimately, especially in Aboriginal communities, the effectiveness of services is built on relationships, good communication and trust. There is good evidence, for example, that strengthening the relationship between patients with chronic diseases and the services and providers which they access is an important pillar of effective management[5,6].
- A high turnover of short-term staff which puts additional pressure on long-term staff, who are often paid less, required to repeatedly orient new staff and are more stressed as a result[7].
- Anecdotal evidence that resident staff in communities are less likely to access professional development opportunities because they are committed to the provision of consistent healthcare delivery.

Hanley describes FIFO as 'a necessary evil', a 'necessary compromise between the tyranny of distance and equity of access to health services'[8]. That is, it is a second best option for communities unable to attract and retain a suitable workforce. Is second best acceptable for the 30% of the population outside of metropolitan areas? Is this our aspiration? What can we do about it?

Firstly, we need to reverse the 'deficit view' of rural and remote areas[9]. The realistic picture is that these are challenging environments, but job satisfaction is high[10].

We need to hold the line in terms of developing the rural and remote workforce. The evidence is good that rural origin and rural exposure are associated with rural practice[11]. Training in remote areas, remote pathways embedded in undergraduate health professions' education and specific remote postgraduate education provide pathways for preparing the remote health workforce. Results take time and we continue to increase training and preparation for rural and remote practice across professional groups. There will be more doctors graduating and more of them will have been trained in rural and remote settings.

Thirdly, we need appropriate models and an appropriate workforce for these models. There are already very successful visiting models from which we can learn[12]. In relation to appropriate workforce, for example, there are barely any nurse practitioners (NPs) in remote areas. For the $750,000 cited for a locum doctor, three or four NPs could be employed. There is evidence that NPs can perform 90% of the GPs' activity[13] with equivalent patient outcomes[14]. We need to have health professionals working at the top of their range of skills and knowledge, and trial more NPs in remote areas.

We also need sufficient resources to meet the primary healthcare needs of remote and rural communities. Recruitment and especially retention of resident teams will continue to be hampered by understaffing, high work demands, resultant stress and staff turnover[7].

There is a dearth of data about the number and turnover of short-term and locum staff. These should not be difficult to collect, but we do need systematic and nationally consistent collection. This should be a priority for Health Workforce Australia.

We can also do better without spending more if we adopt a more flexible approach to recruitment and retention of staff. There are some very high-functioning hub-and-spoke models

which provide effective services and retain staff in remote settings[15].

Finally, we need to ensure that the selection and education of health professionals has a strong focus on social accountability and altruism. The Training for Equity in Health Network (THENet) of medical schools is one excellent example of this[16]. Through appropriate curriculum design informed by explicit values, education providers can build empathy, not erode it[17].

In conclusion, visiting services will always be a feature of healthcare delivery in small, remote settlements. However, for these to be successful and for community healthcare needs to be met, we can and must continue to build strong resident primary healthcare teams.

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References

1. Gruen R, Bailie R. Specialist clinics in remote Australian Aboriginal communities: where rock art meets rocket science. *Journal of Health Services Research and Policy* 2004; **9(Suppl2):** 56-62.

2. Gruen RL, Weeramanthri TS, Bailie RS. Outreach and improved access to specialist services for indigenous people in remote Australia: the requirements for sustainability. *Journal of Epidemiology and Community Health* 2002; **56:** 517-521.

3. Garne DL, Perkins DA, Boreland FT, Lyle DM. Frequent users of the Royal Flying Doctor Service primary clinic and aeromedical

services in remote New South Wales: a quality study. *Medical Journal of Australia* 2009; **191:** 602-604.

4. Birks M, Mills J, Francis K et al. Models of health service delivery in remote or isolated areas of Queensland: a multiple case study. *Australian Journal of Advanced Nursing* 2010; **19(1):** 36?45.

5. Battersby MW. Health reform through coordinated care: SA HealthPlus. *BMJ* 2005; **330:** 662-665.

6. Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *Milbank Quarterly* 1996; **74:** 511-544.

7. Lenthall S, Wakerman J, Opie T et al. What stresses remote area nurses? Current knowledge and future action. *Australian Journal of Rural Health* 2009; **17:** 208-213.

8. Hanley P. The FIFO conundrum. *Australian Journal of Rural Health* 2012; 20: 48.

9. Bourke L, Humphreys JS, Wakerman J et al. From 'problem-describing' to 'problem-solving': challenging the 'deficit' view of remote and rural health. *Australian Journal of Rural Health* 2010; **18:** 205-209.

10. Opie T, Lenthall S, Wakerman J et al. Occupational stress in the Australian nursing workforce: a comparison between hospital-based nurses and nurses working in very remote communities. *Australian Journal of Advanced Nursing* 2011; **28:** 36-43.

11. Laven G, Wilkinson D. Rural doctors and rural backgrounds: how strong is the evidence? A systematic review. *Australian Journal of Rural Health* 2003; **11:** 277-284.

12. Wakerman J, Humphreys JS, Wells R et al. Features of effective primary health care models in rural and remote Australia: a case-study analysis. *Medical Journal of Australia* 2009; **191(2):** 88-91.

13. Hooker RS. Physician assistants and nurse practitioners: the United States experience. *Medical Journal of Australia* 2006; **185(1):** 4-7.

14. Mundinger MO, Kane RL, Lenz ER et al. Primary care outcomes in patients treated by nurse practitioners or physicians: a randomized trial. *JAMA* 2000; **283(1):** 59-68.

15. Buykx P, Humphreys J, Wakerman J et al. Systematic review of effective retention incentives for health workers in rural and remote areas: Towards evidence-based policy. *Australian Journal of Rural Health* 2010; **18:** 102-109.

16. Worley P, Murray R. Social accountability in medical education – an Australian rural and remote perspective. *Medical Teacher* 2011; **33(8):** 654-658.

17. Hirsh D, Gaufberg E, Ogur B et al. Educational outcomes of the Harvard Medical School-Cambridge integrated clerkship: a way forward for medical education. *Academic Medicine* 2012; **87(5):** 643-650.