

PERSONAL VIEW

Is Fly in/Fly out (FIFO) a viable interim solution to address remote medical workforce shortages?

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ABSTRACT

Geographically remote regions of Australia experience a higher degree of socioeconomic inequality and health inequity, amid poor resourcing and extreme climatic conditions, when compared with their more urban counterparts. Doctors with the knowledge, skills and interest in remote work remain a scarce resource, with only 58 practitioners per 100 000 people versus 196/100 000 in metropolitan areas. Pending the arrival of the full complement of long-term remote medical workforce, an alternative solution that has so far received little attention but could provide near equivalence to resident doctors is the 'fly in/fly out' (FIFO) model. Specifically, where one doctor has a continuous relationship with one town or community, albeit spending their rostered time off away from this location, rather than continuity of service with different doctors each time. In this model, doctors spend a fixed number of days at work geographically remote from their home and families, with logistical support (eg housing, transport) provided, followed by a fixed number of days back at home not working. This provides a the doctor with the benefits of remote clinical work plus guaranteed time off at home, a more acceptable roster than in many remote locations at present. This also avoids the complex issue of experienced doctors having to leave remote areas mid-career for the well-documented reasons of spouse employment and children's education, as well as providing easier access to professional development activities. The author followed this path and remains a FIFO doctor after 7 years of continuous service. For FIFO to be effective, there needs to be a commitment from the sponsoring organisation for short, balanced, flexible, family friendly rosters and a positive organizational structure with effective communication between management and front line staff. Evidence shows that families and children with healthy family functioning, who are able to balance separateness and togetherness and are able to readily adjust when circumstances move from stability through change, and have strong communication skills, cope well with FIFO work. The author's employer actively supports his FIFO work arrangements. Although FIFO presents challenges and is not for everyone, it may be time for organisations providing



medical care to remote Australia to further consider this option. Allowing mid-career doctors experienced in remote medicine to continue remote clinical practice when they move to the city for family reasons would provide an immediate benefit to remote communities. Notwithstanding the challenges, perhaps it is time to consider the option of FIFO to address ongoing workforce shortages?

Key words: Australia, doctor, FIFO, Fly-in/Fly-out, remote medicine, rural workforce, workforce shortages.

Background

The 4% of Australians who live in geographically remote Australia (encompassing 75% of the land mass) experience a higher degree of socioeconomic inequality and health inequity amid poor resourcing and extreme climatic conditions, when compared with their more urban counterparts¹. Aboriginal and Torres Strait Island people living in remote communities experience even greater health inequities². The higher level of disease burden spans chronic diseases such as hypertension and diabetes mellitus, mental health problems including intentional self-harm, as well as acute trauma which encompasses accidental drowning and transport accidents³. The National Strategic Framework highlights that provision of equitable access to sustainable health services for Australia's rural and remote populations is substantially more difficult to achieve when compared with urban and regional Australia⁴.

Workforce

Doctors with the knowledge, skills and interest in remote work remain a scarce resource, with only 58 practitioners per 100 000 people versus 196/100 000 in metropolitan areas⁵. The approaches available to reduce the disparity in remote workforce are⁶:

Immigration: recruit additional doctors from overseas, especially under mandatory rural service provisions.

Workplace reform: change working conditions to make rural and remote practice more attractive to Australian doctors,

for example though modification of clinical practice guidelines, workplace inter-disciplinary role delineations.

Vocational training: championing remote medicine as a viable career path with associated vocational guidance, and changing the training pathways to ensure sufficient numbers of trainees with relevant skills are taught.

Logistic: adjusting rosters to be more 'people friendly' plus higher remuneration to address long working hours and the additional expense of living in remote locations.

Core issues to be addressed by any solution include providing continuity of care, a key factor in the provision of quality health care⁷, and ensuring non-resident services balance the extra burden they place on remote community infrastructure with a positive contribution to the local community's 'social capital', such as social cohesion and wellbeing⁸.

Current practice

Although a long-term resident doctor is the ideal, they are difficult to recruit and sustain. Consequently, many remote communities use compromise arrangements which include a succession of relatively short-term resident doctors or using a 'hub-and-spoke' model.

Short-term resident doctors

A succession of relatively short-term resident doctors who provide high continuity of care after a period of relationship building, but suffer early burnout, leaving after a period of



only months. The cycle repeats with the arrival of a new doctor.

'Hub-and-spoke' model

The 'hub-and-spoke' model, which typically involves one site as a principal base that provides centralised support or activities to satellite sites located more rurally but connected to the principal site^{8,9}. This methodology is also at times referred to as an 'outreach' program¹⁰. In this system, doctors who live and work in one location are contracted to provide services to outlying remote areas as an adjunct to their primary work. Not uncommonly, these 'remote relievers' each visit a number of communities for only a few days in a specific remote location periodically, resulting in fragmentation of care within a single remote location across a number of doctors, at best. Of note, this creates an additional risk for clinicians, because the patients do not have ready access to their doctor for postoperative care for procedures performed while at the remote site. This absence may be perceived as neglect by the patient, as well as creating the potential for confusion or a lack of clarity in accountability for patient care¹¹.

Fly-in /fly-out (FIFO)

Another alternative solution that has so far received little attention but could provide near equivalence to resident doctors is the 'fly in/fly out' (FIFO) model. Specifically, this is where one doctor has a continuous relationship with one town or community, albeit spending their rostered time off away from this location, rather than continuity of service but different doctors each time. In this model doctors spend a fixed number of work days geographically remote from their home and families, followed by a fixed number of days back in their home location not working, including not being available for telephone consultations¹². Logistical support such as housing and transport is provided in the remote location¹³.

If three or more doctors are employed to the same position and share the logistical support, it is possible to provide 24 hour cover, 365 days per year. This system has the potential to provide each doctor with the professional satisfaction of remote clinical work while at the same time giving the added incentive of regular, guaranteed time off in their home environment. It may provide a roster that appears to have a better work-life balance than that experienced by many doctors working and living in remote locations at present. This also affords one solution to the complex issue of experienced doctors having to leave remote areas mid-career for the well-documented reasons of spouse employment and children's education, as well as offering ongoing and easier access to professional development activities¹⁴.

The author's personal experience

On a personal note, the author has been successfully working as a FIFO remote clinician in both the public and NGO workforce sectors over the last 7 years, and continues to do so. Using the model described above, he has a long-term and ongoing clinical relationship with a specific community, while his time off is spent 1800 km away back at home with his family. His current position is an equal job share with another FIFO clinician who also lives 1800 km from work, providing between them 1.2 full time equivalent (FTE) clinicians. Anecdotally, this arrangement is working well and is highly regarded by the recipients of care and the community at large who appreciate clinicians who have a detailed understanding of remote health and whose ongoing presence enhances continuity of care.

The author's access to continuing medical education has been greatly enhanced by living in a more metropolitan location, because this is where the bulk of ongoing education is geographically located. For example, he now has the option of attending half or one day courses on his days off at home, where a remotely located doctor would be unable to attend due to the logistics and travel time outweighing the benefits of attending for such a short period of time. Enhanced attendance capability also provides greater networking and



social opportunities with other clinicians, an important feature of ongoing clinical development.

Challenges for the employer

Although FIFO has been growing in the offshore oil industry since the 1940s, and exponentially in Australian mining since the 1980s¹⁵, there has been little interest shown by health service and workforce organisations to utilise this model for shortages in rural/remote medicine to date. Transport costs incurred by flying the doctor back and forth from their home location may be a significant financial disincentive; however, the dollar value may be much lower than long-term use of locums and associated recurrent recruitment campaigns. For example, the challenges of the author's commute to work have been minimised by the rapid increase of regular and reliable commuter flights (often by high speed jet aircraft) to rural and remote locations. As the two doctors in his job who share the arrangement provide more than 1 FTE, the cost of the airfares is partly offset by the higher productivity of logistical resources (eg shared accommodation, vehicles, office space).

Reluctance with FIFO may also be due to the apparent challenges, such as reported high staff turnover rates in the mining industry¹⁶ and associated high recruitment costs¹⁷. Even those who enjoy FIFO work may develop 'FIFO fatigue', a combination of emotional and physical tiredness¹⁶. However, there is evidence that these problems can be effectively addressed by appropriate short, balanced, flexible, family-friendly rosters which provide roughly equal time home and away, allowing a sufficient length of time to unwind at home. Additionally, there is a necessity for positive organisational structures leading to more effective communication between management and front-line staff to address issues and concerns as they arise¹⁸. The author's employer actively supports his FIFO work. For example, the fatigue management policies ensure the roster incorporates a fair work-life balance, including more time at home than at work.

Personal challenges for the doctor and their family

A key concern has been FIFO restrictions on family life, and recurrent transitions for families that are different from typical non-FIFO work¹⁹. Early studies identified that 'at home' partners found difficulty in adjusting to swiftly recurring partings and reunions, coping with disruptions to social life, loneliness as well as anxiety during the absence and prior to their partners' return²⁰. More recent studies have shown that marital satisfaction and stability is directly related to the ability of individuals to find an effective work-family balance. Taylor and Simmonds demonstrated that families who cope well with FIFO work and enjoy healthy family functioning are able to balance separateness and togetherness, readily adjust when circumstances move from stability through change, and have strong communication skills, with no evidence that individual factors including partner employment, family stage, roster type, or previous experience alone were predictors of success²¹. Kaczmarek and Sibbel confirmed that there was no significant impact on primary-school aged children's psychological wellbeing due to the fathers' absence for FIFO mining; although mothers from the FIFO families reported significantly more stress than those in non-FIFO families for communication, support and behaviour issues within the family²². In the author's case, his family has been very supportive of his choice to continue working in remote medicine and consider that, on balance, the downside of being away for 12 days at a stretch is more than compensated for by the subsequent 16 days off at home. With the family residing in a more metropolitan location, not only can his family members pursue interests unavailable in remote locations, but the author himself also utilises those options. Another dramatic change has been the explosion in access to reliable high speed Internet and cheap phone services in rural and remote locations, allowing him to be in daily contact with his family despite the geographical distance.

Summary

With processes available to address the challenges posed by this form of long-term employment, why has this approach generally been discounted? Anecdotal evidence suggests that experienced remote doctors are reluctant to leave their rural



practice when they move to the city mid-career for family reasons, realising that their career path and clinical caseload will be quite different when working in metropolitan areas. This group remain active in hub-and-spoke outreach programs after moving to more metropolitan domiciles. Perhaps FIFO is a realistic alternative to be offered to this group.

In summary, a sustainable medical workforce for remote Australia remains somewhat distant. Notwithstanding the challenges, perhaps it is time to consider the option of FIFO to address this ongoing workforce shortage? Perhaps the next step is for this model to be evaluated in terms of service outcomes and community satisfaction?

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