

# **Fly in and fly out – getting doctors to the mines**

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One of the most prevailing issues for the Fly In Fly Out (FIFO) workforces in Australia's mining towns is the health care available in these communities. The Federal Government's Parliamentary Inquiry into the effects of the FIFO model clearly identified the delivery of quality health to both the mine workers and the local residents as a matter of concern. These communities are under enormous pressure as a result of huge population growth. Demographer Bernard Salt (Fowler & Cronau 2012) proposes that new approaches are needed to solve the problems this dramatic growth has brought. This paper presents an alternative approach to providing health care to workers within the mining industry. Accessing the medical services of doctors and allied health professionals via a similar fly in fly out model has the potential to not only benefit the mine workers but also ease the health pressures of the rural communities. A new approach, a new model of health care is essential. Improved access to health care for workers equates to improved work output and ultimately leads to greater productivity for companies.

In the report commissioned by the Isaac Shire Council the population of areas such as Moranbah has doubled in recent years. The Shire now has more non-resident workers than residents (McCarthy 2011). The nationally recommended General Practitioner to patient ratio should be within the 1:1000 range. The Parliamentary Inquiry revealed figures of 1:2750 – almost three times the ratio where quality health care can be accessed (McCarthy 2011). Local doctors in these communities back these claims. Presenting information at the Inquiry the doctors have found that 1 in 4 patients treated are from outside the permanent community (Colyer 2012) and additionally they are frequently unable to see patients on the day requested. A recent KPMG survey backs these claims. The analysis found a need for an extra 44 doctors and in regional areas to restore the balance. Rural health is an issue in Australia and is compounded by the increase in these population figures. Not only is access to General Practitioners problematic but these small towns have few if any Specialists.

## **General Practitioner Pressures in Rural Areas**

It is unlikely that an increase in the number of rural General Practitioners necessary to meet the needs of these communities will occur. A number of factors contribute to the shortage of doctors in these areas –

- Doctors are the first and last point of call for health issues. They face high on call burdens and in many cases not only work through their own practice but also assist at the local hospital.

- Generally they have little direct support from medical specialists and professional isolation is an issue for those doctors practicing in rural communities for lengthy periods of time. A doctor in a city area has a wide network of contacts in specialties as opposed to a rural doctor whose access to this support may be limited.
- Family factors such as the educational needs of their children and poor spouse employment opportunities act as a further disincentive.
- Similarly to the mining companies, medical workers are faced with limited and high cost housing options.
- Annual Leave options are restricted as relief doctors are difficult to source.

Given the challenges in securing permanent rural General Practitioners to improve the access to medical care, it is obvious a different model of delivery is needed. A FIFO model of medical care allows doctors to provide a service to mining companies without facing the challenges of permanently living in rural communities

### **Matching medical care to the health needs of mining workers**

In understanding how to address the health needs of workers it is necessary to identify the issues where medical assistance is most frequently sought or required. The media do not present a positive account of health problems within mining communities. Drinking, mental illness such as depression (Fowler 2012), stress and sexually transmitted diseases have been identified by the AMA in Western Australia as concerns within mining communities. An examination of the Queensland Mines and Quarries Safety Performance and Health Report 2010/11 gives further insight into the nature of injuries sustained by employees in the course of their work. Together this information provides a basis for the type of medical care which will best meet the needs of workers. Currently workers attempt to access the local medical services or wait until they fly home. In many instances this is not meeting the health needs of workers and consequently may impact upon their ability to work. Timely and tailored care which addresses these issues will benefit both worker and mining company.

### **Mental Health**

Work within the industry is both physically and mentally demanding. The schedule of work hours, blocks of days on and then off, while being beneficial in some respects also presents problems. A report from the Australian Institute of Mining and Metallurgy give the attrition rate as one in three within the first 12 months (Duffy 2012). Addressing the pressures of work leading to stress and other forms of mental illness is essential if the industry is to keep growing a skilled workforce. Mental illness was the main topic at a recent interstate Minerals Council Occupational Health and Safety Conference (2012). A report delivered by the Hunter Institute of Mental Health and the University of Newcastle identified that this issue alone can cost a single mine \$300-400 000 a year. Mental health issues impact both the employer and employee in a number of ways. The worker is more likely to be absent from duties, less productive when working and is at a much higher risk of injury while working. The conditions for FIFO workers compound the risks of mental illness. Living alone, lack of local networks and the high physical demands of the job have been identified as the most significant factors (NSW Mineral Council). Access to doctors and qualified allied health professionals such as counselors on a

more regular basis would assist in meeting the health needs of workers dealing with these issues. In a FIFO Medical Services model regular access to such professionals could be provided.

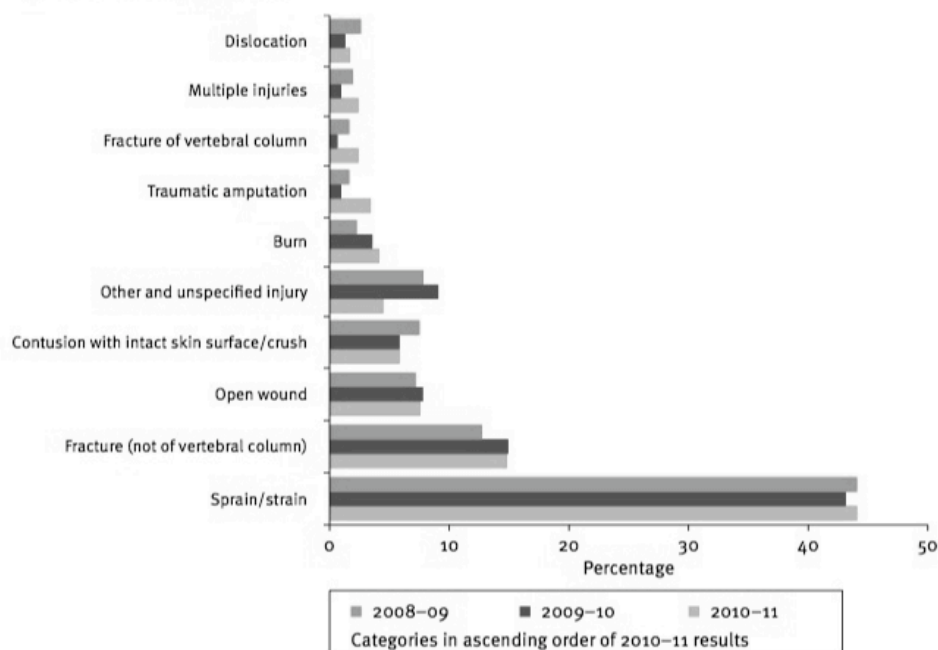
### Illness and spread of disease

The close living quarters of the FIFO community add another dimension to the type of access to medical care required. The transitory nature of work sees employees bringing viruses and disease from outside the community. Furthermore contagious conditions such as gastroenteritis, whooping cough and influenza are easily spread through workers living closely together. In a work cycle of continuous days on while at the mine, such illnesses can cause significant absenteeism. This can be lessened by both prompt medical care and a program of preventative medicine. A regular doctor onsite can identify and treat issues quickly. Good health care also aims to preempt illness and provide immunisations guarding against the contracting and spread of diseases such as influenza. A proactive approach to managing these basic health issues benefits both employee and employer and recognizes the challenges of communal living within a work environment such as the mining industry.

### Work Injuries

Over the last few years reports from the Queensland Mines and Quarries in relation to Health and Safety have indicated a steady decrease in injury and incidents in most areas. However, these statistics provide firstly an insight into the type of injury most frequently sustained by workers and secondly an opportunity to improve the 'lost days' statistics further. The table below details the 'Nature of injury' for the last three years.

Figure 5.2: Nature of injury, 2008–11



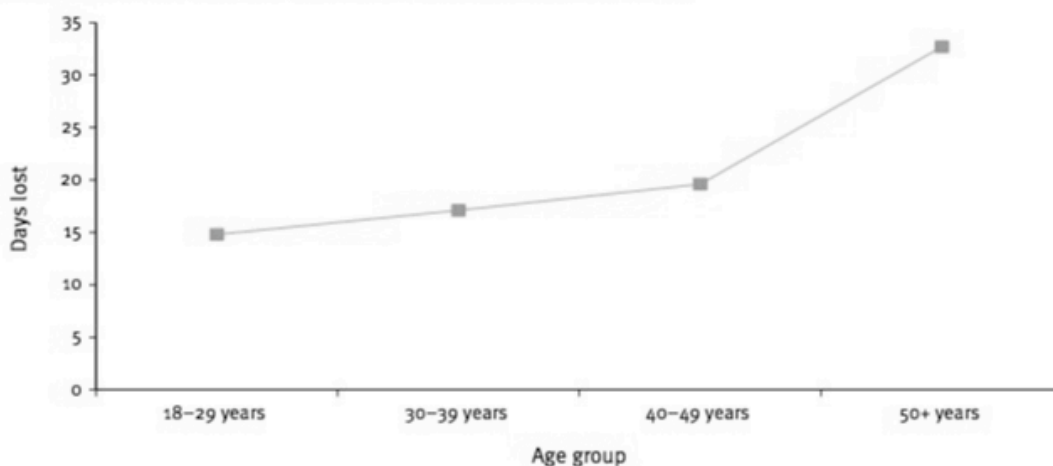
By far the most prevalent injury is sprains and strains, accounting for over 40% of all injuries. Muscular-Skeletal injuries such as these require prompt and accurate diagnosis and correct treatment. Any delay in treatment and diagnosis can lead to a greater recovery time which is detrimental to both the patient and the employer. Whilst some medical attention is currently given by nursing and paramedic staff at mines, the absence of a doctor can compromise patient care and the long term outcome. A doctor is able to give a more comprehensive diagnosis and prescription medication for pain and inflammation. In this highly-connected age, the use of Telemedicine via video links has the potential to bring Specialist advice and care direct to the mines via the doctor treating the worker. It would be possible to link to a doctor such as an Orthopedic Surgeon in a major city to further assess a patient. Incorrect diagnosis or treatment can lead to chronic pain which has both a psychological and physiological impact on workers.

### Workers Compensation and Lost Work Days – Improving the statistics

The Workers Compensation Data in the 2010/11 Safety Performance and Health Report for Queensland Mines and Quarries supports the cost of these injuries to both the industry and the individual worker. Most compensation was given for soft tissue injuries, trauma to joints and ligaments and trauma to muscles and tendons. The average cost per worker was \$7 500 with total costs for industry over \$11 000 000. An investment in providing more expedient, quality medical care by a doctor has the potential to reduce these costs and have workers back performing duties in shorter time frames. Additionally doctors using the FIFO model would be more familiar with the mining industry and the type of work involved are therefore better able to support an alternative duties program.

An examination of the statistics for days lost for injuries shows an average of 15-30+ days across age groupings of mine workers when hurt, representing days away from work.

Figure 5.7: Number of days lost per age group to lost time injuries, 2011



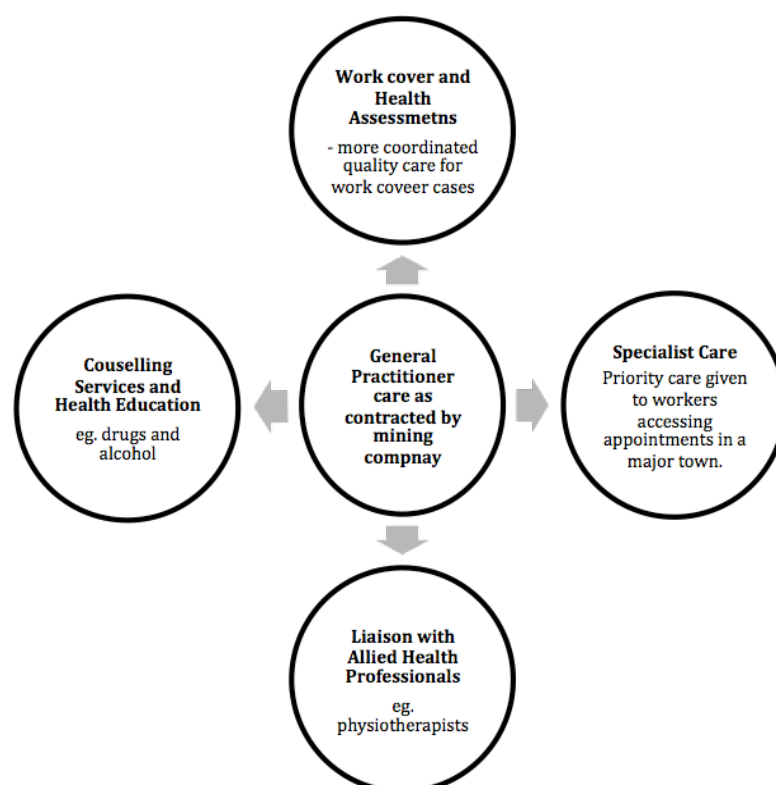
In the 2010/2011 report there were 230 days lost per million hours worked across the sector. In an industry where 92.9 million hours were worked annually this represents an enormous number of lost days. A model of medical services provided more directly to the mine and assistance coordinating specialist medical care has the potential to positively influence these figures. The aim of medical care is to address

the patient's needs promptly and ensure a safe return to work. Time is lost currently with workers seeking medical attention away from the mines, and for some injuries, waiting time to secure appointments with Specialists. There is an urgent need for companies to find a model of care that aims to deliver a way of life that is workable in regional Australia.

Mining companies and workers are at times heavily criticized for their impact on rural communities. A model of medical care that demonstrates health care is a priority, not only assists workers but is evidence of a company's respect for these communities. Acting to source medical care for their own workforce and thereby easing pressures on overburdened rural medical services is a socially responsible course of action for mining companies.

### **Delivering medical care to mines – a new model**





It is suggested that a model of medical care as flexible and varied as the current mining workforce would have an enormous positive impact on the health of workers and the productivity of companies. In examining the current health issues of these communities and the most prevalent injuries, care could be coordinated to encompass the following -



This model supports a coordinated team care approach to delivering medical assistance. One 'organisation' is managing care as opposed to multiple agencies being involved. Such a model recognizes a medical service needs to be tailored to meet the mining company's needs. A company could engage a doctor's services for a negotiated time and frequency. The doctor is then able to provide to all mining staff day to day medical care that is currently only accessed through the rural doctors

of nearby towns. Not only would this ease the pressure on these facilities, it would guarantee workers access to a doctor in a more timely manner. Any improvement in the ongoing health care of workers assists in delivering a healthier workforce. In addressing some of the health issues of workers relating to alcohol, drugs and stress a doctor can provide initial advice and counseling and also link to other health professionals. Making medical services easier to access also increases the likelihood of workers seeking medical advice. It promotes a more positive workplace. An employee rehabilitating from injury, who is able to access physiotherapy care or a doctor familiar with mining work, is more likely to be performing alternative duties and returning to their usual role more quickly. Ideally the doctor could assist in coordinating care beyond the mine with specialists in a major town. By arrangement a priority appointment could be organised to limit the time away from the mine and ultimately the time away from work. Companies are required to have workers undergo medical assessments periodically. A contracted General Practitioner could complete all these assessments for the company. As a workplace, the provision of such medical support can only enhance the desirability of working there. Given the challenges of distance and time away from family and services, the knowledge of sound medical care is a drawcard.

A visiting doctor could assist with both prevention and management of illness, health education programs and industry compliance regulations. The table below provides an example of ways in which a doctor may support the overall health of workers.

 <p>flu vaccines hepatitis A vaccines</p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• Identification of waterborne illness such as giardia etc</li> <li>• Early intervention and identification of illness.</li> <li>• Health Checks</li> </ul>	 <p><b>Management</b></p> <ul style="list-style-type: none"> <li>• Management of chronic conditions such as <ul style="list-style-type: none"> <li>• Hypertension</li> <li>• Diabetes</li> <li>• Cardio Vascular Health</li> </ul> </li> <li>• Soft tissue injury</li> <li>• Mental illness eg. stress related issues</li> <li>• Monitoring workers on alternative duties</li> <li>• Sexual Health</li> </ul>	 <p>Miner's medical examinations</p> <p><b>Education and Compliance</b></p> <ul style="list-style-type: none"> <li>• Drug and Alcohol use</li> <li>• Drug Testing</li> <li>• Work cover claims</li> <li>• Diet</li> <li>• Personal Mental Health</li> </ul>	 <p>Liaise with specialists for priority appointments and care</p> <p><b>Coordinated Health Care</b></p> <ul style="list-style-type: none"> <li>• Allied Health Care Support eg. physiotherapy</li> <li>• Counselling services</li> </ul>
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## **Future Pressures**

A forecast of employment figures for future mining projects only suggests a greater pressure of rural health services. The start up figures for development projects in Central Queensland provide clear evidence of the population growth ahead.

<b><u>Projected Year</u></b>	<b><u>Mine</u></b>	<b><u>Employment figures</u></b>
2013	Broadmeadow underground Daunia open cut	650 (construction) 1000 (construction)
2014	Caval Ridge	2000 (construction)
2016	Wards Well  Saraji East open cut	1000 (construction) 500 (operational)  1000 (construction) 500 (operational)

The above figures are merely a small sample of the development ahead within the industry. If the guidelines for doctor to patient ratios are to be considered in delivering quality health to workers, it should be acknowledged that current rural doctor services will in no way meet this need and furthermore the system will experience an even greater overload. In working towards a 1:1000 doctor/patient ratio many of these developments could exclusively require the services of a single doctor. The employees of these hardworking mining communities deserve access to city quality medical care. In the same way that companies have sought to provide housing for employees, consideration must be given to sourcing reliable and prompt medical care. The Safety and Performance Report for Queensland Mines and Quarries states the aims of improving and monitoring safety and health is to 'encourage and prioritise proactive planning of strategies to improve safety and health performance'. Considering a new model of the provision of medical care is 'proactive planning'.

## **Conclusion**

Whilst companies may believe the provision of health care should come from external agencies such as the government, it is highly unlikely that given the changing and rapidly expanding population within the sector that a solution will be found in the short term. Rural health has been a pressing issue long before the boom of mining in the state. Demographer Bernard Salt (Fowler 2012) calls the current changes and opportunity in mining the 'gold rush of the 21<sup>st</sup> century' and just as the gold rush in early Australia provided growth and prosperity it also challenged communities greatly. In terms of planning for workforce needs and building projects some attention must be focused on improving access to professional health care, notably access to doctors. In building and supplying a trained workforce to the mines the 'fly in fly out' model has been adopted by the mining companies. In meeting the needs of their workforces a 'fly in fly out' medical service can deliver suitably trained and qualified medical support. It is a 'think outside the square' opportunity and time invested in addressing this issue for workers now will have long lasting benefits both to employer and employee.

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