

ORIGINAL RESEARCH

The rural hospital doctors workforce in New Zealand

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A B S T R A C T

Introduction: The sustainability of New Zealand's rural hospitals has been in question for some years. Increasingly, clinical services have been centralised and specialist staff have moved to bigger centres. As well as clinical services, the governance of these hospitals has shifted, often due to a shortage of vocationally registered medical practitioners available to lead the clinical services. In 2009 the Medical Council of New Zealand (MCNZ) approved a new vocational scope of practice in Rural Hospital Medicine (RHM). The present study was designed to establish the current composition of the rural hospital medical workforce at the introduction of this new scope of practice.

Methods: This study was a 2009 cross-sectional survey of rural hospitals approved for RHM training by the MCNZ. Hospital managers were surveyed using a mailed questionnaire. All medical practitioners providing medical care in these hospitals in 2009 were identified, and each was mailed an additional questionnaire.

Results: In all, 28 rural hospitals and 107 medical practitioners who provided clinical services were identified; 28 responses (100%) were received to the hospital managers' survey and 69 responses (64%) to the doctors' survey. The managers' survey revealed a shortage of medical practitioners and significant use of locum staff. The workforce had a median age of 47 years, was predominantly male (75%) and principally trained overseas (68%), and 54% was vocationally registered. A proportion of the hospitals (35%) did not have a recognised clinical leader or an active process for credentialing new medical staff.



Conclusion: The findings were not unexpected but do quantify the shortage of medical practitioners and the governance issues facing small rural hospitals in New Zealand. The scope of RHM has the potential to attract new doctors into practice, providing greater stability and clinical leadership for these important facilities. The study provides a baseline for a future evaluation of the effectiveness of the introduction of the new scope of practice.

Key words: governance, hospital, medical staff, rural, New Zealand.

Introduction

The issue of the sustainability of rural hospitals in New Zealand is a perennial problem¹⁻⁴. Shortages of doctors, funding crises, falling populations and increasing specialisation of health services have led to the centralisation of many services to hospitals in larger centres. Over the last 20 years a number of hospitals have been closed or the facilities handed over from health boards to community trusts³. With the loss of specialists from many hospitals, and the de-establishment of the medical superintendent role in the early 1990s, the responsibility for clinical governance of rural hospitals has also been moved, in many, instances to the base hospitals⁵. In 2009 the Medical Council of New Zealand (MCNZ) approved Rural Hospital Medicine (RHM) as a vocational scope of practice and approved the College of General Practitioners as the body responsible for developing an educational framework for doctors wishing to enter this scope of practice⁶. This move opens the way for generally registered rural hospital doctors to achieve vocational registration, and for those already registered in general practice to gain recognition and support for their hospital-based skills. It is hoped that this new initiative will improve the recruitment and retention of rural hospital doctors and provide a cadre of clinical leaders who will take responsibility for the clinical governance of their health services.

This study was performed in order to survey rural hospitals in New Zealand and characterise their current medical workforce, and to ascertain current governance arrangements to ensure standards of care are maintained. In addition, rural doctors who provided services to these hospitals were

surveyed to discover their future scope of practice intention. The results should provide a baseline for assessing the impacts of future initiatives, including the recent changes to vocational registration.

Methods

This cross-sectional study was conducted in 2009 by the New Zealand Institute of Rural Health with cooperation from the Division of RHM. Formal ethics approval was not sought for this survey as it did not include any patient contact or details, and the responses from the individual doctors and the hospitals involved were all anonymised.

Initially, rural New Zealand hospitals that provided 24 hour hospital care, had medical cover and were included on the MCNZ list of rural hospitals approved for registration in the new scope of RHM were identified. The MCNZ had determined that hospitals with specialists in more than one specialty were regional hospitals and so these were excluded from their list of rural hospitals⁶. Hospitals that provide no emergency cover or those that provide residential care only were also excluded. Hospitals that provide long-stay care and/or maternity care only and have no medical cover for the care of acute undifferentiated patients from the community were also excluded (approximately 16 rural hospitals). The list of hospitals for survey was developed in conjunction with district health boards and the rural doctors' network.

Twenty-nine hospitals were surveyed by mail; however, one of these (Whangaroa Hospital) serves a very small population and was subsequently excluded because 24 hour cover of the 2 hospital beds was not always available.



Consequently, data supplied by 28 hospital managers were analysed. These managers identified the doctors providing medical cover in their hospital in 2009, including those they employed and those working under a contractual arrangement. The identified doctors were then mailed an additional questionnaire. Data from the publicly available MCNZ register were used to verify doctors' registration status, and the year and university of their basic qualification.

Results

Hospital managers survey

All 28 hospital surveys (100%) received from identified hospital managers were analysed. Eighteen of the 28 hospitals (64%) directly employed medical staff. The managers of these hospitals stated they had 80.9 budgeted full time equivalent (FTE) generalist and 4.2 FTE specialists positions. At the time of the survey, 53.9 FTE staff (66% of available positions) were employed as were 19.5 locums; 7.5 FTE positions were unfilled. The specialist positions were all filled.

Of the 28 hospitals, 15 were owned and managed by a District Health Board (DHB), 11 were owned by community trusts, one was a limited partnership and one was a local authority trading organisation. Fourteen of 18 hospitals (77%) that directly employed doctors reported a credentialing process for verifying qualifications and references etc prior to employment.

Twenty-six rural hospital managers answered the question about the availability of suitably qualified medical staff with 18/26 (75%) reporting a serious or a critical shortage and eight reporting a shortage. Regarding the availability of locums, only two respondents reported an adequate supply, with most saying there was a serious or critical shortage.

Ten of 28 managers (35%) reported that their facility had no designated medical leader (eg clinical director). Similarly,

10/28 reported there was no active process of clinical governance.

Registration status of doctors in 2009

Of the 107 doctors identified who provided medical services to the 28 rural hospitals, 27 (25%) were female. The median year of graduation was 1985. Thirty-eight (35%) were New Zealand trained (10 from Auckland and 28 from Otago). Of the 69 who were international medical graduates (IMGs), 31 (45%) had trained in the UK while 28 (41%) were trained in South Africa, Australia or North America. Fifty-eight (54%) were vocationally registered, 45 were generally registered and four were working under provisional registration. Of those who were vocationally registered 31/58 (53%) were GPs, 15/58 (26%) were vocationally registered in the new scope of rural hospital medicine, eight were registered with the *Accident and Medical Practitioners Association (AMPA)* and four were registered as hospital specialists. There was considerable overlap between these vocational scopes and many doctors were registered in more than one.

Doctors' survey

Sixty-nine of the 107 doctors (64%) surveyed responded and their characteristics were similar to the total – that is, 19/69 (27.5%) female, median age 47 years and median year of qualification 1985. Thirty-two per cent were New Zealand graduates. However 62/69 (90%) had permanent employment suggesting that locums were under-represented among the respondents. Thirty-five (51%) noted they had worked additional shifts in the last month to cover shortages in the hospital.

Only 29/69 (42%) said they were allowed regular, guaranteed non-clinical time. Interestingly only 36% DHB staff had guaranteed non clinical time compared with 44% of non-DHB employees and 39% full time workers compared with 43% of part timers.

In answer to the question 'Is there any formal medical leadership (eg clinical director) in your hospital?', 23/69



(33%) said 'yes', although when categorised according to hospital, there were positive responses from 14/27 (52%) of hospitals. Forty-two doctors said there was no formal medical leadership. Comments included statements such as:

From Chief Medical Officer indirectly and distantly.

I think the physician who visits once a week is probably the clinical director.

No formal leadership but easy access to clinical leadership from base hospital.

Similar responses were obtained when asking about clinical governance and credentialing. In all, 34/69 (49%) said they had a process of clinical governance and 36/69 (52%) or 18/27 (67%) hospitals said there was credentialing of medical staff.

Discussion

When discussing the staffing of rural hospitals it is important to define 'a rural hospital'. Janes in 1999 identified 36 rural hospitals but excluded Taupo, Tokoroa, Thames, Oamaru, Kaitaia and Ashburton, which at the time were 'specialist hospitals'. While at the time of the present survey 4 of these hospitals still had a vocationally registered specialist providing care, this was only in a single specialty and all 6 hospitals are included in the MCNZ list of rural hospitals. Fifteen of Janes' hospitals have either closed or are now residential care facilities with no acute beds². Williamson et al recently identified 44 potential rural hospitals but only obtained 31 responses to their survey, and 28 hospitals indicated they handled a range of acute conditions⁷. Thus the present sample of 28 hospitals is a relatively complete picture of the provision in 2009. The diversity of roles carried out by rural hospitals – for example elderly care, GP short stay facilities, emergency room care and maternity care will continue to make classification difficult. The main defining characteristics used in the present survey were that the hospitals were rural and had beds which received acutely ill patients who would be managed by a generalist.

The present survey of hospital managers identified that there was a serious/critical shortage of appropriately qualified doctors available to work in rural hospitals. While these classifying terms could be considered subjective they do indicate the hospital managers' perception of need, a perception supported by the 10% unfilled positions and 25% filled by locums. While this has been raised as an issue previously⁶, this study has quantified the extent of the problem. The survey also revealed that acute hospital care is being provided in many cases by hospitals owned and run by community based organisations. It is of interest to note that the 'neo-liberal, market driven' policies of the 1990s have reversed the intent of the 1938 health reforms³ which nationalised hospitals and removed them from local ownership. Also, the usual safeguards associated with devolving services from state control have not been rigorously applied – that is, strong regulations to ensure the quality of care provided by the new owners. This is evidenced by the fact that many of the hospitals are not credentialing their medical staff and do not have an active clinical governance structure. However this is also true of some of the hospitals owned by the DHB. As the Minister of Health noted, there is a need for greater clinical leadership – and this appears to be particularly true for the rural hospitals⁸. Williamson said 'the capability of local clinical governance to provide a clear vision and strategy of service development appropriate to their population's need is also important'⁷. Some form of credentialing of staff is particularly important in rural hospitals where there is a high turnover of staff, and use of locums and IMGs. While IMGs play a critical role in keeping rural health services operating in many countries^{6,9,10}, they also often require initial supervision and additional support¹⁰. Recent high profile cases from other countries also highlight the importance of proper assessment and supervision of IMGs working in rural hospitals or out of office hours^{11,12}.

The present survey identified only 107 rural hospital doctors who are providing acute care in the 28 rural hospitals, a very vulnerable base from which to be operating such an important service. Hospital managers identified a continuing critical shortage of medical practitioners available to work in



New Zealand's rural hospitals. Another sign of the lack of capacity is that 50% of the doctors had been required to work additional shifts in the month prior to the survey. It was also noted that a high proportion of IMGs was identified – 65% compared with the national figure of 41%, 42% for GPs as a whole¹³ or 57% for rural GPs¹⁴. The doctors also had a higher average age at 47 years compared with the national average (40 years)¹³. That many rural hospital doctors have been trained in other countries, coupled with the high proportion of doctors who are not currently vocationally registered, suggests a need for greater emphasis on the governance of rural facilities.

The doctors' questionnaire revealed a number of disturbing factors – the doctors also noted a lack of leadership, many reporting that they had no protected non-clinical time and that clinical governance processes were often rudimentary. When they first met in 2005, New Zealand's rural hospital doctors concluded that the absence of a professional body and training program were the greatest barriers to recruitment, retention and standards of care⁶. Now that these doctors have their own professional 'home' within the Royal New Zealand College of General Practitioners (RNZCGP) and the first registrars have entered the new training program there is the prospect that some of the problems highlighted in the present article may improve.

Murdoch identified the need for a clinical network of rural hospital doctors⁴. Now rural hospital doctors have a recognised scope of practice within the RNZCGP (Division of RHM). Murdoch also raised the issue of an academic base for RHM. This has been recognised by the Division who have insisted that the training program include a significant proportion of academic study. In addition, rural hospitals have renewed their participation in the training of medical students on a number of sites, due to rural immersion programs commenced by New Zealand's two medical universities (at Auckland and Otago)^{15,16}.

It has to be said that the research base for RHM has been limited in New Zealand. Despite this a growing body of

knowledge has been built up by a small but dedicated band of researchers¹⁷⁻²¹.

Murdoch also noted the need for leadership on the issue of out-of-hours provision in rural areas⁴. More work on the principles and issues involved in this difficult area needs to be undertaken and the Division of RHM should be involved in these discussions. Because RHM is a new scope of practice with an active experiential pathway, the number of vocational registrants is still steadily increasing. By July 2010 there were 38 doctors on the register and this is expected to plateau at approximately 50 doctors by the end of 2011 and to increase further when the current registrars start completing their training program in 2013.

Conclusion

This study provides useful baseline information for rural hospital managers, clinical leaders, DHBs, Health Workforce New Zealand and others involved in New Zealand workforce planning. The initiatives outlined should improve many of the sector's problems; however, their actual impact should be evaluated. Further research is needed on the strengths and weaknesses of differing models of care, for example comparing community ownership with ownership by a DHB. In addition, DHBs should assist in supporting New Zealand rural hospitals to develop robust and sustainable processes to underpin the clinical governance of their health services.

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Appendix I: Rural New Zealand hospitals in this study, 2009

1. Akaroa Hospital
2. Ashburton Hospital
3. Bay of Islands Hospital
4. Buller Hospital
5. Chatham Islands Hospital and Health Centre
6. Clutha Health First
7. Dannevirke Community Hospital
8. Dargaville Hospital
9. Dunstan Hospital
10. Golden Bay
11. Gore Hospital
12. Hawera Hospital
13. Hokianga Hospital
14. Kaikoura Hospital
15. Kaitaia Hospital
16. Lakes District Hospital
17. Maniototo Hospital
18. Murchison Hospital and Health Centre
19. Oamaru Hospital
20. Opotiki Hospital
21. Taihape Health Limited
22. Taumarunui Hospital
23. Taupo Hospital
24. Te Kuiti Hospital
25. Te Puia Hospital
26. Thames Hospital
27. Tokoroa Hospital
28. Wairoa Hospital and Health Centre