THE IMPACT OF INNOVATION FUNDING ON A RURAL HEALTH NURSING SERVICE: THE REPOROA EXPERIENCE

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Abstract

Health Reporoa Inc. offers a first contact rural nursing service to the village of Reporoa and surrounding districts. From 2003 to 2006 it became a project site through selection for the Ministry of Health (MoH) primary health care nursing innovation funding. Health Reporoa Inc. successfully achieved its project goals and gained an ongoing contract from Lakes District Health Board to consolidate and further expand its services at the close of the funding period. This paper examines the impact of the innovation funding during the project period and in the two years that followed. The major impact came through an expansion of the accessible free health service to the local population; advancing nursing practice; increased connection to the nursing profession and wider health community, and enhanced affirmation of the nursing contribution. The rural nursing service model developed at Health Reporoa, through the benefit of innovation funding, can now act as a blueprint for other rural health services, particularly those in high deprivation areas.

Key Words: Primary health care, rural nursing, innovation, advancing practice.

Introduction

Reporoa is a rural community in central New Zealand (NZ) where a small group of nurses provide a first contact primary health care (PHC) nursing service to the local population. Health Reporoa Inc. (HR) was one of 11 projects that secured Ministry of Health (MoH) primary health care nursing innovation funding in 2003-2006 to extend the services provided. The funding of the 11 projects had its origin in the PHC Strategy (Ministry of Health, 2001). The Strategy indicated the future direction of PHC in New Zealand and the importance of the nursing contribution in this direction. An evaluation of the 11 projects was also funded by the MoH (Nelson, Wright, Connor, Buckley, & Cumming, 2008 in press; Primary Health Care Nurse Innovation Evaluation Team, 2007). This article, co-authored by two members of the evaluation team (MC, KN) and the senior nurse at HR

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(JM), demonstrates how innovation funding enabled a more accessible service to those most in need in Reporoa and surrounding districts, while simultaneously providing for the advancement of nursing practice.

Motivating the application for innovation funding was the loss of a general practitioner (GP) and a belief by the governance committee that nurses prepared to advance their practice, could respond to the community need and provide first contact PHC services efficiently and effectively. Since the close of innovation funding, HR has attained a contract from the Lakes District Health Board (LDHB) for the maintenance and extension of the nursing service. The post innovation contract is for overall comprehensive nursing services rather than the series of separate contracts (e.g. Youth Health, Community Nursing Service) available at the time of innovation funding.

The evaluation received approval from the Multi-region Ethics Committee (a health and disability ethics committee that approves projects across different regions in New Zealand). It involved interviews with nurses, community stakeholders and analysis of documentation and clinic data. Findings from the evaluation, both published and those held at HR, and particularly interviews and a focus group with main stakeholders, form a major component of this paper. Quotations in this paper, taken from these findings, appear in italics. Where appropriate, statistics from the 2006 findings are updated to account for developments post innovation funding.

Background

Rural Health Nursing in New Zealand

'Backblocks nursing' was the name given to rural nursing in the early 20th century (Burgess, 1983, 1984; Wood, 2008). In the 1970s practice nurses, in addition to public health and district nurses already stationed in rural areas, were employed by GPs via a special subsidy introduced by the government in response to difficulties in meeting rural health need (Docherty, 1996; McClellan & Brash, 1988; McLennan, 1981). In the 1980s the trend became evident for nurses to provide a first contact nursing service in rural areas for high need populations upon the exit of rural GPs (Litchfield, 2004; McClellan & Brash). Issues in servicing rural communities continued into the 1990s. A Centre for Rural Health opened in Christchurch in 1994 to address this need (Litchfield, 2001; Ross, 1999, 2001). The Christchurch centre closed in 2003 following the opening of The NZ Institute of Rural Health in Hamilton in 2001 (The Institute of Rural Health, 2003). The Christchurch centre offered and the Hamilton institute continues to offer postgraduate education and produced informative material for the planning and development of rural health nursing in New Zealand. Material from these agencies focused on the uniqueness of rural contexts and the shape of nursing practice needed in such a context. In 2001, in line with the PHC Strategy's priorities, the MoH began issuing a number of reports on rural health (Ministry of Health, 2008) signalling that ongoing vigilance was necessary to meet rural

health need. Similar experiences in attending to rural health need through the development of rural health nursing have occurred internationally (Macduff & West, 2003; Macleod, Kulig, Stewart, & Pitblado, 2004).

Reporoa and Kaingaroa Communities

Health system restructuring in the early 1990s left Reporoa bereft of any nursing services. A local committee, similar to those in Takapau and Eketahuna (Litchfield, 2004; McLennan, 1981) mobilised together and achieved contracts for public health nursing, district nursing, adolescent/college care and care of the elderly, from the then Midland Crown Health Enterprise. A precedent for such local committees occurred in the early 20th century (Wood, 2008). To fulfil the Reporoa contracts two nurses were employed part time during 1996 and 1997. One of these was the main employee and the other supported and relieved her. This main nurse still works at HR. She is referred to as the senior nurse in this paper. During this time a GP worked independently in Reporoa three days a week, sharing the community-owned rooms (the base clinic) with the nurses. In 2002, Lakes District Health Board (LDHB) became the contract purchaser and the local governance committee became Health Reporoa Inc. At this time the nurses also provided unfunded triage clinics for a $10 fee. These took on greater importance when the GP discontinued his practice in Reporoa in 2002. The HR governance group and the nurses believed that the most 'at risk' members of the population were not accessing the triage clinics and needed a more convenient and free service closer to their communities. It was this belief that motivated the discussions with the LDHB regarding funding the clinics from which emerged the application of innovations funding.

At the beginning of the project Butler and Maisey (2003) cited the Reporoa and surrounding village constituency as 1761 people. Most were Pakeha with 18.26% Maori. There were pockets of affluence as well as pockets of poverty. The NZ Deprivation Index (Crampton, Salmond, & Futton, 1997) for the area was six (where one represents least deprivation and 10 represents highest deprivation). Kaingaroa, included in the Reporoa constituency during the negotiating of the MoH contract, had a population of 559 with 84.5% identifying themselves as Maori (New Zealand Statistics Department, 2007). Kaingaroa's NZ Deprivation rating has remained 10 throughout (Rotorua District Council, 2008). Surrounding areas have since been added to the HR constituency and by 2008 the population served was approximately 3500, 64% Pakeha and 34% Maori.

A survey of the Reporoa population in 2003 revealed access to a GP as the community's greatest health priority (Butler & Maisey, 2003). Further, these authors reported high numbers of motor vehicle accidents and drug use with associated violence, particularly in Kaingaroa. The LDHB identified ongoing health issues related to diabetes, obesity, cardiovascular and respiratory conditions, cancer, and smoking in its overall constituency (Lakes District Health Board, 2004). According to this document the high statistics for chronic illness, and its

precursors, were even higher in the Maori population.

Impact of Innovation Funding

The immediate impact of the funding was twofold. First, an extra nurse and relieving nurse were employed making a team of five nurses – one full time, two-part time and two relievers. The administrator's hours were extended to enable support for the upgrade of reporting mechanisms required with the innovation status. Second, clinics increased following consultation with the community.

On review by the evaluators and the Reporoa nurses two years after closure of the funding period, and functioning within a new comprehensive contract, the overall impact covered four interrelated areas: Extension of an accessible free health service; advancing nursing practice; increased connection to nursing profession and wider health community and enhanced affirmation of the nursing contribution.

Extension of an Accessible Free Health Service

Innovation funding resulted in an increased number of clinics available and enabled free access to these clinics. The number of Reporoa base clinics increased and additional outreach clinics were provided at schools, industry and the local Maori Hauora organisation. The total clinic time increased from 10 hours a week at the base to 30 hours a week across five sites between 2003 and 2006. In 2008 clinics were located in four sites for 28.5 hours. The Hauora clinic ceased because of staff changes.

Community members began attending the additional clinics immediately, with the numbers attending in any one month fluctuating. Fluctuations related to flu vaccination campaigns and other health screening activities which were offered in different months, and school holidays. Over the project period, there was a gradual increase in the use of the clinics (Figure 1). However it is not possible to track this trend further given changes in the comprehensive contract reporting. The comprehensive contract required a move from one to three monthly reports to LDHB. Three monthly comparisons of July-September 2005 (803 contacts) with the same months in 2008 (1121 contacts) indicate ongoing expansion. The 2008 figures capture the extension of the service within a wider constituency.

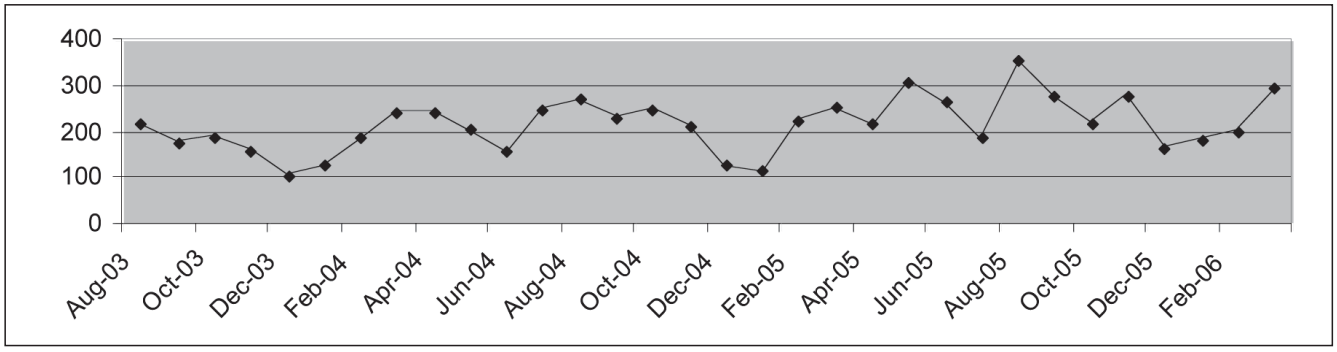

Figure 1. Attendance at all clinics between August 2003 and March 2006

In 2003, 2004 and 2005 the proportion of Maori attendance at all clinics was 33.4%, 39.9%, 42.8% respectively. A Kaingaroa stakeholder in 2006 in commenting on the community ownership of the local nursing clinic considered that its convenience and free access encouraged attendance; especially by those who had debt with visiting GPs. The same stakeholder commented that *the nurses are culturally appropriate – they are a certain breed of nurse – open heart and open arms manner.* In July-September 2008 Maori were 48% of all clinic attendees. The increase of Maori attending clinics provides evidence that the service has achieved a MoH goal of making health care more accessible to Maori (King, 2001).

Another feature in the clinics was an increase in adult male attendance. Although males were the majority of attendees at the industrial sites, which was consistent with the majority of employees being male, men began attending the base clinics. According to the monthly reports male attendance was in almost equal numbers to female. It is likely that some of this effect was a flow-on effect from the nurses' accessibility at the industry clinics and community activities, but community feedback also spoke of the *comfortable* environment provided by the nurses. In 2008 adult male attendance had settled at 40% of all clinic attendees.

Overall, the innovation funding and ongoing funding from the LDHB has allowed nurses the time to assess people from a broad health perspective and to advise on early interventions and health promotion. Many different stakeholders commented on their satisfaction with the effectiveness of the time taken and free access to health promotion, health screening and general preventive work. Comments included *have noticed huge moves forward since innovation funding, women's health screening, cervical screening.* [The] *increase in staff ... makes them, nurses, more available,* [allows] *time for nurses to communicate better and give comprehensive explanations*. In 2006 community stakeholders believed that the community was healthier and admissions to hospital had reduced. In tandem with the expansion of clinics was an expansion of rural nursing practice and greater realisation of nursing potential.

Advancing Nursing Practice

Jones and Ross (2003) discuss expanding nursing practice as involving the development of new knowledge, often including increased autonomy. This was the experience of HR nurses. The two nurses employed at the outset of the project had already begun postgraduate study and had moved beyond more regular nursing roles such as public health and district nursing while retaining the skill set pertaining to them. During the three year funding period the senior nurse and the newly employed nurse enrolled in the Postgraduate Rural Health Diploma at the Waikato Institute of Rural Health with the intention of progressing to a Master's degree and Nurse Practitioner status. The new nurse obtained a rural nurse scholarship for 2007 and completed her degree. Unfortunately, having returned to the team in 2008 she resigned in August due to unexpected

family commitments. The senior nurse completed her Master's degree in early 2009 and has plans to apply for registration as a Nurse Practitioner with prescribing rights. Attendance at postgraduate courses is assisted by the provision of Clinical Training Authority (CTA) funding, and from positive encouragement of the governance group. The nurses report that the postgraduate nursing programmes increased their confidence in consolidation of their expanding skill base and in dealing more effectively with clinical issues. Moreover, these programmes assist them to describe and clarify their practice boundaries. Other clinical skill education sessions occur regularly in the local region and are selectively attended by all the HR nurses.

Community feedback toward the close of the funding period included observations that the project had provided the opportunity for the expansion of nursing skills which had been grasped by the nurses to the benefit of the population. Further, at this time, the communities' initial concern about a GP replacement was no longer an issue. In fact one stakeholder described the nurses as *superb at replacing the GP.* This person said that the nurses' *accessibility* [is] *really important as is approachability* and further observed *there is less infection because* [the nurses] *can give antibiotics.*

The nursing practice, informed by a PHC and person-centred philosophy, had three main thrusts: health assessment and diagnosis; triage and treatment of minor injuries and conditions and health promotion and health maintenance. Diagnosis and treatment were bolstered by standing orders (Ministry of Health, 2002) with neighbouring GPs for dispensing medications for some infections and for some contraceptives. In certain situations, for example, in suspected urinary infections, nurses were also able to order specified diagnostic tests or take blood for disease screening and health maintenance checks. In addition, the nurses had authority to refer people with bone injuries to X-ray. Education and training in these skills took place locally and nationally.

Being on the ground in the community, the nurses seek rural solutions to rural problems. In this way they portray their embeddedness in 'rurality', described as understanding the significance of and increasing responsiveness to the rural context (Jones & Ross, 2003). Thus, their practice can be described as being informed by an ethic of rurality. This practice fits with what Litchfield (2001) describes as a comprehensive rural health care model of nursing. Reinforcement of the model came from Reporoa community feedback. *They really care. The community knows that they care, so really trust them to follow up. They are in tune so deal with things more effectively … They foster an ethos that community health is important and to be valued.*

Increased Connection to Nursing Profession and Wider Health Service Community

Prior to the project the HR team experienced considerable professional isolation described as a characteristic of rural nursing practice (Howie,

2008; Jones & Ross, 2003). As such, increasing connection with the nursing profession and wider health service community throughout the project and since is important. These connections expanded the sphere of influence of their practice both locally and nationally: a feature of advancing practice (Nursing Council of New Zealand, 2004).

Closer connections began with the LDHB in developing the proposal for MoH funding and further developed throughout the funding period and beyond. These connections primarily involved the Funding and Planning manager. However, a meeting was held with the Chief Executive Officer and a presentation articulating their practice was given to the Lakes DHB Community Primary Health Care Advisory Committee (CPHCAC) in 2005.

The nurses invest time in communicating the outcomes of their work to the GP practices where their clientele are enrolled. Such outcomes can be about referring people to see a GP or discussion on a plan of action. Much of the success of the nursing work relies on this collaborative relationship. These nurses believe, as does Higgins (2008), that good outcomes for clients are achieved when respect, communication and information flow backwards and forwards within collaborative relationships.

Other expanding connections developed within the project through workshops provided for representatives from the 11 projects, and from the postgraduate education. Both these avenues provide interaction and extended contacts with other professional nurses and health policy strategists who assisted in broadening their understanding in perspectives of care and in positioning as rural nurses in the national arena. Further, these connections led to international contacts. The senior nurse in moving towards NP status took an opportunity to spend time with an NP in the United Kingdom. Such connections, not previously on the horizon, now provide the nurses with a greater vision of their practice and provide affirmation of their own work.

Enhanced Affirmation of their Nursing Contribution

Nurses working in isolation where advancing their practice has considerable personal cost together with being under surveillance in a targeted project need evidence that they are positively contributing to health outcomes and need to know that this contribution is valued. In addition to the affirmation received at the project workshops and the ongoing connections with the other chosen projects, valuing of their work came from three main areas: colleagues, services users and the DHB.

Their collaboration with the GPs where their clients are enrolled is important so they worked hard at building relationships with them. At the beginning of the funded project many GPs were sceptical of the nurses' contribution, however as one nurse noted *with innovation dollars acknowledgement* [by GPs] *has shifted to be positive*. Such a shift both reduces the energy and caution needed by nurses in approaching the

doctors. It makes for a more collegial conversation where the best client outcome can remain foremost.

Valuing and affirmation by service users is evident through the increased attendance at the clinics. Community stakeholders such as schools, industry and the local St Johns ambulance group demonstrate the value of the clinics through the provision of in-kind resources such as free use of rooms and purchasing of equipment. As the college principal reported: *It is really rich having … nurses who are adolescent friendly, the pupils are very comfortable with the clinic and display ownership … it's amazing the volume of students that go through. I believe it relates to the relationship between student and nurses.*

Consistent affirmation is also evident through the presence and activity of the governance group. Support comes in provision of relief nurses, time off for study and financial assistance to attend both formal and informal education sessions. On the ground, the governance group and manager seek funds for equipment and particular projects and keep communication channels open with the community. In particular the governance group has encouraged the endeavours of initially two nurses, now one, towards nurse practitioner status.

The LDHB's affirmation is demonstrated through the provision of ongoing funding of the HR nursing service. Both the CEO and Funding and Planning manager of the LDHB expressed their pleasure and satisfaction with the HR achieving their innovation project objectives. As knowledge of their work gathered momentum approaches to visit and learn from them increased from other agencies. For example they were approached to take undergraduate nursing students and in 2008 the senior nurse was invited to Nelson to participate in a DHB organised forum about rural/ advanced nursing roles in the Nelson Marlborough DHB.

Much of the valuing and affirmation emerged out of the expanding professional and health service connections. Such affirmation supports the stability of the workforce and increases the attraction of the service to other possible employees.

Into the Future

The development of a 'Future Directions' document at the close of the funding period paved the way to an integrated future. It consolidated what HR had achieved through participating in the innovations, gave new energy to the whole HR team, showed commitment to the future and provided evidence for negotiation of the new comprehensive rural nursing contract received in 2006 and rolled over in 2008. This new contract covered overall nursing services. Such an umbrella contract in rural nursing, rather than the previous multiple contracts, honours the holistic nature of nursing where health education, promotion and treatment mainly go hand in hand. Such a contract assists in overcoming fragmentation and encourages continuity of health care for all the community members. Moreover the 2006 contract provided for the employment of liaison workers

by the service, previously employed by other local groups.

Five nurses presently provide 60 hours, plus on-call hours, of nursing time each week. Only two of these were part of planning the vision for the future in 2006 together with the administrator. The vision of 2006 has not advanced as envisaged due to upheavals relating to the two nurses having more time to study, the resignation of one of these, and the integration of new nurses into the service. However, the senior nurse studied the services state of collaboration with GPs in her Master's degree. Her unpublished findings indicated that GPs found collaboration with the HR service a positive experience for them and their clients.

More formal links with a Rotorua Primary Health Organisation are being considered as a future possibility. The present arrangement works well on the ground for HR while their service is funded independently by the LDHB. As collaborative GP and nurse relationships enhance the outcomes of health care to clients it is important that a non-competitive model develops which promotes the ongoing collaboration and independence of each group.

Conclusion

New Zealand's long history of rural communities forming groups to become the channel for organising health services is part of our national fabric. Such services often survived through the goodwill of the personnel and governance members with little opportunity to develop and flourish. It is likely that this would have been the fate of HR without their selection for innovation project funding. The impact of this funding is now evident in the extension of comprehensive health services freely available to a previously underserved rural population. In the process of this achievement was the opportunity for the nursing personnel to upgrade their skills and advance their formal nursing education making them more capable of providing a better service than prior to the funding period. Moreover the opportunity to progress in realising their nursing potential, connect with the wider professional and health community and have their contribution affirmed increases their commitment to the community.

HR now provides a model of rural nursing to which other rural communities can aspire to improve the care of their populations. DHBs are now responsible for providing and improving rural health services. Other rural communities, who have a history similar to Reporoa and still survive on multiple contracts and much goodwill, can now present the evidence of the impact of increased funding on Reporoa as support in negotiations to upgrade their own services. Improvements in rural health in New Zealand will gather momentum if the impact experienced at Reporoa is multiplied many times around the country and support services for rural health continue to evolve. Such investment should lead to improved health and well being of rural populations and acknowledge the important contribution they make to the social capital of New Zealand.

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