

**THE CHALLENGE OF DEVELOPING  
PRIMARY HEALTH CARE NURSE  
PRACTITIONER ROLES IN RURAL  
NEW ZEALAND**

**By**

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## **ABSTRACT**

When the New Zealand Nursing Council introduced the Nurse Practitioner™ as a new level of nurse in 2001, the opportunity arose for the introduction of Primary Health Care Nurse Practitioners into the rural practice arena in this country.

This dissertation explores the influences on the development of rural nursing in the last decade in New Zealand including the role of the Centre for Rural Health in advancing rural nursing education, as well as the impact the shortage of health professionals in rural New Zealand has had on the development of the rural Primary Health Care Nurse Practitioner concept.

For pioneering Primary Health Care Nurse Practitioner roles to be successfully implemented in rural communities in New Zealand, several challenges need to be faced; the creation of roles and employment opportunities, community acceptance of the role, medical and nursing acceptance of the role and the establishment of independent nurse prescribing within the constraints imposed by current legislation. The dissertation explores the current literature in an attempt to offer solutions to the identified challenges.

With the creation of Primary Health Care Nurse Practitioner roles and the establishment and acceptance of these roles in rural communities, a new mode of health service delivery in rural New Zealand will begin.

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## INTRODUCTION

*“When we accept tough jobs as a challenge and wade into them with joy and enthusiasm miracles can happen”*

Harry S Truman

(cited in Canfield, Hansen, Mitchell-Autio, & Thieman, 2001, p.49)

When exploring the development and advancement of rural nursing practice in New Zealand in the last decade, the enthusiasm with which it has been embraced, and the challenges nurses face in establishing advanced nursing roles in New Zealand, Truman’s words acquire certain significance.

The New Zealand Nursing Council (NCNZ) introduced a new level of nurse, the Nurse Practitioner™ (NP)<sup>1</sup> in 2001, facilitating change within the established and traditional modes of healthcare provision; nursing in New Zealand began a process of transition and transformation. Nurses practicing at advancing and advanced levels across all clinical settings recognised the opportunity NP endorsement could bring to their careers and to health care delivery, in ways that had not previously been legally allowed or authorised (Ministry of Health [MOH], 2001, 2003). This encouraged nurses to begin preparation for the NP role (MOH, 2003). The New Zealand Ministry of Health (MOH, 2001, 2003) anticipated NP endorsement for suitably qualified and experienced rural nurses would benefit rural communities by improving access to care and improving health outcomes. Included in this faction are nurses who practice in rural communities of New Zealand who seek to establish roles as rural Primary Health Care (PHC) NPs.

The intent of this dissertation is to explore the development of advanced rural PHC nursing in New Zealand in the past decade and then to discuss the challenges I believe rural nurses will encounter, as they seek to establish rural

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1. Nurse Practitioner™ -the NP title is trademarked by the NCNZ (NCNZ, 2001) as it is a registered scope of practice. For the purposes of brevity, this is assumed to apply to all future use of NP in this dissertation.

PHC NP roles. My interest in exploring this topic has surfaced as I prepare an application to NCNZ for endorsement as a rural PHC NP. Like many of my nursing colleagues, I am passionate about the significant contribution nurses make to PHC, particularly in rural communities. I believe PHC NPs have the potential, especially in medically underserved rural communities, to extend the current levels of nursing service to provide a level of care that will enhance patient access to care and potentially reduce current inequities in health (MOH, 2001).

In my current position as a Rural Nurse Specialist, I practice at an advanced level, in a small geographically remote rural community 200 kilometres from a base hospital. I am somewhat frustrated by the restrictions my current nursing registration, that of a Registered Nurse, imposes on my practice. My current role and registration allows for a high level of autonomy within my practice, but does not allow me to prescribe medications or treatments for patients except under Standing Orders<sup>2</sup> (NCNZ, 2005). As a rural PHC NP with prescriptive authority, this constraint would be removed, which would enable me to offer a more seamless level of service to patients, guided by current 'Best Practice' guidelines. As well, in my practice I routinely deal with patients with complex health issues. Limited authority to initiate X-ray, laboratory tests and referral for patients to medical specialists, is a further constraint of my current nursing registration.

My commitment to PHC in a rural context was recognised by the MOH in 2003 when I was awarded one of six inaugural Primary Health Care Nurse Practitioner (Rural) Scholarships (Cassie, 2004). By reimbursing my salary for the 2004 academic year, the scholarship allowed me to step aside from clinical practice with the intent of completing my clinical Master of Nursing qualification and to prepare an application to NCNZ for endorsement as a rural PHC NP. I believe that by providing these prestigious scholarships, the MOH has

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2. Standing Orders Regulations (MOH, 2003) necessitate the signed authority of a doctor to authorise specific nurses to administer specific medications or treatments in specific situations. A legal requirement of Standing Orders is that when actioned, they must be counter-signed by the authorising doctor within 96 hours.



signalled their support for the development of PHC NP roles in rural New Zealand.

It is important to clarify and define the terms *primary health care*, *the primary health care nurse* and *rural* as they pertain to the New Zealand health context and to this dissertation. PHC is a broad multidisciplinary area of practice which is provided in urban and rural settings by nurses and other health professionals (MOH, 2001). The Primary Health Care Strategy (MOH, 2001) defines PHC as:

*...essential health care based on practical, scientifically sound, culturally appropriate and socially acceptable methods that is:*

- *universally accessible to people in their communities*
- *involves community participation*
- *integral to, and a central function of, New Zealand's health system*
- *the first level of contact with our health system (p.1)*

In New Zealand The Expert Advisory Group on PHC nursing (2003) provided the following comprehensive definition which I believe conceptualises the true essence of rural PHC nursing and the rural PHC NP:

*Primary health care nurses are registered nurses with knowledge and expertise in primary health care practice. Primary health care nurses work autonomously and collaboratively to promote, improve, maintain and restore health. Primary health care nursing encompasses population health, health promotion, disease prevention, wellness care, first-point-of-contact care and disease management across the lifespan. The setting and the ethnic and cultural grouping of the people determine models of practice. Partnership with people- individuals, whānau, communities and populations – to achieve the shared goal of health for all, is central to primary health care nursing. (p.9)*

I have chosen to link PHC, the PHC nurse and NP in a rural context by looking to Bushy (2000) who defines *rural* or *ruralness* as the “... *distance between services and providers, geographic remoteness, and lower population density...*” (p.236). Thus, I envisage the rural PHC NP will likely practice in an environment that may be geographically and/or professionally isolated.

I have divided the dissertation into two sections. In Section ONE, I will discuss the measures in the last decade that I believe have led to the development and advancement of rural nursing in New Zealand, and the potential development of the rural PHC NP role. Acknowledgment will be made of the influence of bodies such as the Centre for Rural Health (CRH) in raising the profile of rural health issues and the CRHs’ promotion of advanced education for rural nurses. Discussion will include reference to relevant health policy and legislation in New Zealand, which has shaped and influenced rural PHC and advanced rural nursing developments within this timeframe.

Following this discussion Section TWO will provide critical analysis of selected literature, in an attempt to find a means of responding to potential challenges in establishing rural PHC NP roles in New Zealand. Challenges discussed have been chosen for their relevance to my own practice environment, and my belief that these same challenges will be applicable to other similarly placed nurses. The challenges will concentrate on the formation of rural PHC NP roles by District Health Boards (DHBs), gaining community acceptance and understanding of the role, and gaining nursing and medical acceptance of the role. Literature will be explored relating to how NPs in other countries have responded to these challenges. There is realisation that some challenges may relate only to New Zealand, and others may be related specifically to individual practice arenas. The challenge of establishing independent nurse prescribing in New Zealand will also be discussed, with particular reference to the effect current prescribing legislation has on the establishment of truly autonomous, independent rural PHC NP roles.

Finally, strategies will be proffered to address the identified challenges and conclude the dissertation. It is my intention that this dissertation will become a useful document for individual nurses, DHBs, and communities, contemplating establishing PHC NP roles in rural New Zealand, now and in the future.

## **SECTION ONE**

### **FACTORS INFLUENCING THE DEVELOPMENT OF ADVANCED RURAL NURSING PRACTICE IN NEW ZEALAND**

The evolution and development of advanced rural nursing education and practice in New Zealand, has positioned suitably qualified nurses in rural communities to pioneer PHC NP roles.

American Nursing Professors and Family Nurse Practitioners Marie Brown and Mary Draye examined the experiences of pioneer NPs in the United States of America (USA) in establishing their advanced nursing roles. Brown and Draye (2003) suggested knowledge of the origins of advanced practice “...can lead to a better understanding of this key milestone in the growth and development in nursing...” (p.391). Similarly, I believe recognising the history of the development of advanced rural nursing education in New Zealand in the last decade, serves to remind nurses who are intending to seek PHC NP endorsement, and others, of the importance of the processes that have led to the development of advanced rural nursing practice in this country. It also recognises and highlights rural health issues in New Zealand that have led to the proposed development of the pioneering rural PHC NP roles.

#### **Ministerial Taskforce on Nursing**

The Ministerial Taskforce on Nursing (1998) was commissioned by the MOH, to explore ways of releasing the potential of nursing in New Zealand. The report concluded that, “...the potential for nursing to make a difference to health care will require a process for transition” (MOH, 1998, p.28) and recommended that the MOH direct the NCNZ to develop advanced nursing practice competencies, which were to be linked to titles that were nationally

consistent (MOH, 1998). The report recommended that NP roles be developed in New Zealand, citing international literature to support this recommendation. The recommendation to promote NP development in New Zealand appears to be congruent with developments in Australia at this time (Appel & Malcolm, 2002; Carryer, 2002; Gardner, Carryer, Dunn, & Gardner, 2004). I believe the recommendation of the Taskforce (MOH, 1998) that NP roles be developed in New Zealand was a logical progression of professional nursing development as had been seen in the USA and the United Kingdom (UK), where NPs had been practicing successfully for many years (MOH, 1998; NCNZ, 2001). For many nurses in New Zealand, this was a timely and important document.

The report on nursing (MOH, 1998) identified issues rural nurses recognised could benefit their careers and the communities they serve. The report focused on what was described as the “...*untapped potential of the nursing workforce...*” (MOH, 1998, p.4). The report highlighted the plight of nurses with advanced clinical and leadership competencies from all practice arenas in New Zealand, who were inhibited in their development and utilisation, by legislation, funding shortages, and the lack of ongoing clinical career pathways (MOH, 2001). The report offered vision for improved career pathways for nurses who desired to retain a clinical focus to their roles, rather than following management models which had previously been the only option for individual career advancement.

The concepts of advanced nursing practice, NP and nurse prescribing had been debated in New Zealand for many years (Brash, 1986; Carryer, 2002). In 1986 Jenny Brash, a Nurse Advisor on secondment to the New Zealand Department of Health wrote a discussion paper for the Department of Health and the New Zealand Nurses Association (NZNA) *Exploring the possibilities for independent NPs in New Zealand* (Brash, 1986). In 1989, Laura Hawken wrote a research report for the NZNA looking at *Nurses who see themselves as independent practitioners* (Hawken, 1989). Interestingly I note similarities in the concepts mooted by Brash, Hawken, and the MOH Taskforce on Nursing report (MOH, 1998). I suggest the earlier reports (Brash, 1986; Hawken, 1989)

were the forerunners in identifying the concept of independent nursing practice and the NP concept in New Zealand.

In 1999, the New Zealand Government amended the 1981 Medicines Act (Medicines Amendment Act 1999) which paved the way for the introduction of nurse prescribing (NCNZ, 2005).

### **Inception of the Nurse Practitioner role in New Zealand**

In 2001 following widespread discussion and consultation, the NCNZ released what was described as a blueprint for NP (NCNZ, 2001) and the possibility for nurses to attain NP status finally became a reality in New Zealand. The NCNZ envisaged the NP role in New Zealand would involve academic preparation of NPs at Masters level with an expectation that NPs would demonstrate clinical excellence (NCNZ, 2001).

### **The Primary Health Care Strategy**

Coinciding with the announcement by the NCNZ that suitably educated and qualified nurses could apply to become NPs, the New Zealand Government released documents that were to impact on health policy and provision of health services providing opportunities for nurses to develop NP roles. The New Zealand Health Strategy (MOH, 2000) and the Primary Health Care Strategy (MOH, 2001)<sup>3</sup> were two such documents. I would suggest that these strategic initiatives, particularly the PHC Strategy altered the core structure of PHC service provision in New Zealand, and paved the way for many new and innovative health initiatives by health professionals, to meet the goals and vision contained within the documents (MOH, 2003). The goals of the PHC Strategy (MOH, 2001) are focused on finding local solutions to health disparities by local people, better coordination of health care provision by health service providers, and the promotion of wellness models, which include

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3. The Primary Health Care Strategy (2001)- for the purposes of brevity within this dissertation will be referred to as the PHC Strategy.

the maintenance and restoration of health. As well, the PHC Strategy (MOH, 2001) recognised the need to develop the PHC workforce. By placing particular emphasis on the health of Maori and Pacific Islanders, and for those residing in rural communities (MOH, 2003), the PHC Strategy has the potential to reduce health inequalities and improve health outcomes for these people by improving access to affordable health care at the first point of contact. The PHC NP role as described by the NCNZ (2001) fits with the goals of the New Zealand Health Strategy and in particular within the PHC Strategy (MOH, 2001). This provided nurses with the challenge of developing innovative ways to meet the goals of this document at a time when the rural workforce was depleted in numbers of General Practitioners (GPs) and rural nurses (London, 2001).

So what was happening in rural health and rural nursing at this time?

### **The influence of the Centre for Rural Health on rural nursing development in New Zealand**

In 1994 with the establishment in New Zealand of the CRH and through the efforts of its directors, a forum was founded for the research of rural health, rural nursing, and issues of rural health workforce recruitment and retention. The CRH was initially funded by the Southern Regional Health Authority, followed by the Health Funding Authority and finally the MOH (London, 2002). The CRH was commissioned to carry out a series of projects<sup>4</sup> to support rural health services, community involvement, and rural nursing. The CRH was not alone in researching issues of rural PHC provision, but was a driving force in the examination and promotion of rural nursing roles in New Zealand. Jean Ross, a Director of the CRH and Merian Litchfield a nursing researcher contracted by the CRH, studied these nursing roles, and identified a need for advanced rural nursing education, to support the developing roles of rural nurses (Litchfield, 2001; Ross, 1997, 1998, 1999; Litchfield & Ross, 2000).

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4. The CRH reports of these projects are available on the New Zealand MOH website (<http://www.moh.govt.nz/crh>).

Like Ross, I believe the nursing roles were developing in an ad hoc way and that individual nurses were struggling to access appropriate educational opportunities (Ross, 1997, 1998) in an effort to serve the growing needs of their communities.

In 1998, rural nurses and doctors were offered the inaugural papers in the interdisciplinary Post Graduate Diploma in Primary Rural Health. This was innovative in recognising and promoting the need for collaborative team function in this area of practice (Ross, 1998). The Diploma was developed by the CRH in conjunction with the Christchurch School of Medicine and the University of Otago. This Diploma offered an opportunity for rural nurses to gain a 'tailor-made' postgraduate qualification in their area of practice while continuing in their clinical roles (Ross, 1988; Brown, Maw & London, 2001). This is not to suggest that advanced education had not been available prior to this development. The available education at postgraduate level did not however have a rural PHC focus. I believe this Diploma, although interdisciplinary, was the forerunner of advanced nursing education in rural PHC in this country. This has since positioned rural nurses to pursue further educational opportunities to meet the NCNZ educational requirements for NP endorsement. Subsequently, increasing numbers of rural nurses, with encouragement from the CRH and latterly through Schools of Nursing, the New Zealand Institute of Rural Health, and Auckland University have obtained varying amounts of postgraduate education, to support their advancing practice (Ross, 1997, 1998; Litchfield, 1998, 2001; Litchfield & Ross, 2000; London, 2002; MacLeod, 2004).

I would suggest that rural health and rural nursing 'came of age' in New Zealand in the 1990s through the efforts of the CRH and in particular the vision of Ross and fellow director, Martin London who combined their vision for rural health. The efforts of the CRH to explore rural nursing and rural health issues was also evidenced by their submissions to the Ministerial Taskforce on Nursing (MOH, 1998), the New Zealand Health Strategy (MOH, 2000) and the PHC Strategy (MOH, 2001). Ross was also influential in establishing a Rural



Nurse National Network through the CRH. The work of the CRH helped provoke action on wider rural health issues, and I note the CRH was an influential voice in driving change in health policies such as the PHC Strategy (MOH, 2001).

In 2000 and 2001, the directors of the CRH lobbied the MOH to look at the wider issues of recruitment, retention, and advanced education of the rural workforce (London, 2001). Sadly, the CRH was disbanded in 2002; however, I believe one of the lasting legacies of this organisation is the recognition of the advancing roles of many rural nurses, and the subsequent development of postgraduate education to meet their needs. This in turn has positioned nurses to consider developing rural PHC NP roles to further their careers and to meet the needs of rural communities facing the loss of medical services.

### **New Zealand rural health professional workforce crisis**

It was noted in the literature that there were concerns in relation to health professional workforce shortages. London believed this concern was evident from policy makers down to those at the 'grass roots' of clinical practice, none more so than in rural communities (London, 2000, 2001, 2002). It is important to note GPs and nurses were not the only health professionals in short supply in rural areas. A shortage of pharmacists, physiotherapists, and dentists was also evident (London, 2000). The Rural Expert Advisory Group (MOH, 2002) in their report to the MOH, also showed concern for the declining and ageing rural workforce and referred to "*...a global marketplace for doctors, nurses, and other primary healthcare workers, who are in short supply*" (p 27). London (2002) advised that sixty-nine GPs left rural practice in New Zealand in 2002 and some were not replaced. The resultant decline in GP numbers left many rural communities and regions medically underserved, with the West Coast of the South Island of New Zealand being one badly affected area (London, 2002). The fact that rural Australia also faced a nursing and medical workforce crisis exacerbated the situation, as they too sought to supplement their

diminishing workforce with rigorous recruiting in New Zealand (London, 2001). London believed this intensified the situation for those GPs and nurses still providing PHC services in rural New Zealand. This was highlighted by the media, particularly by the regional newspapers in New Zealand, who joined the growing voices of concern regarding shortages of doctors and nurses. Examples include news articles by Brooker, 2002; Claridge, 2004; Clausen, 2000; MacDonald, 2003; Matthews, 2002; McCurdy, 2003; and Nichols, 2004. Buresh & Gordon (2000), noted the power of the media to highlight and influence public concern on issues such as doctor and nursing shortages, as well as influencing public policy. Whether the media had much influence on subsequent developments, is a matter of speculation. The media articles however, served to provide communities and health practitioners in rural communities, with the information that individual communities were not alone, in their problems of recruiting and retaining health professionals.

### **Ministry of Health response to rural workforce crisis**

In 2002, the MOH offered a substantial financial package for recruitment and retention of rural health professionals. The aim was to stem the flow of GPs and experienced nurses who were leaving New Zealand to practice overseas (London, 2002). It was recognised that the shortage of nurses was an international problem (College of Nurses Aotearoa [NZ] 2001). It is also worth noting that the success of the PHC Strategy was dependent on the retention of the diminishing rural PHC workforce. The package for recruitment and retention of rural GPs and rural nurses demonstrated the MOHs' awareness of the problem, and a desire to offer solutions (MOH, 2003). It is however, also testament to the nursing, consumer and medical bodies that had highlighted these issues and raised awareness of the impact departing health professionals have on rural communities.

## **Nursing and Ministry of Health response to rural health workforce crisis**

One wonders if the dwindling numbers of GPs prepared to work in rural areas had some bearing on the MOH decision to promote rural PHC NP roles in New Zealand. It would be naïve to consider that the NCNZ and nursing leaders did not seize this opportunity to develop the NP role in New Zealand including that of the rural PHC NP role (College of Nurses Aotearoa [NZ], 2001). Nurses recognised the opportunities this situation presented (Carryer, 2002). Professor of Nursing Jenny Carryer believes nurses are clear and focused in their wish to offer advanced nursing services to their communities. Carryer suggests nurses will preserve and honour all that epitomises nursing as a profession, whilst developing their NP roles (Carryer, 2002). I believe nurses will recognise the important intersections with other disciplines within their NP roles. They will promote nursing models, being clear on what a NP is, and recognise all that underpins the nursing discipline. Brown et al. (2001) suggested rural nurses facing continuing health provider shortages have constantly adapted to an ever-changing work environment, which demonstrates the adaptability and resourcefulness of rural nurses, and implied advanced rural nursing models have evolved from circumstance. As nurses in rural areas position themselves (Kai Tiaki, 2003) to find innovative ways to meet the objectives of the PHC Strategy, the promotion of the NP role, as an identified career pathway, appears to be a logical and important evolutionary process for PHC nursing in rural areas

## **What has prevented rural nurses from becoming endorsed as Primary Health Care Nurse Practitioners?**

Between 2002 and 2003, some advanced nurses, aware that NP endorsement in New Zealand was likely to become a reality, explored the NP role (O'Connor, 2003). I am aware of highly experienced rural nurses who have considered applying for NP status, but have not pursued the process because of their awareness that there is no guarantee that a role would be available

should they gain endorsement. O'Connor (2003) cited the burden of studying post-graduate education while working fulltime in rural communities as a reason for nurses not seeking NP endorsement. O'Connor also suggested that some rural nurses who had applied to the NCNZ for NP endorsement had been unsuccessful and had wondered if endorsement as rural PHC NPs is truly achievable.

There are many documented reasons why the first rural NP applicants to NCNZ were unsuccessful. The most obvious reason is that they were educationally ill prepared, and poorly supported through the application process. These nurses although highly experienced did not have a clinical Master's degree and could not demonstrate educational equivalency, which is a requirement for NP endorsement (NCNZ, 2001). O'Connor (2003) suggested that the nurses who had applied were unhappy, as they believed they were already fulfilling a NP role, apart from prescribing. This opinion is corroborated by Bragg (2004) who noted that experienced rural nurses in Australia held a similar belief in that they were already fulfilling a NP role, for which they now had to seek NP credentialing. There is no question that these nurses have demonstrated advancing practice and clinical excellence. I too held a similar view to Bragg and O'Connor, until recent postgraduate study involving a course in pharmacology and a nurse prescribing course, heightened my own awareness of the differences between advancing and advanced nursing practice, NP status and the depth and diversity of knowledge, that is required for the NP role.

The original NCNZ NP framework required applicants to meet five competencies (NCNZ, 2001). This was amended in 2002 to include a sixth competency related to nurse prescribing (MOH, 2002). O'Connor (2003) suggested the alteration of regulations that required all NP applicants, to be educationally prepared to meet prescribing competencies irrespective of their desire to prescribe, once again 'shifted the goalposts'. Although not ruling out those nurses who could apply for educational equivalency without postgraduate education until 2010, the process of proving equivalency without

academic grounding appears for some to have moved NP endorsement beyond reality. Those rural nurses who had submitted applications for NP endorsement or were intending to do so, voiced their frustration (O'Connor, 2003). The goal of obtaining NP endorsement kept moving, but not necessarily in the direction that would benefit this particular group of nurses. There was much debate in the New Zealand Nursing Journal, Kai Tiaki, in 2003, surrounding this topic.

The Nurse Practitioner Advisory Committee (NPAC-NZ) responded to the concerns that nurses had not been adequately prepared for the NP application process, by developing a mentoring process to support nurses seeking NP endorsement, through the credentialing process (NPAC-NZ, 2003).

### **Primary Health Care Nurse Practitioner (Rural) Scholarships**

The year 2001 heralded the arrival of Paula Renouf, on the NCNZ register as the first NP endorsed in New Zealand. At the time of writing fifteen nurses have achieved NP status; of these four have been endorsed as PHC NPs with one PHC NP establishing a DHB funded independent nursing service (Kumar, 2005). In March 2005 the Nurse Practitioner Advisory Committee (NPAC-NZ, 2005) advised that nine of the then fourteen endorsed NPs were employed as NPs. This falls well short of the MOH's vision of two hundred established NP roles as suggested by Hughes, (2003). Renouf (2003) in a letter to the editor of Kai Tiaki outlined a proposal to "...*fast-track*..." (p.3) experienced nurses, who lacked formal postgraduate education, to NP status. Renouf suggested NPs were urgently needed in primary health care. Although not specifically stating these NPs would be required in rural areas, Renouf's reference to disadvantaged people, allows one to assume that some of these nurses would practice in rural communities. In the same article Renouf suggested that twenty NPs working in PHC could be providing access to disadvantaged people by the end of 2003, and offered a challenge to "*those in power to reconsider how that might be achieved*", (Renouf, 2003, p.3). Sadly, the vision

of Renouf, the NCNZ, and the MOH are a long way from being realised. Nurses were asking nursing leaders why no rural nurses had gained NP endorsement, and what measures were needed to support this process (O'Connor, 2003).

Early in 2003, nursing leaders in rural health lobbied the New Zealand MOH, on behalf of rural nurses to gain financial support for selected rural nurses to be funded to complete their Master of Nursing degrees and seek NP endorsement (Harris, 2003). These visionary nurses recognised the many difficulties encountered by rural nurses in accessing and completing postgraduate education whilst maintaining their practices with demanding on-call requirements in isolated rural communities. They foresaw the opportunities that existed in rural New Zealand for the establishment of NP roles which had the potential to address the policy directions of the day.

The MOH was strategic in its response and invited applications in September 2003, from suitably qualified rural nurses to apply for six Primary Health Care Nurse Practitioner (Rural) scholarships (Kai Tiaki Nursing New Zealand, 2003; MOH, 2003). The scholarships offered the successful applicants the opportunity to complete their Master of Nursing degree. This included being funded to replace income and being released from their practices for the 2004 academic year. The MOH (2004) have announced a continuation of further Rural PHC NP scholarships for 2005 and beyond.

Whether this was a political manoeuvre by a Government approaching an election year or a genuine desire to promote the rural PHC NP model is a matter of conjecture. Whatever the reasoning behind these future scholarships, I note that rural nurses are advantaged by this opportunity, which has not been offered to their urban counterparts. The reality of acquiring NP status has been brought closer for the scholarship recipients (Cassie, 2004), as it is an expectation of the scholarship that they will apply to the NCNZ for endorsement as NPs.

The vision of the MOH for 200 NPs, as indicated by Hughes (2003) may take many years to achieve. Individual nurses will achieve NP endorsement, and PHC NPs will eventually be seen practicing in rural communities in New Zealand. However, 'fast-tracking' of NPs as suggested by Renouf (2002) is unlikely. The Masters preparation of NPs is essential to provide credibility to the role, for colleagues and patients. The stage therefore is set, as the first rural PHC nurses reach NP endorsement, to explore the creation of these roles and the challenges they may face in establishing the role in rural New Zealand.

## **SECTION TWO**

### **CHALLENGES AND SOLUTIONS**

As rural PHC nurses gain NP endorsement, they will face many barriers and challenges to establishing the role. I believe it is unlikely that many rural PHC NPs will choose to become self-employed. They will therefore require the development of roles by their employing organisations, to enable them to practice as NPs alongside other members of the PHC team. Aligned with this, the rural PHC NPs will seek support and acceptance from all the key stakeholders, including their employers in their transition to the NP role, their communities, and their nursing and medical colleagues. They will also require alteration of the current Nurse Prescribing Regulations and Legislation (NPAC-NZ, 2005) to enable them to realise the full potential of the rural PHC NP role.

#### **Role Creation for Nurse Practitioners in New Zealand**

With the prospect of rural PHC NPs, being endorsed by the NCNZ from 2005, an important challenge facing these nurses is the development of employment opportunities, by the creation of NP roles. As NP endorsement usually occurs prior to a role being developed (Kumar, 2005), the challenge for the newly endorsed NPs is to pursue opportunities for employment. This will include submitting proposals to their employers for the adoption of the NP concept and creation of NP roles. Kinner, Cohen & Henderson (2001) discussed the lack of NP roles for novice NPs in the USA as a barrier to practice, challenging NP professional groups, and legislators in the USA, to find solutions.

There appears to be no consistency or uniformity in the processes involved in establishing the current NP roles in New Zealand (NPAC-NZ, 2005). The current roles have been created for individual NPs in a variety of areas of practice, including mental health, wound care, PHC, gerontology, and



neonatology (NPAC-NZ, 2005). In May 2005, the first advertisement for a NP in urban New Zealand appeared in the New Zealand Nursing Journal Kaitiaki (Kaitiaki, 2005, May). Although not advertising a PHC NP role, I believe this heralds an important milestone for aspiring NPs by demonstrating the willingness of an organisation to recognise the potential value of NPs, and providing an example of a way forward for NP workforce development. Importantly, it offers hope to aspiring NPs that future roles may be created and advertised without the need for extensive lobbying for role creation, as is currently the case (Kumar, 2005).

### **Nurse Practitioner role creation in other countries**

An extensive literature search of the creation of the NP role, revealed a paucity of relevant articles, leading me to realise that the literature was focused more on the development or establishment of the need for NPs rather than discussing how NP roles were actually created. I was particularly interested in Australian literature to explore the methods used to create NP roles in rural communities. I believed the Australian context of rural PHC provision, the similarity of their rural practice settings, and their recent implementation of NP roles may be more relevant to New Zealand than literature from the United Kingdom (UK) or the USA. The results of the literature search was disappointing, with few articles being found or of relevance. This opinion was corroborated by Adrian and O'Connell (2000). Of necessity, I broadened the search to include NP role creation in the USA, Canada, and the UK. This included an extensive search of multiple databases, as well as literature searches by two librarians. One article by Harulow (2000) and one report Gardner, Carryer, Dunn, & Gardner (2004) demonstrated the similarities between Australia and New Zealand in the drive to establish NP roles. Harulow (2000) posited the endorsement of NPs for rural areas was considered innovative and timely in Australia. Gardner et al. (2004) in their

report on the Nurse Practitioner Standards Project<sup>5</sup>, suggested roles appeared to be driven from a mix of Government policy, nursing bodies, and from within communities, as well as by individual nurses. The literature surrounding the actual establishment of NP roles in Australia was scarce and the available literature tended to focus on the struggle nurses have had to gain the legislative and regulative authority to allow them to become NPs (Appel & Malcolm, 2002; Gardner et al., 2004). Several articles highlighted the difficulties rural and rural remote nurses in Australia were having in accessing advanced education and the unsuitability of many courses for advanced rural nursing (Bushy, 2000; Hegney, 1998; Keyzer, 1998; McMurray et al., 1998). This same view was held by Ross (1997) and Litchfield & Ross (2000) for nurses in New Zealand. A number of authors and researchers demonstrated their interest and caution in the development of NP roles in rural Australia (de la Rue, 1997; Keyzer, 1997; Roberts, 1996; Turner & Keyzer, 2002). Bushy (2000) in discussing NP roles in different nations, suggested rural NP roles in Australia were to be established through need and to meet inequalities in health, particularly for indigenous peoples. This demonstrates an important link with New Zealand and the PHC Strategy with the emphasis in New Zealand looking to improve the health of Maori and Pacific Islanders (MOH, 2001).

In Australia, nurses faced similar challenges to New Zealand nurses in gaining NP endorsement. Australian nurses who believed they were already practicing at NP level, and that endorsement would be a natural progression of the role, became disillusioned, a sentiment that was echoed by New Zealand nurses (Bragg, 2004; Pepperell, 2003). Also, like the USA, but unlike New Zealand, different states of Australia had introduced NPs in different ways, and within different frameworks (Appel & Malcolm, 2002; Harulow, 2000; Gardner et al., 2004). This is a significant contrast to New Zealand, where one regulatory

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5. Nurse Practitioner Standards Project (Gardner et al., 2004) is a trans Tasman initiative by the Australian and New Zealand nursing councils- investigating core NP competencies and standards in NP education a accreditation programmes for NP preparation

framework covers all NPs (NCNZ, 2001). In New South Wales, the initial NP roles were created by the New South Wales Department of Health (Appel & Malcolm, 2002). In New Zealand, to date, roles have not been created in this way; the 'way forward' has been left to individuals (Kumar, 2005).

### **The role of District Health Boards in creating rural Primary Health Care Nurse Practitioner roles**

In discussing the proposed establishment of rural PHC NP roles with nursing scholarship colleagues, I discovered that their employers had indicated that rural PHC NP positions would not be established in 'the foreseeable future'. The reason being given is that the DHBs cannot afford NPs, due to the expectation that the NP role will command a higher salary than current rural nursing roles. This confirms the concern I share with my fellow scholarship recipients, that despite being supported by MOH scholarships towards NP endorsement, there is no guarantee that this process will result in the formation of NP roles. We fear individual employers may choose not to promote these roles and adhere to the status quo in rural areas; that of employing advanced and experienced nurses working under Standing Orders, with titles such as Rural Nurse and Rural Nurse Specialist. To date, these nurses have been the mainstay of rural health provision, particularly in medically underserved and remote areas, providing an extensive health service within their communities (London, 2000; Ross, 1998). I see this as a tension between the expectations of the MOH that DHBs will create NP roles, the recognition by DHBs of the NP role leading to NP role creation, and the desire of individual nurses to see NP roles created.

It is my belief that NP roles will not be abundant, and different DHBs may choose to take a cautious 'wait and see' stance, to judge the effectiveness of the roles within other DHBs, before committing to the process. It could be argued that cost benefits for DHBs establishing transitional PHC NP roles have already been met in part by the educational preparation of nurses by way of PHC nursing scholarships. I believe for DHBs to establish NP roles, a

process, or framework for the implementation of organisational change as discussed in Craig and Smyth (2002) and Carson (1999) will need to be recognised and adopted. Carson (1999) believed organisations must respond and adapt to change and that change in any organisation is constant. Lauder, Sharkey and Reel (2003) in considering similar issues in Australia discussed “...*the inertia of large organisations when faced with the need to undertake radical change...*” (p.751). The ‘need’, may be that DHBs, who are charged with the responsibility of implementing the PHC Strategy, look to the NP model as a means of realising some of the aims of this document (MOH, 2001). Reveley (1999) suggested organisations that may be planning or implementing change may be receptive to staff initiatives, but this is less likely to occur in more traditional or conservative organisations. The question arises; are DHBs ready to undertake this ‘radical change’? What knowledge do DHBs have of the effectiveness of PHC NPs, a concept (NP) which is in an embryonic stage of development in New Zealand? A strong framework of evidence will be required to support any proposal, to encourage DHBs to embrace the NP concept. The task will be to provide supporting evidence, from international literature, that NPs are cost effective, appropriate, improve access to care, and achieve appropriate health outcomes for patients (MOH, 2001; NCNZ, 2001).

### **What rural Primary Health Care Nurse Practitioners can offer District Health Boards**

A search of international literature from the last decade, to source evidence to prove the effectiveness of PHC NPs, revealed many useful articles focusing on and providing comparisons of NPs and GPs. Of these, I initially chose three randomised controlled trials, Kinnersley, Anderson, Parry & Clement (2000), Munding, Kane, Lenz & Totten (2000), and Venning, Durie, Roland, Roberts & Leese (2000), to provide evidence of the effectiveness of NPs in comparison to doctors (GPs). The selected studies were conducted in primary care facilities. It is my belief that at the time of writing these studies provided the

best available evidence to support the adoption of the PHC NP concept within rural New Zealand. Sox (2000), suggested these are the three leading studies in this field and that they are well referenced in international literature.

In their study Kinnersley, et al. (2000), concluded that there was no significant difference in care provided by NPs and doctors, there was high patient satisfaction with NPs and that the NPs provided more information to patients. Mundinger, et al. (2000) concluded that there was no difference in short term health outcomes between patients seen by NPs or doctors, and the NPs and doctors in this study worked under identical conditions. Venning, et al. (2000) concluded that the NPs were more cost effective than the doctors were, NPs provided greater patient satisfaction, had no differences in clinical or health outcomes and that both groups had similar prescribing patterns.

Horrocks, Anderson, and Salisbury (2002), conducted a systematic review of 11 randomised controlled trials and 23 prospective observational studies, including those highlighted by Sox (2000). Horrocks, et al. (2002), concluded NPs in primary care lead to increased levels of patient satisfaction and improved quality of care, and identified no difference in health outcomes. Horrocks et al. noted that there were increased costs associated with NPs (consultation time higher and more tests/ referrals) and indicated the need for further research to clarify the way in which NPs might work most effectively for the health outcomes of the PHC population. Donald & McCurdy (2002) in a newspaper article reviewing the study by Horrocks et al. (2002) reached the same conclusion. A study by Pinkerton & Bush (2000) highlighted that NPs managing patients whose health care needs were as complex as those managed by GPs, showed similar health outcomes. Collectively, these studies indicate there is some evidence that NPs contribute to improved health outcomes in PHC and perform at least as well as GPs on a range of measures. However, more research is needed.

I consider the evidence provided by the studies, has positive implications in a New Zealand context, particularly in medically underserved rural communities,

however I believe caution needs to be used when comparing the two professions (nursing and medicine), because of the inherent differences in these disciplines. Julia Cumberledge, in the foreword to a 1989 report on a review of community nursing in the UK (Cumberledge, 1989) suggested to seek medical advice is not necessarily to seek a cure for illness, rather a search for health, and argues the two concepts are different. I believe this theory when applied to nursing epitomises the essence of the rural PHC NP role in New Zealand; that of a wellness focus of care and the maintenance of health. As well, it is important that we remember that the comparisons (of NPs and GPs) in the literature are comparisons of a small aspect of commonality in the roles of the two disciplines, such as patient centred tasks of diagnosing, prescribing, and treating.

Shortages of GPs in rural communities and funding shortfalls have the potential to constrain DHBs from meeting the goals of the PHC Strategy (MOH, 2001). I believe NPs could alleviate this situation by practicing in this area. Rural PHC NPs will practice autonomously but collaboratively, and their success will be underpinned by their prior nursing experience in New Zealand. This experience ensures that these NPs are familiar with the concepts of collaborative practice (Ross, 2001). The competencies for NP endorsement require NPs to collaborate, consult, and refer appropriately especially regarding serious health issues (NCNZ, 2001). I believe rural PHC NPs will offer improved access to care, particularly in medically underserved areas. This view is supported in a USA study by Martin (2000), who suggested access to care continues to be a problem in rural areas, and that NPs are well positioned to alleviate this problem. Armed with expert and in depth knowledge of their communities from their previous practice experience, rural PHC NPs are also likely to offer the DHBs a commitment to continuity of care.

Further research, as suggested by Horrocks et al. (2002), evaluation, and audit of PHC NP roles will be required once the roles have been established. In time, through research, evidence as to the effectiveness of the roles in this country (New Zealand) will be available. Only then will it be known if the roles

have improved access to care, and met the health needs of rural communities in New Zealand, as well as the goals of the PHC Strategy.

### **Proposing a rural Primary Health Care Nurse Practitioner model: a West Coast initiative**

I am currently employed by the West Coast District Health Board (WCDHB) which has not yet adopted the NP concept. My response to this challenge was to write to the DHB management and offer, 'to work with them towards the establishment of NP roles.' This resulted in an invitation to join a working party to explore the transition to NP role by the then Director of Nursing (DON) for the WCDHB (Williams, R., personal communication, 3 July 2004).

The working party is exploring the NP role, with input from a professional nurse advisor from the New Zealand Nurses Organisation (NZNO) and senior nurses nearing NP endorsement. The working party has identified and developed pathways for transition from Rural Nurse Specialist to rural PHC NP and has developed a generic NP position description. The working party has compiled a proposal that the WCDHB adopt the NP concept, and that NP roles be developed and funded (WCDHB, 2005). The NP Working Party intends submitting the proposal to the WCDHB during 2005. Should the WCDHB agree to adopt the NP concept, a proposal for the development of two rural PHC NPs will then be submitted to the WCDHB board. The working party, believes that by adopting the proposal the WCDHB has the opportunity to trial and pioneer an innovative model of rural nursing for the West Coast of the South Island. This model (the PHC NP) can in turn be audited with information being made available to other DHBs in New Zealand (WCDHB, 2005).

### **Independent rural Primary Health Care Nurse Practitioner practice**

It is possible that nurses wishing to become PHC NPs in rural areas can work independently of a DHB (NCNZ, 2001), and one New Zealand NP is already self-employed (Kumar, 2005). This can also be achieved by the process of

buying into a partnership with a PHC general practice or trust. A further option is that the NP may form a nursing consultancy business. Innovative ideas for new nursing services such as developed in Eketahuna in the 1990s (McClellan & Brash, 1988), to previously underserved areas, may be favourable to DHBs (as the funders) and individual communities. The NP regulations (NCNZ, 2001) allow this option in New Zealand, which is not available for example in Australia (Appel & Malcolm, 2002). For me, the option of a partnership is not readily available on the West Coast of the South Island as the majority of PHC practices are owned and run by the local DHB. The positions of all the staff in these practices are salaried. It is feasible in some rural communities in New Zealand, that individual NPs will contract services, which have traditionally been run by DHBs, and run these services as an independent practice (Kumar, 2005).

Self-employment as an independent NP would involve issues of, contracting, negotiating, and gaining funding equality with medical colleagues. Baldwin et al. (1998) and Glynn (1989) discussed various marketing strategies to be used by those intending to introduce the independent NP model into communities. They suggested NPs will need 'business savvy' skills, will need a sound knowledge of contracts, funding avenues, issues of charging fee for service, or funded care. Interestingly, Mahnken (2001) in discussing the 'market forces' approach suggested this has implications for the independent NP of accountability and quality of care. For the New Zealand NP, accountability and quality of care will be paramount requirements as part of their NP endorsement and as a requirement of the Health Practitioner Competency Assurance Act (2003) (NCNZ, 2005). Mahnken (2001) further suggested issues of providing services to a standard to meet patient needs, can be sidelined by economics.

A challenge, for PHC NPs proposing self-employment in rural communities is whether they would have the time, the ability, or the business acumen to pursue this avenue. In New Zealand, midwives have independent practices and effectively manage both the business and clinical components of their



role. The difficulty for rural PHC NPs in comparison would be their generic or broad area of practice, the multiple contracts they may need to negotiate, and the less predictable nature of their work. Some PHC NPs may choose to start NP practice by being employed and later become self-employed when they have gained experience in the role and established their practice. Other rural PHC NPs may retain a degree of independence by contracting their services as locum practitioners either to DHBs, private practices or in time to Primary Healthcare Organisations (PHOs), as they become established in rural areas.

### **The place of the rural Primary Health Care Nurse Practitioner in Primary Healthcare Organisations**

PHOs are contracted and funded by DHBs to implement the PHC Strategy, and to develop the PHC workforce (MOH, 2002). Participatory health professionals can be directly employed by the PHO or another organisation such as a DHB, or have their private practice funded by the PHO. In the Rural Expert Advisory Group document, *Implementing the Primary Health Care Strategy in New Zealand* (MOH, 2002), there is no mention of, or reference to NPs. There is much discussion around the subject of collaborative practice. Reference is made however, to the “*expanding role of rural nurses*” (MOH, 2002, p 15), and “*upskilling nurses*” (p.23) to facilitate reasonable GP rosters. Sadly, it could be interpreted that the contribution of nurses as a supporting role to doctors appears to be more important to the authors of this document, than recognition and promotion of the rural nursing role, or indeed recognition of the NP model. It could also be interpreted that the membership and composition of the Advisory Group committee could have some bearing on this; the committee was mostly comprised of doctors with only two nurse members. A further explanation may be that NPs were a new concept in New Zealand, at the time the Rural Expert Advisory Group tabled their document. There appears to be no provision for the implementation of PHC NP roles within PHOs. Kumar (2005) questions what has happened to the original idea

of independent NPs contracting their services to PHOs and wonders if the idea has “...*crashed even before taking off...*” (p.8).

In Australia (Appel & Malcolm, 2002), recognition of NPs as independent and autonomous providers of PHC in rural areas is a long way off and it appears New Zealand nurses, will also struggle with the concept of equality amongst health practitioners. New Zealand neonatal NP Deborah Harris would argue that she already has this recognition (Harris, 2002), although one could suggest this is not the norm. GPs have a strong voice in PHOs; rural nurses in New Zealand although greater in numbers, are yet to find their voice. It may be that nurses will need to sit on PHO boards to promote NP and nursing roles within PHOs. When Rural PHC NP roles are developed, these nurses will then have an opportunity to challenge the PHO boards to gain a ‘voice’ at PHO level. There is much ground to be covered, before this challenge can be realised. Rural PHC NPs will need to be clear in what their proposed role will offer PHOs and rural communities

### **Community acceptance of the rural Primary Health Care Nurse Practitioner role**

I believe it would be inconceivable for any nursing role in a rural area to succeed without community support and acceptance. For the rural PHC NP, I believe gaining community acceptance will be important and pivotal to the success of the role. Simon Bidwell a researcher contracted by the CRH supports this view. In his review of international literature of successful models of Rural Health Service Delivery and Community Involvement in Rural Health, Bidwell (2001), offered the opinion that, “*successful rural health services require community involvement*” (p.29). I would progress this opinion by suggesting an ‘unsuccessful’ nursing model would likely demonstrate some form of consumer resistance, or lack of community ‘buy-in’. If this happens and a new service is not utilised, there is the potential for it to fail.

A key challenge for new NPs is how would a rural PHC NP gain acceptance in a community? I believe this challenge has potential ramifications and needs to be explored, particularly for PHC NPs who may practice in areas that have traditionally had the services of a GP, and are no longer able to attract GPs to practice in their communities. For the aspiring PHC NP this situation represents an opportunity to establish a NP role. This role may, or may not, be acceptable to the community. The inception of a PHC NP role in any rural community in New Zealand would be a 'change' from the status quo, or the expected or usual and recognised form of health care provision; communities may question the competence of a nurse to provide a level of service that GPs have previously provided.

Personal experience of living and nursing in small rural communities has given me an awareness that change in any form, brings an element of resistance and suspicion. Bidwell (2001) suggested rural communities are traditionally conservative in their approach to health services, becoming vocal mostly when service closures are threatened even if those services have been underutilised. McMurray (2003) suggested rural people access health care, and view health and health promotion in different ways than people in urban settings. This view is supported by several authors, who consider health for rural people is measured by a person's ability to work or do their job (Bushy, 2000; Brown, et al., 2000; Litchfield, 2002). Nurses, working in rural communities, recognise this concept and historically know their communities well, as they are often long-term residents of the community (Bushy, 2000) and are aware of the stoicism of rural people (Brown et al., 2001). Communities also desire continuity of health care (London, 2001) and Bidwell (2001) suggested communities also want security of health care. London (2001) suggested nurse-led services provide continuity of service in rural communities, facing loss of GPs. Similarly, Ross (1998) suggested nurses in rural areas of New Zealand are already providing what are recognised as advanced PHC services to the more remote rural communities. In some cases such as Stewart Island, Taranaki, and some parts of the West Coast of the

South Island the services are already nurse-led (Litchfield, 2004; London, 2002). These nurses are practicing in areas that have historically had nurse-led services only, and I would suggest the nurse-led services have grown and evolved in response to the needs of the community. Therefore, a change of title from rural nurse or Rural Nurse Specialist to NP, and the resultant anticipated improvement in service delivery within these communities would likely cause few ripples despite what Harulow (2000) describes as ongoing medical resistance, and concerns about the NP role from outside the community. For communities who have previously had GP led services, it may prove harder to introduce PHC NPs. The question arises, despite the shortages of GPs in rural communities, are rural communities in New Zealand ready for NPs?

I would suggest rural communities cannot in effect answer this question. They are likely to have no prior exposure to NPs or knowledge of the capabilities or role of NPs (Lindeke, Bly & Wilcox, 2001; Wiseman & Hill, 1994). Lindeke et al., (2001) in examining perceived barriers to rural NP practice in Minnesota USA suggested lack of understanding by the general public of the NP role and scope of practice could prove detrimental to the success of NP practice. For nurses in rural New Zealand, there are no rural PHC NP roles in existence for these new roles to be modelled on. It should therefore be no surprise that communities have little insight into the roles, therefore, the challenge is to raise awareness of the potential of the rural PHC NP role.

In New Zealand, media comment on nurse prescribing in the newspapers has raised some awareness that NPs will be able to prescribe. A recent example (Davis, 2005, ) offers the public the opinion of Dr Ross Boswell, chairman of the New Zealand Medical Association who describes NP prescribing as “looney” and that NP prescribing “...will put the public at risk...”(p7). This is not the type of comment to instil confidence in NPs or encourage communities to accept NPs. I consider some sectors of the public do accept that nurse prescribing is attached to the NP role. Madrean Schrober, a long-time NP in the United States, as a keynote speaker at The Advancing Nursing Practice

and NP Conferences in New Zealand in 2002, also discussed this point. It was noted by Schrober that it is likely people will view NPs as 'prescribers', not realising that prescribing is a very small facet of the NP role (Schrober, 2003). Interestingly Brown and Draye (2003) in their examination of pioneering NP roles in the USA discussed the frustration of NPs who found family friends and colleagues tended to focus on the 'medical components' of the NP role such as prescribing, suggesting that these nurses, would either no longer be nurses, or should become doctors. It is likely New Zealand PHC NPs will find themselves facing similar comment. Having little or no knowledge of the NP role has the potential to cause consumer resistance, making implementation and establishment of these roles in some areas either very difficult or impossible. Conversely, lack of knowledge of the NP role may mean a community has undue expectations of the NP. I also believe the lack of knowledge of NP roles, creates a potential tension for nurses who have gained NP status, practicing in this new role in a community that has previously known them in the capacity of their rural nurse role. This could create some confusion for patients.

A final question is do rural communities need NPs? Bidwell (2001), highlighted the importance of community consultation, and discussed the importance of health needs analysis in communities to establish the level of health service required.

It appears education and information about the role and abilities of the NP to provide PHC will need to be thoughtfully and carefully assimilated and proffered to members of communities (Kelley & Mathews, 2001; Kinner et al, 2001; Lindeke et al., 2001). It may be that different information will need to be provided to different focus groups in communities (Bidwell, 2001). Bidwell (2001) discussed power balances within communities, and the ability of individuals to dominate or proffer views that are their own, and not necessarily a consensus. The difficulty in many community decisions is to gain consensus. Consequently if an individual or individuals choose, they may influence others either positively or negatively, and this phenomena is a risk that an aspiring

NP may have when proposing the establishment of NP roles. Bidwell (2001) suggested that these people are targeted either as a focus group or individually. In this way they can be educated, in this case regarding the role and capabilities of NPs, so the NP concept is 'sold' to this group. They in turn have the ability to influence others. Some communities will have people who need no convincing of the merits of NPs and these people are likely to assist intending NPs. They are likely to lobby with 'their' nurses to promote or even demand NP roles, in their community. This offers a viable opportunity for communities, especially following loss of medical practitioners. In this way communities can identify and respond to their perceived needs, and community 'buy-in' can help secure some continuity of health service provision (Bidwell, 2001).

Conversely, other communities will have prominent citizens who may oppose the promotion of NP roles, and as in my own community, voice their concern that the establishment of a NP role may mean the community will lose funding for, or be prevented from supporting a GP role. The people in these communities deserve a rapid and honest response to these genuine, but often unfounded concerns. Importantly every opportunity to educate the public about NP roles must be taken (Kinner et al., 2001). In my own community, when I learned that there was concern that a NP role, could mean the loss of funding for a GP, I responded by taking the opportunity to write a letter in the local community newsletter. I outlined what a NP role was, what a GP role entailed, and highlighted the differences and commonalities of the two roles. This forum enabled me to reinforce the importance of medical input in the community, and provide valuable information to educate and inform those with legitimate concerns or queries. The positive response to this initiative highlighted the need there is for ongoing education and enlightenment, in the community. This has encouraged other nursing colleagues to consider this approach. This also highlighted the invisibility of nursing, and the prominence of medicine (Buresh & Gordon, 2000). I believe DHBs and the MOH also have a responsibility to support nurses in this way, with strategic media releases, in local or regional

newspapers. The MOH Sector Update (Hughes, 2004), indicates the MOH realise education regarding NP roles is needed for communities and other health professions, and have undertaken to proceed with education, through media release, and journal articles.

A search of the literature, regarding community acceptance of rural NPs was disappointing in that despite a large volume of literature on this topic, it yielded little information other than community satisfaction with rural NP roles (Knudtson, 2000; Roberts, 1996). Baldwin et al. (1998) in discussing the lack of previous exposure of communities to NPs suggested they would be accepted by communities under certain conditions. These conditions included issues of confidentiality, friendliness, willingness to integrate into the community, competence, cost, and availability. Brown et al, (2001) discussed similar issues for rural health professionals in the New Zealand context. Baldwin et al. (1998) also mentioned the issues around lack of knowledge of the NP role, and stressed the need for community education of the NP role to encourage acceptance. Once established there will also be a need for research and audit of the roles, to explore the extent and nature of community acceptance, offering guidance for future nurses or employers desiring to establish PHC NP roles in rural communities

I perceive that medical support for the rural PHC NP role will also be crucial to the successful introduction of this model in communities. It is therefore appropriate to explore how doctors view the NP role and how their acceptance can be gained.

### **Medical acceptance of the rural Primary Health Care Nurse Practitioner role**

Appel and Malcolm (2002) in looking at the development of the NP role in Australia suggested gaining acceptance of the NP role by the medical profession would greatly strengthen the NP position. GP perceptions of the implementation of NP roles in New Zealand range along the continuum of

negative to positive opinion. Blayney (2004), a rural GP in New Zealand proffered the following opinion of independent NPs:

*Despite claims that these nurses would work in teams with GPs, we all know the independent midwife story.... GPs have been forced out.... We already see a huge fragmentation in care from school clinics where nurses are “de-facto” prescribing oral contraception and the GP only gets to see the girl when things go wrong.... it is only by seeing the “easy” cases that GPs can keep a lid on fees... and maintain some degree of overview, providing preventative care and ensuring the overall health management of a patient is appropriate, efficient and safe (p.3).*

Blayney raised several issues; his perception that NPs may not be team players, issues of prescribing, safety, independence, and cost factors affecting the viability of GPs. Fortunately, few GPs have been as vocal on this topic, or been prepared to put their names to such articles. Blayney as evidenced by Davis (2005) is not alone in his opinion; therefore, it is important that nurses and those responsible for legislation and policy recognise this as well as recognising that Blayney may have some legitimate foundation for his concerns. I believe rural nurses do not wish to displace doctors, or be seen as ‘mini-doctors’, a concern discussed by Keyzer (1997) and Litchfield (1998). Parts of the NP role such as prescribing and diagnosing, which have historically been the domain of doctors, will be incorporated in the role, as an adjunct to core nursing skills and advanced nursing knowledge.

In 2002, an exploratory study was conducted in Northland to gauge GP perceptions of the NP role (Mackay, 2003). The findings of the study revealed that Northland GPs generally responded favourably to the suggestion of working with NPs, and believed NPs would enhance care in the community. Although having positive inferences for NPs, the GPs shared concerns about some role functions the NPs would undertake, especially prescribing, diagnosing, and ordering laboratory tests. The study echoed some concerns made by Blayney (2004) particularly regarding their experiences with midwives, the competence of NPs and that NPs would compete for income



(MacKay, 2003). Is this not patch protection? One wonders if the collaborative model of health service provision is being overridden by competitive factors. Importantly, MacKay (2003) identified that New Zealand GPs were confused over the proposed role and legal status of the NP. It is worthy of note that the study was conducted when the NP concept in New Zealand was in its infancy, and it would be interesting to re-survey the same GPs in the future to gauge any shift in concern or opinion.

There is an abundance of overseas literature pertaining to doctors' opinions of NPs. It is not surprising that many articles discuss similar issues to those discussed by Mackay and Blayney, especially nurse prescribing, NP competency and the inherent danger of NPs being able to practice independently of medicine e.g. Aquilino et al. (1999); Carr et al. (2002); Lockhart-Wood, (2000); Michener, (2002) and Wilson et al. (2002).

Fortunately, there is a balance of opinion and some NPs such as New Zealand NP Deborah Harris have been encouraged in their practice by medical colleagues (Harris, 2002). This view is shared by Appel and Malcolm (2002) who suggest a shortage of GPs in rural areas generally promotes a willingness by GPs and nurses to share the workload. They suggest rural nurses are generally on a 'more equal footing' with GP colleagues than their urban counterparts and conclude that GPs cannot feasibly cover rural practice on their own. Appel and Malcolm (2002) believe the rural GP and the rural nurse are in the first instance, interdependent a view shared by Bushy (2000). Their roles are likely to be collegial and highly collaborative and their wider team is likely to consist of other health professionals such as pharmacists, mental health teams, police, ambulance, and fire brigade (Bidwell, 2001; Brown, et al., 2001; Ross, 2001; Appel & Malcolm, 2002). The latter are likely to be serviced by unpaid volunteers. The smaller, or more remote the community, the more interdependent and collaborative the 'team' is likely to be, sharing on call and providing collegial and professional support (Brown et al., 2001; Ross, 2001).

With the shift in the range of capabilities of a NP in rural areas when these roles are implemented, it would be natural to assume that the roles will be viewed with caution by other health professionals. Brown and Draye (2003) in their study of pioneer NPs in establishing their roles in the USA, reported that NPs described this time as “...a *proving ground*” (p.395), where their performance was constantly scrutinised, and strategies were developed to prove credibility to sceptical colleagues. Adrian and O’Connell (2000) commenting on the introduction of the PHC NP in Australia suggested the need for a clear definition of the NP role and the boundaries of the role will be needed to encourage medical acceptance of the concept. This has relevance in the New Zealand context.

It is important to remember that for the initial, pioneering rural PHC NP roles in New Zealand, the new NPs will have had a minimum of four to five years clinical practice within the context of rural PHC. They will have been practicing either autonomously or semi- autonomously at an advanced level, and will be grounded in ‘rural’ health (MOH, 2003). These experienced advanced nurses will likely be well known to the ‘team’ where they will practice, they will have demonstrated collaborative practice, and their capabilities and philosophies of care will be known (Brown, et al. 2001; & Ross, 2001). They will have been ‘prescribing’ under standing orders for years, and will know their practice population well (Philips, 2003). They are likely to have lived in their community for many years (Brown et al., 2001; London, 2001). The nurses will have fostered strong professional relationships with GPs during the course of their academic study. Selected GPs have performed the role of clinical associate<sup>6</sup> while the nurse has undertaken their Master’s level prescribing practicum, a process necessary to fulfil the requirement for NP endorsement (NCNZ, 2002). The role of the clinical associate in New Zealand is to assess the ability of the nurse to diagnose and prescribe appropriate therapeutic interventions and

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<sup>6</sup> In New Zealand the role of clinical associate to date has been undertaken by doctors whose task is to assess the suitability of a nurse to prescribe interventions and medications within their area of practice. It is envisaged that NPs may fulfil this role at some time in the future.

demonstrates collaboration between GPs and nurses. I would suggest that this collaborative relationship will continue to grow as the new NP enters practice. These GPs are well positioned to understand the potential of the NP role and to adjust their practice to align with NPs.

The question as to why some doctors are cautious about the introduction of NPs generally stems from the doctors' concerns over nurse prescribing, (MacDonald & Katz, 2002; MacKay, 2003). Others suggest doctor's concerns stem from prospective loss of income (Blayney, 2004) competition, and loss of power, and control and discussion abounds surrounding nurses being accused of being doctor substitutes (Wood, 2000). Whatever the differences that may exist, nurses and doctors need to put aside their differences for the betterment of their patients and health service provision (MacKay, 2003).

MacKay (2003) in identifying the lack of knowledge GPs have surrounding the competence and abilities of NPs, once again highlights the need for education about the role, to promote acceptance of these new positions in New Zealand. However, given the barriers and challenges to practice experienced by the true NP pioneers in the USA (Brown & Draye, 2003; Kelley & Matthews, 2001) it would be unrealistic to assume that the endorsement of NPs in New Zealand would not meet with some similar forms of resistance and scepticism from doctors or nurse colleagues.

### **Nursing acceptance of the rural Primary Health Care Nurse Practitioner role**

It is my view that nursing opinion of the rural PHC NP role will generally be one of acceptance, as more nurses undertake postgraduate studies and as the profession progresses into the next decade. I believe from personal experience, that the complex nature of existing rural nursing roles in New Zealand, and the advanced knowledge required by rural nurses is recognised by nursing colleagues. However, in the pioneering NP roles described by Brown & Draye (2003) and Kelley & Matthews (2001), the authors cited

nursing resistance to the NP role as a barrier. They suggested negativity may stem from lack of knowledge of the role.

In New Zealand, some nurses have expressed concern that the NP role will be elitist, and will create a division or separatism (Grant, 2003). Nurses who have previously called themselves NPs are unhappy that now that the NP title is trademarked by the NCNZ (NCNZ, 2001), they can no longer use the title. They believe this move devalues their role (Pantano, 2003/2004; Pepperell, 2003). O'Conner (2003) explored what is described as 'angst' about NPs in New Zealand, and concluded that nurses were frustrated and disillusioned, and that nurses feared the NP role would create divisions within nursing. O'Conner (2003) cited nurse's feelings of unease and anxiety about the role and that some nurses viewed the role as a threat. Should the role end up with an element of 'elitism' attached to it, is it wrong to view the role this way? It is after all the 'pinnacle' of the nursing scopes of practice in New Zealand. The new rural PHC NP will be aware of such comments, realising that until the role is 'proven' as suggested by Brown & Draye (2003), there will be unease surrounding the concept. They will be focused on establishing their role and commencing practice at a level previously not allowed in this country (NCNZ, 2001).

In this new role the rural PHC NP is likely to be a novice, and will have returned to the advanced-beginner level, or be in a transitional phase of learning and adapting to a different focus of nursing as described by nursing theorist Patricia Benner (2001). Several American studies have explored the transition of nurses from the Registered Nurse to the NP role and contain valuable insight into the pitfalls and triumphs of this process (Brown & Draye, 2003; Kelly & Matthews, 2001; Rich, Jordan & Taylor, 2001). Unfortunately, it is outside the confines of this dissertation to discuss the theories of transition of NPs from registered nurse to NP. To do justice to this topic would be a dissertation in its own right. It is important to note, however that the energies of the NP will lie in establishing their roles, networking, gaining collegial support, and 'proving the role' (Brown & Draye, 2003; Kelley & Matthews,

2001; Rich et al. 2001). The new NPs will need support and encouragement from nursing colleagues as they branch out into their fledgling practices (Kelly & Matthews, 2001). Formal professional support mechanisms will need to be established (Hewson, 2004).

As leaders, the NPs will need to encourage other nurses in educational pursuits, and walk alongside them to assist them to achieve their own career goals. It has been suggested the resistance or unwillingness of nurses in the USA to accept the NP role, comes from their lack of knowledge of the role and the capabilities of the NP (Brown & Draye, 2003; Kelley & Matthews, 2001). Once again, this highlights the need for education and awareness of the NP role as mentioned in previous chapters. A positive attitude and a professional and collegial approach to the new role by NPs should promote the benefits of the role to other nurses who are sceptical or not accepting of the role. Efforts by the NP to understand and appreciate the opinion and beliefs of other nurses will hopefully break down any resistance to the role and promote acceptance. New PHC rural NPs will need to develop appropriate mentors and find supportive colleagues to help them cope with any resistance which may occur (Kelley & Matthews, 2001). In rural communities in New Zealand, most nurses seeking NP endorsement will be known to their nursing colleagues. These colleagues are likely to have encouraged and supported these nurses in their quest for academic qualifications, and NP endorsement. I believe that the rural PHC NPs will be accepted by nursing colleagues and that non-acceptance, if evident will not hinder the development or achievement of the role.

### **The rural Primary Health Care Nurse Practitioner role and nurse prescribing**

Several constraints to NP practice, will pose significant challenges to rural PHC NPs. These include the limited access to laboratory tests by NPs, their lack of access to radiology tests, and the fact that they are unable to sign work certificates, death certificates or New Zealand Work and Income forms

(Hughes, 2004). All these issues have the ability to constrain and to challenge rural PHC NP practice, and the NCNZ has undertaken to address these issues (Hughes, 2004; NPAC-NZ, 2005). I believe however, that the current nurse prescribing regulations, pose a greater challenge for Rural PHC NPs wishing to establish autonomous or independent practice. The Medicines Amendment Act, 1999 and the Medicines Regulations, 2001 offer opportunities for nurse prescribing (NCNZ, 2005). In 2002, the NCNZ decided that NPs would be credentialed to prescribe only when they had completed Masters level papers in pharmacology and nurse prescribing, and had completed an appropriate clinical prescribing practicum, as part of their Master's degree (NCNZ, 2002). At the time of writing, the prescribing regulations support nurse prescribing in the specific fields of child and family, and aged care only (Hughes, 2003). As the practice of rural PHC NPs will encompass people across all age continuums, they will encounter many people in their practice, for whom they are not endorsed to prescribe. This anomaly will require the rural PHC NP to 'prescribe' to certain areas of their practice population under "Standing Orders," until the regulations are altered. The question could be asked why rural PHC NPs need prescriptive authority for their whole area of practice. Personal experience has shown that Standing Orders are restrictive, usually related to urgent or emergency situations, and do not normally cover areas of preventative health, which is expected to be a large part of the rural PHC NP role (MOH, 2001). As previously mentioned, as well as inhibiting independent practice, this has implications for those nurses working in medically underserved areas and the communities they serve, in terms of patient access to care. Unless resolved this will be a barrier to truly autonomous practice and independence for NPs.

Frances Hughes noted in a Nursing Sector Update in 2004 that the Government had agreed to update the Medicines Regulations 1984, which is the regulatory framework for designated prescribers. This means that prescribers will only be able to prescribe medicines that fall within their designated area of practice (Hughes, 2004). The report advises, "...the

*proposed changes will require the existing regulations for aged care and family health nurses to be amended to reflect the new framework”* (Hughes, 2004, p.2). The report also advised the proposed changes to prescribing regulations would come into effect on 18<sup>th</sup> September 2004, when the final parts of the Health Practitioners Competency Assurance Act (2003) was to become law (Hughes, 2004). Unfortunately, at the time of writing, the projected changes to the prescribing regulations have not occurred and there is currently only one New Zealand NP endorsed to prescribe (Kumar, 2005).

In April 2005, the NCNZ issued a consultation document entitled *Implementing Nurse Practitioner Prescribing* (NCNZ, 2005). This document sought submissions on the schedule of medicines that NP prescribers would be able to access within their area of practice. The document proposed that NPs with prescriptive authority would have access to all medicines listed in the First Schedule of the Medicines Regulations, 1984, with the exception of a list of exempted medicines (NCNZ, 2005). At first glance, this proposal offered improvements to the current situation. NP prescribing would no longer be restricted to specified age groups. A further examination of the proposal, and examination of the First Schedule of the Medicines Regulations, 1984, revealed that NPs would not have access to the formulary of the Misuse of Drugs Act, 1975 (NCNZ, 2005). This omission had implications for NPs, striving to provide holistic health services, as they would not be allowed to prescribe some medicines regularly used in their practice. Examples include palliative care patients requiring prescriptions of morphine, and the use of morphine for pain relief in emergencies.

At the time of writing, the NCNZ have added a formulary to the proposed amendments to the nurse prescribing regulations that includes medicines from the Misuse of Drugs Act, 1975 (NCNZ, 2005), the timeframe for these changes is uncertain.

I would interpret the proposed changes to the prescribing regulations to mean that the identified area of NP practice determines the degree of prescribing,

the wider the identified area of practice, the greater the list of allowable medicines. This naturally has implications for rural PHC NPs, as their identified and endorsed area of practice will by definition be broad. There is much work to be done and many challenges to be met, before nurse prescribing regulations, and legislation allows rural PHC NP prescribers to be truly effective in this aspect of the role. As well, at the time of writing, there is some uncertainty with a general election imminent in New Zealand, as to what impact a change of government would have on health policy, should this occur. With parliamentary activity now essentially suspended to cater for election campaigning, the required legislation to allow for the proposed changes to the nurse prescribing regulations is unlikely to occur this year. The challenge for individual nurses and the NZNO and NPAC-NZ is to continue to lobby the MOH and the NCNZ to progress this legislation<sup>7</sup>.

Having explored the individual challenges that nurses are likely to face in establishing their PHC NP roles in rural New Zealand, the common and overriding problem that has been highlighted in this section is the lack of knowledge of what the NP role entails. The immediate challenge is for appropriate education about the PHC NP role, to be directed to communities, DHBs, the medical profession, and to nurses.

As the first PHC NPs gain NP endorsement and establish their roles, they will be in a prime position to promote the PHC NP model in rural New Zealand and to provide role models for future generations of nurses desiring to follow this pathway.

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<sup>7</sup> **UPDATE:** After this dissertation had been submitted for examination and prior to the September 2005 General Election the outgoing New Zealand Minister of Health, Annette King announced that the necessary legislation had been passed and the new prescribing regulations allowing NPs to prescribe within their area of practice would come into effect on 8<sup>th</sup> December 2005.



## **CONCLUSION**

Exploring the development and advancement of rural nursing in New Zealand in the past decade, serves to remind aspiring rural PHC NPs of the influence of organisations, such as the CRH, on advanced nursing education that has in turn led to the evolution of this pioneering role, within the New Zealand health arena.

The first priority, for rural nurses will be to gain NP endorsement. The challenge will then be for the development and creation of PHC NP roles in rural communities, as an employee of a DHB, PHO, or by self-employment.

Rural PHC NP role development will require NPs to demonstrate their ability to be effective in the role as well as show clarity, and understanding of what the role entails. They will need community support for the role and the ability to collaborate with other health professionals. They will require skills to work with the media to raise awareness of the role as well as the ability to assess resistance, confusion, or concerns about the role, formulating appropriate responses to these challenges as required.

The resources the rural PHC NPs will require will be personal competence to perform the role and pioneering vision to lobby for the establishment of the role. They will require mentors to support them in the establishment of the role and DHBs or PHOs to fund the roles. The final resource required will be for legislation and policy to change to enable role performance.

Finally, through audit of standards and health outcomes and future research of the development of rural PHC NP roles, will we be able to gauge the true effectiveness of this role in rural communities in New Zealand

It is time for nursing in New Zealand to come of age. I believe the NP concept is sound and feasible, and the timing is right to create PHC NP roles in rural New Zealand to allow the challenges of establishing the roles begin.

This step is captured in a quotation from nursing pioneer Florence Nightingale:

*“I think one’s feelings waste themselves in words; they ought all to be distilled into actions which bring results.”*

*Florence Nightingale 1820-1910.*

## **REFERENCES**

- Adrian, A., & O'Connell, J. (2000). Nurse practitioners. In J. Lumby & D. Picone (Eds.), *Clinical challenges* (pp. 40-52). St Leonards, NSW: Allen & Unwin.
- Appel, A., & Malcolm, P. (2002). The triumph and continuing struggle of nurse practitioners in New South Wales, Australia. *Clinical Nurse Specialist*. Vol.1 (4) p.203-210.
- Aquilino, M., Damiano, P., Willard, J., Momany, E., & Barcey, T. (1999, May/June) Primary care physician perceptions of the nurse practitioner in the 1990s. *Archives of Family Medicine*. Chicago, Vol. 8 (3); p.224-228.
- Baldwin, K., Sisk, R., Watts, P., McCubbin, J., Brockschmidt, B., & Marion, L. (1998, Dec). Acceptance of nurse practitioners and physician assistants in meeting the perceived needs of rural communities. *Public Health Nurse*. 15 (6); p389-387
- Benner, P. (2001). *From novice to expert* (Commemorative Edition). Prentice Hall: New Jersey.
- Bidwell, S.(2001). *Successful models of rural health service delivery and community involvement in rural health: International literature review*. Centre for Rural Health, Christchurch, New Zealand. [www.moh.govt.nz/crh](http://www.moh.govt.nz/crh) Electronic version. Retrieved 30 March 2004.
- Blayney, K. (2003, April) Rural primary health: A GP voice from South Taranaki. Electronic Newsletter. [www.drblayney.com](http://www.drblayney.com) retrieved 5 June, 2004
- Bragg, J.(2004) Rural nurse practitioners in South Australia: Recognition for registered nurses already fulfilling the role *Australian journal of Rural Health* Vol.12 (1) p.3.
- Brash, J. (1986). *The independent nurse practitioner in New Zealand*. Wellington: Department of Health.
- Brooker, M. (2002, March 9) Nursing exodus doubles. *The Christchurch Press*, p. 8.
- Brown, L., Maw, H. & London, M (2001) *Orientation pack for new rural practitioners and their families in New Zealand*. Centre for Rural Health, Christchurch: New Zealand. [www.moh.govt.nz/crh](http://www.moh.govt.nz/crh) Electronic version. Retrieved 30 March,2004.
- Brown, M., & Draye, M. (2003). Experiences of pioneer nurse practitioners in establishing advanced practice roles. *Journal of Nursing Scholarship*, Vol. 35 (4): p.391-397.
- Buresh, B., & Gordon, S. (2000). *From silence to voice*. Cornwall University Press: London.

- Bushy, A (2000). *Orientation to nursing in the rural community*. Sage Publications: California.
- Canfield, J., Hansen, M., Mitchell-Autio, N., & Thieman, L. (2001). Chicken soup for the nurse's soul. Health Communications, Inc: Florida.
- Carr, J., Armstrong, S., Hancock., & Bethea, J. (2002). GPs' perceptions of the nurse practitioner role in primary care. *British Journal of Community Nursing*, Vol. 7 (8); p. 408-413.
- Carson, S. (1999). Organisational change. In Hamer, S. & Collinson, G.(Eds.). *Achieving evidence-based practice: A handbook for practitioners*. London: Bailliere Tindall.
- Caryyer, J. (2002, November). The nurse practitioner role: A process of evolution. *Kai Tiaki Nursing New Zealand*. Vol 8 (10); p.23.
- Cassie, F. (2004, Jan). Serving the community. *New Zealand Nursing Review*. Vol 4(9); p.11.
- Claridge, A. (2004, January 13). Doctors quit NZ for dollars. *The Christchurch Press*. p. A3.
- Clausen, V. (2000, April 15). Nursing shortage a crisis, says doctor. *The Christchurch Press*. p. 3.
- College of Nurses Aotearoa (NZ). (2001, June). Primary health care strategy document: the nursing answer to inequalities in primary health care. Palmerston North: Author.
- Craig, J. & Smyth, R. (2002). *The Evidence-Based Practice manual for Nurses*. Churchill Livingstone: Edinburgh
- Cumberlege, J., Carr, A., Farmer, P., & Gillespie, E. (1986). *Neighbourhood nursing - A focus for care*. London: Her Majesty's Stationary Office.
- Davis, J. (2005, July 20) Prescribing upsets NZMA. *The Christchurch Press*, p.7.
- de la Rue, B. (1997). Nurse practitioner developments in Australia. *Nurse Practitioner: American Journal of Primary Health Care*. Vol. 22 (94) p.252-253.
- Donald, F.C., & McCurdy, C. (2002). Review: nurse practitioner primary care improves patient satisfaction and quality of care with no difference in health outcomes. *Evidence-Based Nursing*; 2002 Oct; 5 (4); p.121. Retrieved electronically 30 March 2004. CINAHL.

- Gardner, G., Carryer, J., Dunn, S., & Gardner, A. (2004). *Nurse Practitioner Standards project* (Research Report to Australian Nursing & Midwifery Council). Australia: Australian Nursing and Midwifery Council.
- Grant, M. (2003, April). Drawing a line in the sand over nurse practitioners. *Kai Tiaki: Nursing New Zealand*, Vol.9. (3); p.3- 4.
- Glynn, P. (1989). The future of the adult nurse practitioner: a cultural materialist and structural functionalist approach to the opinions of health care professionals (nurse practitioner). *Nurse Practitioner; American Journal of Primary Health Care*. p.223.
- Harris, C. (2003, November). Rural health nursing scholarships announced. *Kai Tiaki: Nursing New Zealand*, Vol. 9 (10); p.8.
- Harris, D. (2002, October). The value of nurse practitioners. *The New Zealand Medical Journal*. Vol. 115 (1163).
- Harulow, S. (2000). Nurse practitioners: Defining the achievement. *Australian Nursing Journal*. North Fitzroy: Feb. Vol.7, Iss.7: p. 20-23.
- Hawken, L. (1989). *Nurses who see themselves as independent practitioners: A research report*. Wellington: New Zealand Nurses Association.
- Hegney, D. (1998). Extended, expanded, multiskilled or advanced practice? *Collegian*. 4: p.22-27.
- Horrocks, S., Anderson, E., & Salisbury, C. (2002). Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. *BMJ* 325 (7536): 819-823. Retrieved electronically 10/04/04. PUBMED: 11934775.
- Hughes, F. (2003, December). *Nursing sector update*. Ministry of Health: Wellington.
- Hughes, F. (2004, July). *Nursing sector update*. Ministry of Health: Wellington.
- Kai Tiaki Nursing New Zealand. (2003, September). *Rural health nurses welcome funding package*, Author, Vol. 9 (8); p.7.
- Kai Tiaki Nursing New Zealand. (2005, May). [Advertisement]. Vol. 11 (4): p.33
- Kelley, N., Matthews, M. (2001, April). The transition to first position as nurse practitioner. *Journal of Nursing Education*. Vol.40 (4): p.156-162.
- Keyzer, D. (1994). Expanding the role of the nurse: nurse practitioners and case managers. *Australian Journal of Rural Health*. 2: p.5- 11.
- Keyzer, D. (1997). Working together: the advanced rural nurse practitioner and the rural doctor. *Australian Journal of Rural Health*. Vol. 5 (4) p. 184 -189.
- Keyzer, D. ( 1998). Reflections on practice: defining rural nursing care. *Australian Journal of Rural Health*. 20 (1): p.100-104.

- Kinner, K., Cohen, J., & Henderson, M. (2001, March). Comparison of past and current barriers to novice nurse practitioner practice: the California perspective. *Clinical Excellence Nurse Practitioner*. Vol. 5 (2); p 96 -101.
- Kinnersley, P., Anderson, E., Parry, K., & Clement, J., et al. (2000). Randomised controlled trial of nurse practitioner versus general practitioner care for patients requesting "same day" consultations in primary care. *BMJ* 320 (7241)1043-1049. Retrieved electronically 10 April 2004. ProQuest. Document ID 53092532.
- Knudtson, N. (2000, October). Patient satisfaction with nurse practitioner service in a rural setting . *Journal of the American Academy of Nurse Practitioners*. Vol. 12(10); p.457-461. Retrieved 4 March 2004, from CINAHL.
- Kumar, R. (2005, March). Nursing vision losing focus? *New Zealand Doctor*. March, 2005; p. 8-9
- Lauder, W., Sharkey, S., & Reel, S. (2003, September). The development of family health nurses and family nurse practitioners in remote and rural Australia. *Australian Family Physician*. Vol. 32 (9); p.750 -752.
- Lindeke, L., Bly, T., & Wilcox, R. (2001, July). Perceived barriers to rural nurse practitioner practice. *Clinical excellence for Nurse practitioner*. Vol.5 (4); p.218-221.
- Litchfield, M.(1998). The scope of advanced nursing practice, *Nursing Praxis in New Zealand*. Vol.13, No. 3, pp 13 -23.
- Litchfield, M.(2001). *A framework of complementary models of rural nursing*. Centre for Rural Health: Christchurch New Zealand.
- Litchfield, M.(2002).*The successful design and delivery of rural health services: the meaning of success*. Centre for Rural Health: Christchurch New Zealand.
- Litchfield, M. (2004). *Achieving health in a rural community: a case study of nurse-community partnership*. Cliff Press: Hastings, New Zealand.
- Litchfield, M., & Ross, J. (2000). The role of rural nurses national survey. Centre for Rural Health: Christchurch New Zealand.
- Lockhart-Wood, K. (2000). Collaboration between nurses and doctors in clinical practice. *British Journal of Nursing*. Vol. 9 (5) p. 276- 281.
- London, M. (2000). *New Zealand annual rural workforce survey 2000*. Centre for Rural Health, Christchurch, New Zealand.
- London, M. (2001). *New Zealand annual rural workforce survey 2001*. Centre for Rural Health, Christchurch, New Zealand.
- London, M. (2002). *New Zealand annual rural workforce survey 2002*. Centre for Rural Health, Christchurch, New Zealand.

- Matthews, L. (2002, April 19). Area GP shortage becoming dire. *Palmerston North Evening Standard*. p.3.
- MacDonald, N.(2003, October 6). Rural healthcare-culture in crisis. *Wellington Dominion Post*, p.A.7.
- MacDonald, J., & Katz, A. (2002, August). Physician's perceptions of nurse practitioners. *Canadian Nurse*, Vol. 98 (7); p.28-31.
- MacKay, B. (2003). General practitioners' perceptions of the nurse practitioner role: an exploratory study. *New Zealand Medical Journal*. March 14; 116 91170): U356.
- Mahnken, J.(2001.) Rural nursing and health care reforms: building a social model of health. *Rural and Remote Health* 1 (online), 104. <http://rrh.deakin.edu.au>
- Martin, K. (2000, December). Nurse practitioners: a comparison of rural-urban practice patterns and willingness to serve in underserved area. *Journal of the American Academy of Nurse Practitioners*. Vol. 12(12); p.491-497.
- McCurdy, D. (2003, August 2). Nursing in crisis. *Wellington Dominion Post*. p. WM3
- McClellan, V., & Brash, J. (1988). *The Eketahuna health centre: a rural health initiative* (Discussion Paper 3). Wellington: Health Services Research and Development Unit.
- McLeod, M., Kulig, J., Stewart, N., Pitblado, J., & Knock, M. (2004, June). The nature of nursing practice in rural and remote Canada. *Canadian Nurse*. Vol.100(6); p.27-31.
- McMurray, A., St John, W., Lucas, N., Donovan, A., & Hohnke, R. (1998). *Advanced nursing practice for rural and remote Australia: report to the National Rural Health Alliance*. Australia: Griffith University.
- McMurray, A. (2003). *Community health nursing primary health care in practice* Churchill Livingstone, Melbourne. Chapter 3. p. 57.
- Michener, L. (2002, Sep-Oct). The rise of midlevel providers- are caregivers headed for a turf war or a new team approach? *Tar Heel Nurse*, Vol 64 (5) p.24-25.
- Ministry of Health. (1998). *Report of the Ministerial Taskforce on nursing: releasing the potential of nursing*. Wellington: Author
- Ministry of Health. (2000). *The Health Strategy*. Wellington: Author
- Ministry of Health. (2001). *The Primary Health Care Strategy*. Wellington: Author
- Ministry of Health. (2002). *Implementing the primary health care strategy in rural New Zealand*. Wellington: Rural Expert Advisory Group
- Ministry of Health. (2002). *Nurse practitioners in New Zealand*. Wellington: Author
- Ministry of Health. (2003). *Implementing the primary health care strategy in rural New Zealand*. Wellington: Author

- Munding, M., Kane, R., Lenz, E., & Totten, A, et al. (2000). Primary care outcomes in patients treated by nurse practitioners or physicians: A randomized trial. *JAMA* 283 (1) 59-69. Retrieved electronically 10/04/04. ProQuest.
- New Zealand Nurses Organisation. (2003, August). *Position statement: Nurse practitioners in New Zealand*. Wellington:
- Nichols, L. ( 2004, January 13). Doctor drain could hit rural areas. *The Nelson Mail*. p.2.
- Nightingale, F. (1820-1910). Electronically retrieved. [www.quotationspage.com/quote](http://www.quotationspage.com/quote) 5<sup>th</sup> September, 2004.
- Nursing Council of New Zealand. (2001). *The Nurse practitioner™: responding to the health needs in New Zealand*. Wellington: Nursing Council of New Zealand.
- Nursing Council of New Zealand. (2002). *The Nurse Practitioner: Responding to health needs in New Zealand*. (3<sup>rd</sup> Edition). Wellington: Author.
- Nursing Council of New Zealand. (2005, April). *Implementing nurse practitioner prescribing: Consultation Document*. Wellington:
- Nursing Council of New Zealand. (2005, July). *Implementing nurse practitioner prescribing: Consultation Document*. Wellington:
- O'Connor, T. (2003, March). Relishing the challenges of rural nursing...Marg Eckhoff. *Kai Tiaki: Nursing New Zealand*. Vol. 9. (2); p.16-17.
- O'Connor, T. (2003, July). Why the angst about nurse practitioners? *Kai Tiaki: Nursing New Zealand*, Vol.9. (6); p.13-14.
- Pantano, T. (2003/2004, Jan/Feb). Loss Of NP title causes demoralisation. *Kai Tiaki Nursing New Zealand*, Vol. 9 (11); p.28.
- Pepperell, G. (2003, May). [letter to the editor]. *Kai Tiaki: Nursing New Zealand*. Vol.9. (5); p.3.
- Philips, S. (2003, September). [letter to the editor]. *Kai Tiaki: Nursing New Zealand*, Vol.9. (8); p.4.
- Pinkerton, J.,& Bush, H.(2000, June). Nurse practitioners and physicians: patients' perceived health and satisfaction with care. *Journal of the American Academy of Nurse Practitioners*. Vol.12 (6); p211-217.
- Renouf, P. (2003, April). [Letter to the editor] Providing a 'fast tract' for nurse practitioners. *Kai Tiaki: Nursing New Zealand*. Vol. 9 (3); p.3.
- Reveley, S. (1999). Development of the nurse practitioner role. In M. Walsh & A. Crumbie & S. Reveley (Eds.), *Nurse practitioners: clinical skills and professional issues* (pp. 293-301). Oxford: Butterworth Heinemann.



- Rich, E., Jorden, M., & Taylor, C. (2001). Assessing successful entry into nurse practitioner practice: a literature review. *Journal of New York State Nurses Association*. Vol.32 (2); p. 14 -18.
- Roberts, K. (1996) The rural nurse-practitioner: concepts and issues. *Australian Journal of Rural Health*. Vol. 4. (3) p. 171-178.
- Ross, J. (1997, February). Rural practice nurse skills project (SRHA) September 1996. *Primary Health Care New Zealand*. p.79-84.
- Ross, J. (1998). Advanced rural nursing practice. *Primary Health Care New Zealand* p.36 -38.
- Ross, J. (1999). The development of the advanced role of rural nurses in New Zealand. *Australian Journal of Rural Health*. Vol. 7 (4); p. 253-257.
- Ross, J. (2001). *Dimensions of team effectiveness in rural health services*. Centre for Rural Health: Christchurch, New Zealand.
- Schrober, M. (2003, Dec/Jan). Over emphasising nurse prescribing. *Kai Tiaki: Nursing New Zealand*. Vol. 8 (11); p.8.
- Sox, H. (2000). Independent primary care practice by nurse practitioners. *JAMA* 283 (1)106-109. Retrieved electronically 10/04/04. ProQuest. Document ID: 47806799.
- The Nurse Practitioner Advisory Committee of New Zealand [NPAC-NZ] (2003, November) *A Stocktake of the Implementation of Nurse Practitioner Position*: Author.
- The Nurse Practitioner Advisory Committee of New Zealand [NPAC-NZ] (2005, March) *A Stocktake of the Implementation of Nurse Practitioner Position*. Author.
- Turner, C., & Keyzer, D. (2002). Nurse practitioners: a contract for change and excellence in nursing. *Collegian*. Vol. 9 (4) p. 18-23.
- Venning, P., Durie, A., Roland, M., Roberts, C., Leese, B (2000) Randomised controlled trial comparing cost effectiveness of general practitioners in primary care. *BMJ* 320 p1048-1053. [www.bmj.com](http://www.bmj.com) Retrieved electronically 16/07/04.
- West Coast District Health Board [WCDHB] (2005, April). *Proposal for implementation of nurse practitioners within the West Coast District Health Board*. (Draft). (Available from Director of Nursing, WCDHB, P.O. Box 387, Greymouth).
- Wilson, A., Pearson, D., & Hassey, A. (2002, December). Barriers to developing the nurse practitioner role in primary care – the GP perspective. *Family Practice*. Vol. 19(6); p. 641-646.

Wiseman, R., & Hill, N. (1994, November) Acceptance of the nurse practitioner role by Consumers in a Rural Community. Letter to the editor. *Nurse Practitioner* Vol. 19 (11); p.24-25.

Wood, L. (2000). *The enigma of advanced nursing practice*. Mark Allen Publishing Ltd: Wiltshire.