



Te Whare Whakakotahitanga Mo Te Hauora Taiwhenua

# **A FRAMEWORK OF COMPLEMENTARY MODELS OF RURAL NURSING**

*THE REPORT OF A STUDY OF NURSING  
ROLES AND PRACTICE FOR A NEW  
ERA OF HEALTHCARE PROVISION  
IN RURAL NEW ZEALAND*

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Centre for Rural Health  
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#### ABOUT THE CENTRE

The Centre for Rural Health was established late 1994. It was funded (initially by the Southern Regional Health Authority, then the Health Funding Authority and finally by the Ministry of Health) for a series of projects to support rural health services and community involvement. The Centre was under the directorship of Martin London and Jean Ross from, respectively, rural general practitioner and rural nurse backgrounds. It was also known as the National Centre for Rural Health. The Centre closed in late 2002, with final publications being completed in 2003. The resources and reports created under the auspices of the Centre were uploaded mid 2003 to be available indefinitely.

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## EXECUTIVE SUMMARY

The study was undertaken to identify models of rural nursing is the second phase of the Rural Nurses Project funded by the Health Funding Authority. The first phase was a survey of rural nurses that revealed a great diversity of employment arrangements that rendered traditional nurse roles and titles redundant. They no longer convey the nature of the work undertaken by nurses in rural areas. The need for a specialty field of rural nursing was identified. A further phase of research was necessary to explore the current work of rural nurses, the characteristics of their varied roles and approaches to practice, to point to the range of ways they might be employed within the new health system.

Nine practising nurses were interviewed at least twice by telephone. They were selected to include as much diversity as possible. Two service managers were also interviewed and further data was drawn from a case study of a nurse-led rural health service.

A description of contemporary rural nursing in New Zealand was drawn from the data. The nurses' descriptions of their work and work settings are represented by five interrelated themes:

- Scenario of change
- Diversifying employment arrangements
- Role reframing
- Reconfiguring networks
- Shaping of practice scope

The diversifying employment arrangements of nurses span an array of service providers. This has reframed the roles they performed in the past and there is a shift to new forms of practice associated with new configurations of the networks of service providers. Within this scenario of change, professional practice is being developed by rural nurses to contribute in new and more direct ways to health.

The models of rural nursing constructed from this overview accommodate traditional and novel service delivery in the context of the new health sector. The framework differentiates nurse groups according to employment arrangements that frame the role nurses take within the network of health services. The four models are differentiated by features of the scope of nursing practice:

- A) Employment within the services funded within existing health sectors (personal: primary, secondary, tertiary; public health). Scope of practice is bounded by job description that specifies the contribution of the nurse role to the wider service goals:
  - Hospital and outreach services
  - General practice partnership
- B) Employment by service providers funded to provide a nursing service directly to a population. Scope of nursing practice is bounded by health need of the population, trans service sectors, constructed by the nurses in partnership with employers – such as community trusts/companies and Maori provider organisations - according to their knowledge and expertise:
  - Focused healthcare (eg management of asthma, cardio-vascular and respiratory disease)
  - Comprehensive healthcare (geographically defined locality)

The framework gives a new coherence to nursing practice to redress the fragmentation that has evolved within the contracting environment. The models incorporate and reframe nurse roles that have in the past sustained the delivery of services from hospitals and general practices, as well as nurse roles that are just emerging within innovative provider schemes. Hence, all models have relevance within the new health system, operating simultaneously. They are complementary in addressing the health needs of rural people, with the potential to significantly influence access. Collectively the nurses working within this framework are positioned in the health system to facilitate collaboration and effect integration.

Nurses employed by the more recently established provider organisations may advance their practice to work across service sectors. The emergent roles are opening the way for nurses to work in new collegial relationships with medical practitioners that is mutually agreeable and believed to be enhancing the effectiveness of both.

Within these models, there is potential for all nurses to advance their practice and create new networks. Nurses within any of the models might choose to become certificated to prescribe medications if it is relevant for their role and practice.

The framework of models is the foundation for developing a career structure for rural nurses and the education model to support it. The next phase of the Rural Nurse Project within the Centre for Rural Health will integrate all components to develop a strategy for implementation, maintenance and resourcing.

# 1. INTRODUCTION

## 1.1 The Rural Nurse Project

The project was undertaken as the second phase of a project to identify models of nursing in the provision of rural healthcare. It is part of a wider project funded by the Health Funding Authority examining the provision of rural health care.

The first phase of the rural nurse project was a survey that provided a tentative overview of the current work of nurses in rural New Zealand. The survey questionnaires were disseminated as widely as possible amongst employing organisations. In the absence of workforce data on “rural nurses”, the respondents were nurses who identified themselves as “rural” in their work and who were willing to participate. Therefore it was not possible to claim representation of nurse roles. However, the findings did give some indication of significant issues to be addressed in envisaging service models for the future.

The respondents were a cohort of 85 nurses mainly in their later years of employment and had been long-time rural residents. They had trained in a system that was hospital based and now defunct. Most had had little if any higher education other than incidental up-skilling to meet requirements for tasks as they presented. The responses showed a great diversity of employment arrangements that confused the traditional roles and nurse titles. It was clear that how nurses had been employed and worked in the past was no longer relevant for the current health service delivery context in rural areas.

There was no identifiable coherent nursing practice articulated that addressed the need for rural healthcare. But the findings did show this group of nurses as a valuable resource. They had created new work patterns and learned new skills; their knowledge of their communities and experience of rural life had enabled them to respond flexibly to changing service demands. They saw that they were “filling gaps” in healthcare provision in many areas. Therefore, it was concluded that, to develop nurse roles relevant for the transition to a form of healthcare delivery to better address the health needs of rural people, “rural healthcare” should be acknowledged as a specialty scope of practice with professional and service structures to support it.

The data from a separate research project being undertaken at the same time also contributed to the second phase of the rural nurses project. This is an in-depth case study of one solely nurse-led, community owned health service in Hawkes Bay. It was requested by the local community as a review and as a response to the demand from Government funders to specify the significance of the service for the health of the local communities. The findings will be presented in detail separately. However the data from the community focus groups and interviews with health professionals and service managers in the service towns provided helpful reference material to supplement and elaborate the information from the nurse interviews in the Rural Nurses’ Project.

The purpose of the Rural Nurses Project as a whole was to explore the characteristics of roles and the practice of rural nurses. Description and analysis of their current work, considered in the context of the new health sector funding structure and possibilities for employment, was the basis for constructing a framework of models of rural nursing. This is to show the range of ways nurse roles might be developed in rural communities and point to differences in scope of practice associated with each.

The models will give direction to the development of a career framework and supporting education structure that will establish rural nursing as a specialty field. The nature of nursing practice to be learned within the models, the parameters of the services to support it, and the educational requirements for nurses to work in this way are the focus for the next phase of the Rural Nurses Project.

## 1.2 Objectives

- ◆ To differentiate the forms of nursing service in diverse rural areas and employment arrangements.
- ◆ To present the scope of rural nursing practice within a framework of complementary models of rural nursing.

## 2. METHOD & DESIGN

### 2.1 Preparation

As a preliminary phase, the nature of the study and selection of participants were discussed by telephone with personnel involved in various ways at national and regional level with rural healthcare. These discussions helped to build a picture of the current services and changes in train around the country. The future developments in rural healthcare envisaged also contributed to the descriptions of potential roles for nurses.

This was the context for decisions about selection of the range of rural nurses to be interviewed. To be as inclusive as possible of the diversity of service and employment arrangements, the number of nurse participants originally planned (5) extended to nine (9).

A proposal was developed and submitted to an Ethics Committee. After consideration in consultation, the chairperson noted that the study was concerned with staff development and therefore did not need to be evaluated for approval by the full committee. However, the conditions of participation to protect the participants were disseminated in a written statement and consent was formalised.

### 2.2 Participants

The nine (9) practising nurses had been referred to the study as rural practitioners. Most of them also performed managerial functions within their services. The group had the following characteristics:

- ◆ A broad geographical spread: 4 nurses from the North Island (different parts of Northland and East Cape); 5 nurses from the South Island (Nelson, Westland, Otago and Southland)
- ◆ A range of professional role backgrounds: Public Health Nurse, District Nurse, Practice Nurse, Hospital Nurse, Plunket Nurse.
- ◆ Deployment in localities that had varying degrees of geographical isolation and distance from medical practitioners and hospitals:
  - \* small rural settlement, small rural town;
  - \* clinic base 2 hours from nearest GP, 4.5 hours from nearest hospital, 8 hours from tertiary hospital/specialists;
  - \* hospital/health centre base 45 minutes - 2 hours from tertiary hospital (mostly 2 hours).
- ◆ A range of service settings:
  - \* small community hospital with 6 non acute and maternity beds for an interim episode of intensive care, to large community hospital of 36 beds involving minor day surgery;
  - \* nurse only clinic, GP practice, hospital, outreach services of hospital, fully mobile with office base, or varying combinations of these settings.
- ◆ Varied forms and length of experience with rural populations: from a few months to many years; some had practised in one area only, and others had had multiple and different roles in different areas.

- ◆ Residence as part of the population being served and residence outside the area being served.

The two service managers contacted had primary responsibility for the management of the rural nursing service within the administrative structure of their respective employing HHSs. The participants in the nurse-led service case study included the nurses, the administrative trustee and other representatives of the Community Charitable Trust and Health Centre Committee, a representative group of community residents, representatives of the GP groups, Practice Nurses and hospital managers in the neighbouring towns, clients of the service.

## 2.3 Methodology

The methodology was exploratory and participatory as a form of hermeneutics. The design derived from a “collective case study” approach<sup>1</sup>.

Whereas the selection of participants was as *structured* as possible to reach the greatest diversity of rural nurse employment and work, the interview process was as *unstructured* as possible. This was to allow the most natural and comprehensive depiction of nursing practice, in the particular service setting, to be constructed through the dialogue.

## 2.4 Design

In the initial letter to the nurses inviting participation the explanation of the research included the questions to which they would be asked to respond in telephone interviews:

- ◆ What do you attend to?
- ◆ What are your activities?

The preliminary notice of the questions prompted the nurses to think about how they might report their work. To enable me as researcher to understand the practice in context, I also solicited information about the structure and operation of the services within which their role had evolved.

There were two telephone conversations with each nurse. They took the form of an open conversation. Notes taken from the first conversation were summarised and organised as an interim statement of the service, role and practice, and faxed to the nurse to focus the second conversation. This allowed for reflection, insight, further elaboration and synthesis of a more coherent practice statement. It led to some new thoughts about what was needed for them to *better* meet the health needs of rural people. The statement was rewritten and a copy sent to the nurse as a personal record. Two nurses made further corrections to some details in the record.

The nine interview summaries provided illustration of the complexity and variability of health care being provided by nurses and substantiated a framework of models of their deployment. The nurses’ reports of what they were actually doing were merged with how they believed they might develop a rural nursing practice relevant in the new era of healthcare.

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<sup>1</sup> Stake, R. (1994) The Case Study. In Denzin, N. & Lincoln, Y. (eds), *Handbook of Qualitative Research*.. Thousand Oaks, California: Sage. pp.236-247

### 3. DESCRIPTION OF RURAL NURSING

The data from all sources are represented by five interrelated themes as a description of rural nursing:

- ◆ Scenario of change: Change is expressed in each of the other themes. It is identified as a theme in itself because of its significance for the subsequent analysis.
- ◆ Diversifying employment arrangements:
- ◆ Nurse role reframing
- ◆ Reconfiguring networks
- ◆ Shaping of practice scope

From this description of rural nursing in health service and funding contexts four models were identified. The models differentiate the scope of rural nursing practice. They are interrelated within a framework that distinctly divides them into two according to the employment context that creates the boundaries for the scope of practice (HHS/DHB, GP practice, Maori/iwi, community trust/company). These models operate simultaneously and are complementary to each other in how they address the health of rural people. And they are complementary to medical practice.

#### 3.1 A Scenario of Change

The nurses' descriptions of their work and service settings conveyed a scenario of a system in flux. While some nurses were still deployed traditionally, they were well aware of the changes in the health system. Most had reconstructed their ways of working within the changing health sector environment, and for many this had meant major changes in their lives. The shift to contracts as the basis for funding the services provided by their employers stood out as the major factor influencing their work.

Some were very anxious about the barriers they saw to be inhibiting the healthcare they could be providing, while others had moved into the new environment and talked with considerable vitality about their new ways of working. Several nurses working in different parts of the country, referred to their reconstituted service delivery model as leading the way in innovation, and thus providing an exemplar for the rest of the country to emulate. Others could see the challenges and possibilities but experienced barriers to developing their roles, particularly influencing and influenced by their relationships with medical practitioners and other health professionals.

The two service managers, employees of traditional regional tertiary hospital organisations with responsibility for rural community services, both focused their comments on workforce issues within the changing health system. They brought different perspectives to the actual contribution of rural nurses. One noted the increasingly exaggerated "transience" of employees to indicate that the education of nurses as a group amongst other healthcare workers needed to change to provide a flexible workforce to support the service goals of the employing provider organisation. She believed there was a need for "skill sets" at each sector level: primary, secondary, tertiary to address the full continuum of healthcare for which the provider was funded: "from promotion through prevention, treatment to palliation".

The other service manager noted the need for nurses to advance their education as “specialist rural nurses” who would be better able to address the breadth of need of rural people for access to the many aspects of healthcare for which the organisation was funded. This required the traditional community based nurse roles to be rationalised under one new title: specialist rural nurse, perhaps opening into Rural Nurse Practitioner. These nurses would “wear the five different hats” in order to provide an outreach service from the hospital into areas where there was only distant access to a medical practitioner. These “generalist nurses” would be supported by nurses with hospital based specialist roles acting as consultants on a regional basis.

The changes in nurse roles are therefore occurring within different frameworks for service development, and reflecting different perspectives of nurses as a workforce and nursing as a professional practice. This is further elaborated in the descriptions the nurses gave of their employment arrangements.

## **3.2 Diversifying Employment Arrangements**

### **3.2.1 Employment Arrangements**

The employers of rural nurses are accommodated within four categories:

- i. HHS/DHB: nurses employed as staff of the hospital (tertiary, primary/secondary) and outreach services.
- ii. GP practices either independent or members of IPAs
- iii. Community trust/company
- iv. Maori/iwi provider organisations

Employment was either fully or mostly publicly funded through one or multiple contracts (HFA/DHB/HHS, ACC) for components of their work, the practice nurse subsidy paid to employing GPs, and public health projects. Nurses of the first two categories were often employed part-time in different positions either within a service or in different services. The nurses of the Maori/iwi providers were employed only by that provider.

As workforce, nurses employed by the HHS/DHBs were salaried, their employment arrangements, including rosters and all forms of support were managed within the organisational structure as a component of the workforce. In general practices, employment arrangements were primarily in support of the medical consultation and whatever activities were required of specific service contracts held by the GP to provide healthcare to the clients of the medical practice. Where nurses were providing a fee-for-consultation service, payments were directly to the employer’s practice business.

The nurses employed by the more recently established community trusts and Maori/iwi organisations had a different context: to provide a nursing service as practitioners, directly to a population. Employment arrangements were flexible as the nurses created their own patterns of work to address the specifications of the contracts through which their positions were funded. They had formal arrangements, part of their contracts, for mentoring from nursing and medical colleagues.

In the one solely nurse-led health service the nurses were employed by a community trust under several publicly funded contracts (with HFA directly and with the HHS), although the operation of the service was largely funded through private, local government and philanthropic sources.

Hence, the diversifying of employment arrangements express the splintering of nursing in the contract environment. The lack of a coherent description of a professional practice in later sections illustrates this.

### **3.2.2 Emergency and Trauma Care**

First-response and on-call emergency and trauma care were significant aspects of the diversifying employment arrangements. It had become an integral expectation of the appointment of rural nurses, particularly those employed by the HHS/DHBs. Nurses prepared within the interdisciplinary PRIME scheme shared in rosters with GPs to provide 24 hour cover. One nurse was comfortably working a one-in-two roster.

In one area the sole GP employed a self-managing group of nurses to provide the full after-hours service, linking with the regional tertiary hospital for medical consultation and referral as necessary. The most senior nurses of the community owned hospital service joined with emergency nurses from the tertiary hospital to provide the service as a part-time job in addition to their respective major employment arrangements. This was seen as a career advancement to be proud of.

Some nurses working in the small community hospitals (both the employees of HHS services and of community trusts/company) had more of an assistant role in providing a triage service (on-site and by telephone) with access to the GPs and tertiary hospital medical staff for advice when necessary. In places where there was a hospital in the same location as the general practice, the hospital nurses rather than the practice nurses held the emergency care role as part of their employment arrangements. The hospital and its equipment provided the emergency care base for the area, used by the GPs when there were no resident medical clinicians. Some nurses noted the role of the community hospital did not play a part because in emergencies people were transferred directly to the tertiary hospital base.

Where nurses were employees of a HHS/DHB working in solo clinics in the most remote places, emergency care was an inevitable component of their employment arrangements. They had trained community volunteer units and access to a helicopter service, operating in conjunction with the GP and/or hospital medical staff on a "*patch and dispatch*" basis.

However, while some nurses had expanded their job descriptions proudly to include emergency and trauma care, others were quite clear that their employment arrangements should *not* include it as a component of their work. The latter expressed a concern that such an extension of their employment arrangements would compromise what they could achieve through their nursing work.

## **3.3 Reframing the Role of the Nurse**

Most of the nurses interviewed had extended their activities and described the nurse role in new ways, with reference to the contracts through which their work was funded. Few were aware of the developments occurring in nursing in other areas.

### **3.3.1 Titles**

A significant indicator of the reframing of nurse roles was the change in nurse titles. The nurses working within the traditional employer organisations (HHS/DHB and GP practices) continued to refer to their roles according to the traditional titles of district nurse, public health nurse, practice nurse, Plunket nurse, mental health team, staff nurse. But these titles were no longer adequate to fully represent the work they were doing. They talked about their work using multiple titles and even then their jobs were beyond expectations of the titles. The nurses employed by the recently established provider organisations (community trusts and Maori/iwi providers) had totally replaced the traditional titles with new descriptive titles more representative of their role e.g. mobile nurses, DSM (disease state management) nurse, marae nurse, health centre nurse, clinic nurse. However, in general, the nurses claimed a collective title of rural nurse, used with variations such as rural nurse specialist, rural nurse practitioner, rural nursing practitioner. Despite the different employment arrangements, the nurses identified with each other as a group that had a primary role in relation to rural populations.

### **3.3.2 Trends**

The reframing of roles was expressed differently by nurses employed by the HHS/DHBs, the general practices, the community trusts and the Maori/iwi organisations.

#### ***Rural Hospitals***

The nurses employed into established jobs to staff the hospitals had extended their roles as managers and specialists. In the bigger hospitals the nurses had been employed into positions that distinctly separated the management from the clinical practice roles.

In the smaller hospitals the same nurses performed both roles. They were developing specialist knowledge and skills to meet a particular demand such as emergency nursing (within the hospital) or asthma nursing (HHS/DHB outreach service) but also at times filled a generalist role to provide 24 hour cover attending to whatever people presented with. In this way, the nurses had extended their practice to branch into particular fields of clinical interest that would contribute within the wider service organisation, but remained flexible in what roles they would take to maintain the service as a whole.

One nurse envisaged the future of the traditional role of district nurse as an outreach specialist service that would provide the intensive and often technical support of patients at home that would otherwise have been provided in the hospital. This would reframe the district nurse role as a secondary sector service.

#### ***General Practices***

The nurses employed in the general practices had taken traditional practice nurse roles where the GP received the practice nurse subsidy. Service contracts for particular projects, held by the GP practice, specified tasks and activities relating to the general health needs of people registered with the service. When delegated to the nurses they expanded their roles beyond the expected GP assistant role. Most had their own their own consulting room. e.g. cervical screening became part of a women's health project and they independently maintained a register of clients.

In the group practices they were taking the initiative themselves to include health teaching and other health promotion, health protection projects in their role in relation to the clients of the general practice. These nurses, like hospital nurses, had organised themselves to integrate manager and practitioner roles, ensuring the staffing and maintaining the operation of the general practice. They did not leave the health/medical centre. They had an extended role that spanned public health and personal health, often the first point of contact.

Some nurses were operating satellite clinics in outlying localities, with the GP visiting on a routine basis. Their role was to manage the service and the everyday healthcare in the absence of the GP, providing the links to the GP when necessary. Some had developed role that was closer to that of the nurses employed by community trusts. Specialist nurses visited to run clinics and be consulted by her/his particular group of clients.

Hence, like the hospital nurses the nurses were providing the flexible support for efficient service delivery. They were developing new nurse roles, but the focus was the primary care consulting clinic, revolved around the partnership with the GPs, and provided an interface for people to move through, or avoid services in primary, secondary and tertiary sectors.

### ***Community Trusts and Maori/Iwi Organisations***

Nurses employed by community trusts and Maori/iwi providers expressed a radical change in role. Employed without predetermined roles and titles, they talked about developing their roles as they gained experience. They did not fill multiple positions.

For some the service contract had specified a focus and related activities e.g. the management of diabetes, cardio-vascular disease and respiratory disease. One group of these nurses organised their work as a team, operating from the same base. In this way, as the nurses working in the larger group general practices, they collectively provided a range of specialty services in the locality. A nurse in a different scheme, working alone, had constructed a primarily whanau and iwi oriented role that was much broader in addressing the full complexity of disease incidence and health determinants. All referred to their roles as client/family/whanau focused.

These nurses had established networks for mentoring and support agreed within the employing organisation. This was an expectation of the training programme associated with their contract for a pilot Maori Mobile Disease State Management Nursing Scheme.

The role of the nurses employed by a community trust to provide a solely nurse-led service had evolved somewhat serendipitously over several years as a collaborative effort with the community. In this way it had been responsive to the health needs of the community as the residents saw them, and as the nurse was able to address them. They had maintained the service through attracting funding from multiple sources. Recently the Funding Authority's service contract specifications had become more precise and focused the role on prevention and early identification of prevalent disease states. This had created strain on the more general role that was expected of the nurses by the community, and demanded different and more complex documentation. One nurse stepped out of the practitioner role into a purely management role for at least one full day a week.

One nurse employed by a large Maori/iwi provider organisation had chosen to negotiate her employment contract as an independent employee for the purpose of maintaining her nursing role that she had established and was expected by the community. In this way she could continue to negotiate her conditions of work to support the role.

Hence the nurses working in these more recently introduced employment arrangements were moving into new healthcare territory, framing their own novel roles that were no longer traditionally bound within service sectors, and developing strategies to sustain them. And they reached out beyond the health service sector. They were providing a nursing service directly to address the health of their communities and whanau/families.

### **3.3.3 Multiple Roles**

In all the employment scenarios, the nurses had attempted to merge their various roles of service manager, specialist, generalist or community health promoter according to the needs of service delivery. Nurses employed by the more traditional service providers (HHS/DHB and general practices) noted the tendency for the management requirements to take priority over clinical care, the specialist focus to predominate over attention to the whole of people's health circumstances, and personal care to take precedence over community public health activities.

Those employed by the newer provider organisations with responsibility directly to the residents of a locality through their representatives on the trusts/committees talked about the pressures of time and the complexity of practising clinically while meeting requirements for documentation etc. Management tasks however were secondary to the healthcare they were expected to provide. This meant after-hours work for the management component. Some were assisted by volunteers from the community.

### **3.3.4 Accidents and Emergencies**

A formal role for nurses as "first response" and "on call" personnel in accidents and medical emergencies had expanded over recent years, coinciding with the loss of medical practitioners and increasing use of helicopters. Rural nurses from many parts of the country reported their participation in the PRIME scheme as support for the role. In many places the nurses and the GPs played the same role, sharing equally the "first response on call" work.

For some nurses this had become an inevitable aspect of the role in the more isolated rural areas, but others had developed their own nursing roles to be facilitative in ensuring timely access to appropriate services without formally taking that role. Some nurses were quite adamant this was not the nursing role and avoided any involvement. They did respond to urgent calls out of hours but unless the situation was critical and they believed they would be helpful in the circumstances, they referred on to the local (usually voluntary) community emergency response team, advised the course of action or rang an ambulance.

Where the nurses were posted in remote areas without GPs or other nurses nearby, they were inevitably seen as having the pivotal role in the "patch and dispatch" process.

## **3.4 Reconfiguring Networks**

The reframed roles of the nurses had implications for why and how nurses interacted with other health workers within the health sector and beyond to other sectors. These networks ranged between two extremes, from the formal structures within hospitals to an open flow of informal relating amongst all health and related workers.

### 3.4.1 Links Between Services

The nurses employed by the HHS/DHBs talked about their networks mainly as links within the service. In traditional hierarchical teams they centred on the management of the episode of a patient or client contact, from admission to discharge. The management structures of hospital-based services differentiated the in-patient care from the care provided by the outreach community services: managers were in competition for resources.

Even where the nurses of the hospital outreach services were thinly spread over vast geographical areas and based in solo clinics as the only health professional in the locality, a team approach to service delivery had been achieved. A manager, based centrally in the regional hospital, took the role of team leader and managed the formalised network.

The increasing specialisation in nurse roles in some places was integral to the development of networks that had focused the care of groups of clients. The nurses had clear and comfortable networks that linked them across secondary and tertiary hospitals.

Despite the formalities the nurses tended to have their own informal networks. They maintained contact with mentors and colleagues when they moved between jobs, and when they were employed part-time by different agencies.

There were also clearly self-contained networks associated with the work of the nurses in general practices. Networks were primarily concerned with the requirements of the medical consultation and episode of treatment.

Whereas GPs reached from their private clinics into the community hospitals to achieve more continuity in their treatment, the nurses employed in both settings noted that networking between them was very limited. They seldom made links with other services regarding the flow of client care. Links involved cumbersome formal procedures and therefore had become limited to specifics e.g. accessing an item of equipment through the HHS/DHB hospital service for the management of a client of the general practice.

There were considerable efforts being made to integrate services in the areas where services had grouped together at a central site as the centre for delivery of all services in the region. While the nurses talked enthusiastically about these efforts (e.g. the initiation of an *“umbrella organisation”*), sometimes involving complex team projects and processes at management level, this was obviously not straight forward: *“a flow between hospital and community is starting to happen”*. There was considerable concern at the fragmentation of healthcare associated with the growing proliferation of specialist professionals and assisting healthcare workers e.g. the number of health and welfare service personnel visiting one household, often simultaneously, for quite different reasons.

The networking of the nurses employed by the Maori/iwi organisations and community trusts was very different. It was relatively informal and according to circumstances, in the moment. Links were spontaneous, focused and usually were made with the client and family/whanau members directly involved. Contacts were by telephone, fax, face-to-face meetings or by letter carried by the patient/client.

These nurses talked about the vital importance of collaborative arrangements across all health service providers and beyond the health sector. They were called on from time to time by medical clinicians in the tertiary hospital as consultants and vice versa. They emphasised the importance of extensive networks through which to address the determinants of disease for whole communities.

### **3.4.2 Collaboration Between Rural Nurses and GPs**

Relationships and role boundaries with GPs were key issues for nurses. Collaboration involved both facilitative relationships and mutually consultative partnerships.

#### ***Facilitative Partnership***

The nurses in the community hospitals, the hospital outreach services and general practices were employed into facilitative partnerships with the medical clinicians/specialists and GPs in support of the episode of treatment of their clients. Delegated tasks were undertaken using protocols and standing orders where they had been prepared, but always with established channels of communication through which medical advice was accessed.

The arrangements for this form of consultation varied from place to place. Some arrangements had become very difficult where there were few GPs serving a region: telephone calls interrupted the consultations with clients for both nurse and GP even for relatively minor or uncomplicated matters. Only two of these nurses noted that “*nurse prescribing*” would reduce the problem. Most of those who did comment on the disruptive situation noted that extension of standing orders would enable them to work in the way they believed to be appropriate.

Nurses employed in general practices managed the medical centre and/or the waiting room to streamline consultations and reduce the GP workload. Some had formalised triage procedures as guidelines. Most reported at least some reciprocal referral. Sometimes the receptionist took this role in consultation with the nurses.

The nurses stationed as solo practitioners in the most remote areas designated “special areas” served as “stand-ins” for the regional GP who visited routinely, and were seen by the residents as such. Their primary concern was the early intervention for the health problems of self-referred clients, and this involved clear consultative channels to the GP and medical clinicians of the regional rural hospital (or on occasions directly to the major tertiary hospital) when medical expertise was necessary. The network supported the links between primary, secondary and tertiary services.

A nurse team employed by a Maori/iwi to directly provide a comprehensive nursing service to an extensive deprived area had reversed the traditional employment arrangements of nurse and GP to create a novel form of collaborative partnership. The GP was employed by the nurses and was consulted by clients only through referral from the nurses. The roles were not fully reversed, however. The role of the GP was primarily as a mentor and teacher of the skills that could be incorporated as nursing practices.

### **3.4.3 Mutually Consultative Nurse-GP Partnership**

Where the nurses were employed by Maori/iwi organisations and community trusts to directly provide a nursing service, the nurses and doctors collaborated in a different way. Here the partnership was founded on an assumption of distinctly different practices and mutual consultation on health concerns.

In one remote area the nurse described a joint nurse-GP clinic base where they had separate consulting rooms and clients, stood in for each other for time off, and shared equally the on-call emergency duties. However, this arrangement had been achieved through the persistent efforts of the nurse. With each replacement of the GP the working boundaries had had to be reestablished for the nurse to continue with her practice and for the partnership to move beyond the traditional expectations of the nurse as assistant to the doctor.

Other nurses developed their networks to be able to consult with a client's own GP and vice versa. These nurses were often in contact with GPs, medical specialists and clinicians in the city or tertiary hospital when it was necessary for the health circumstance of any one client. They were emphatic about their whanau/family orientation so that they consulted with multiple medical practitioners to coordinate the management of healthcare for members of any one group. They spoke of the mutual respect underpinning the collaboration that had developed while they were able to practice independently.

### 3.4.4 Nurse Networks

The informal links amongst rural nurses were very important to them. Those employed in hospital out-reach services in remote areas were in contact with each other in neighbouring localities, not only in relation to standing in for each other out of hours and for leave, but also for personal support. They appreciated the team management that built in staff meetings and supervision even though the nurses were very sparsely spread.

It was noticeable that in all the services the nurses, no matter how widespread in the area, were self-organising to maintain a full access to healthcare for all people. In many places they were creating new ways of working collaboratively to develop greater autonomy in what they considered specifically nursing practice.

For some, the connections as students undertaking the certificate and diploma programmes in rural health had been very important and lasting. The establishment of the National Rural Nurses Network had attracted considerable interest.

In one region the nurses who took management positions in the community hospitals had formed a network to share in the development of management structures: policies developed by one were drawn on as blueprints by others.

### 3.4.5 Summary

There was a distinct difference in networking between the nurses employed by HHS/DHBs, GP practices, community trusts/company and Maori/iwi providers.

Those working within HHS/DHBs and general practices had networks involving personnel and services bounded by the employing service: management of the service and the client/s' episode of consultation with the service, including referral. The HHS/DHB nurses had communication channels that were more formalised than those in general practices. Both groups were concerned with the support of service integration: the coordination of healthcare *provided* to their clients.

The nurses employed by community trusts/company and iwi providers had much more fluid networks, ad hoc and responsive to whatever situation presented. The client, whanau/family or iwi (marae)/community group were participant in the nurse's interactions with other services and personnel. The nurses were concerned with supporting integration of health care *received* by their clients.

### 3.5 The Shaping of Practice Scope

All of the nurses noted that the foundation of their rural nursing expertise was their knowledge of rurality: what it means to live in rural New Zealand, and in particular the locality they served. This included the determinants of health, illness and disability. Importance was given to the personal information about individuals, families and circumstances. They knew what services were available and accessible, how to negotiate them, and how to get greatest benefit from them. The nurse's personal relationship with patients/clients, understanding what might be going on their lives, was noted by almost all. Several mentioned the significance of this as an advocacy dimension of their practice: they knew the people in their private lives as well as the health system.

The nurses gave an immediate response to the question about their practice that conveyed an impression of ready pragmatism: "*doing everything...whatever comes to the door...whatever is needed...what's going on*". However their further elaboration of this statement differentiated the scope of their practice within two broad categories. They differed in what they attended to and therefore how they perceived the purpose of their work. Within one category the nurses as employees of HHS/DHBs or general practices focused on specific activities in support of the wider service mission. In contrast nurses employed by a community trust or Maori/iwi provider attended to much more comprehensive needs of people in their everyday lives.

These two categories distinguish the scope of the nurses' practice according to employment arrangements and service funding:

- \* bounded by service operation, specified in job descriptions, that positions them within the workforce of that provider organisation, bulk funded and/or funded through multiple contracts;
- \* bounded by the health need as it is known by the nurse, negotiated by the nurse and funded directly as a nursing service, sometimes with additional support from multiple contracts.

#### 3.5.1 Scope Bounded by Service Operation (Job Description)

The nurses in this group reported their practice in terms of activities required for the delivery of the service: "*everything that needs to be done*", "*if it needs doing, do it*"; "*pre-hospital management*". The primary clinical purpose of service access by patients/clients was the medical management of disease and disability, prescribed treatments or hospitalisation, but in different forms and extent components were delegated to the nurses.

The nurses had been selected and appointed as staff members to specific positions, usually with a title e.g. staff nurse, district nurse, practice nurse. Accountabilities were defined within the line management of the service organisation. Particular skills and activities of the job were expected (e.g. physical examination) and training available to prepare for them. Significant to the work of these nurses was the management of the service operation.

In the larger hospitals and general practices the positions of service manager and practitioner were appointed separately. The manager provided an interface between the nursing practice and the service administration.

In the small community hospitals the nurses divided their time between management of the service and direct client care. They viewed the hospitalisation episode as an outreach service for both the GP and the tertiary services. Their work involved managing the episode of care as a secondary service, an interface between primary and tertiary sectors. One nurse noted it was more economical to care for a patient in hospital than to provide an outreach service for people in remote areas.

The nurses employed in general practices described their work as managing the clinics to support and streamline the medical consultation: triage as people presented at reception and in the waiting room, physical assessments to provide the GP with baseline status, diagnosis and prescription of treatments for some “*minor/uncomplicated ailments*”, some treatments e.g. suturing, plastering, “*be available for the follow-up for the consultation*”, teaching clients/family members, arranging referrals. Protocols were increasingly being developed that enabled the nurses to undertake more of the traditionally medical tasks, in support of the medical consultation: “*first responsibility is to the GP*”.

As noted previously, they were expanding their work to incorporate public health projects. However the nurses noted this as secondary to their work in partnership with the GPs who employed them. Many recognised and were frustrated by the limits to their practice.

In the larger health centres in towns where the nurses were centralised with the GPs, serving extensive rural areas, the nurses were developing specialty areas of knowledge and skill e.g. women’s health, immunisation coordination. This expanded the service provision in line with contracts bringing additional funding from the Health Funding Authority/Ministry of Health.

The trend to specialisation was also occurring in the smaller hospitals and general practices although the nurses held a generalist approach to be able to manage the full range of admissions. For one group the specialisation had enabled them to “*speak the language*” required to consult directly with medical consultants and specialists and thereby coordinate the care as clients/patients moved between the tertiary and community hospital.

### **3.5.2 Scope Bounded by Health Need**

Half of the nurse groups in the study fell into this category. They had been employed by community trusts/company and Maori/iwi providers to provide a nursing service directly to a population. There were no precedents for how the services might be delivered.

In three localities the nurses were employed to provide a comprehensive nursing service to the whole community, albeit funded through multiple contracts for focused components of healthcare e.g. community nursing, ACC rehabilitation, school health. These nurses had constructed a coherent practice that was responsive to needs as they saw them and incorporated the activities specified in the contracts within this practice. They talked about their practice in terms of the health and lives of the people, attending to families in their homes, whanau and iwi on maraes, and varied community groups. They organised health promotion programmes targeting groups within the community.

They combined clinic consultations with a mobile nursing service. Some ran clinics with the traditional appointment structure for consultations; others had little or no structure (“*When my car is parked outside – that’s where I am*”). Access to the nursing service was free or a donation or koha was invited.

In three localities nurses and GPs were collaborating in providing a comprehensive service to the residents. Their respective medical and nursing practices had evolved to be complementary, overlapping on some tasks. In one remote place one of the two nurses practised from the clinic, sharing it with the GP, and the other was mobile. The clinic GP and nurse maintained full access for residents to the health service; the GP ran clinics in neighbouring areas. The nurses viewed their practice as a shared nursing service, standing in for each other as necessary. They saw their practice as different from the GP although they incorporated many of the same tasks when the GP was away. The clinic nurse had greater specialisation in these medical tasks in order to share the on-call emergency work 1:2.

In another place the GPs and nurses were based centrally serving an extensive rural area. Nurses did not necessarily live in the locality of the clinic to which they were posted. They practised as mobile and clinic-based nurses during usual office hours, hosting a GP, specialists and other healthcare workers routinely for focused consultations. These nurses too claimed a holistic approach and comprehensive healthcare for the population of the locality.

In the third locality, the group of nurses had been employed on special, pilot service contracts held by the Maori/iwi provider organisation. They had constructed a collective nursing service to be as comprehensive and responsive as possible in providing healthcare coverage. They had employed a GP as mentor and teacher to learn to make clinical judgements and appropriately incorporate some traditionally medical tasks and skills. The GP consulted directly with clients only when they were referred by the nurses. This was a very recent initiative.

In two of the localities the nursing service was funded through one contract that focused their service on specified prevalent disease states: diabetes, cardio-vascular and respiratory disease. However, despite this targeting and the implied attention to diagnosis, early intervention and management, the nurses had found their work was much more holistic. They founded their work on a "*Maori perspective of health*". The core of their work revolved around whanau. They arranged hui on maraes to identify needs in general. They showed particular vitality in talking about what they were doing. One nurse who had previously been an employee of the community hospital noted she was now addressing significant health issues that she had not even been able to see in her previous position.

All of these nurses noted their practice was concerned with health in relation to whole families and whole communities, how people manage their lives, often in compromised economic circumstances, in their particular rural localities, and what activities they undertake to protect and promote their health. They emphasised the importance of attending to *everyone* "*O to 100 years old*", and being recognised as "*the nurse*" in the community with responsibility for an overview of predicaments and healthcare, a pivotal figure in the networks of health workers and trusted first-contact person. They were readily invited into homes and saw this as essential to being able to support healthy living, facilitate "*timely access to primary medical medical care*", "*reducing the fragmentation and avoiding the gaps*".

For all of these nurses their practice was a new way of working, and this had disadvantages. They had difficulties in articulating the scope, and therefore were exceedingly busy responding to "*everything*". Most noticeably influential in forming boundaries to their practice was the clarity of the health purpose. The nurses employed by the Maori/iwi organisations were clearest in articulating what they were trying to achieve. The Maori perspective of health was the cornerstone for service delivery by the Maori/iwi providers.

Their practice naturally reached across all health sectors, and beyond to services in other sectors as they addressed the determinants of health and disease for Maori people as well as providing a personal health service.

### **3.5.3 Emergency and Trauma Response**

Some nurses had extended the scope of their practice to incorporate 24 hour accident and emergency cover in place of, or in support of GPs. This movement had been led by the GPs. Nurses in the community hospitals had extended their work to include a triage role and support for the GPs in the hospital setting where there were appropriate facilities. Few of the nurses actually employed by GPs in general practices had extended their practice in this way. One nurse noted that if the GPs would acknowledge their practice capabilities and involve them in a partnership way the strain of on-call work in rural areas could be lessened.

The nurses claimed that, while this was a part of their practice that created anxiety, it was not a large part. However, many did not consider this work to be a part of their practice at all. Only one of the nurses in the health-need scope group had incorporated it into the practice. That nurse had been employed to provide a comprehensive service in collaboration with the GP, also an employee of the iwi organisation, and they shared the first-response, on-call work equally.

Most of the nurses who had extended their practice in this way had participated in the PRIME scheme. One nurse had refused the PRIME training because she believed the work would interfere with what she considered to be the essential nursing practice. Another nurse had participated in the PRIME scheme but had not become involved in on-call work for the same reason. These nurses noted that, although not on-call, they did respond to critical events when residents called them out of hours. Their role was more triage and referral than treatment. Some nurses had difficulties averting indiscriminate after hours calls while others said they were only called when really necessary and this was an accepted part of their practice.

## 4. MODELS OF RURAL NURSING

In summary, the diversifying employment arrangements of the nurses span an array of service providers. This has reframed the roles they performed in the past and there is a shift to new forms of practice associated with new reconfigurations of the networks of service providers. Within this scenario of change, professional practice is being developed by rural nurses to contribute in new and more direct ways to health. Therefore the models of rural nursing that are emerging span traditional and novel service delivery.

The four models are presented within a framework of two parts. The framework differentiates two groups according to the employment arrangements that frame the role nurses take within the network of health services. The models are defined by features of the scope of nursing practice.

### 4.1 Framework

- A.** Employment in services funded within health sectors (personal: primary, secondary, tertiary; public health). Scope of nursing practice is bounded by job description that specifies the contribution of the role to the wider service goals.

#### *Hospital and Outreach Services*

Practice involves management of an episode of care for patients presenting at a hospital or referred to its outreach service with a health problem requiring diagnosis, transfer, intensive surveillance and/or technical treatments within the boundaries of the service structure.

#### *General Practice Partnership*

Practice involves management of the consulting clinic and preventative programmes for the individual clients and families registered in the general practice (PHO).

- B.** Employment by service providers funded to provide a nursing service directly to a population. Scope of nursing practice is bounded by health needs of the population, trans-service sectors, constructed by the nurses in partnership with employers according to their knowledge and expertise.

#### *Focused Healthcare*

Focused attention to persons of specified population groups who have or are at risk for health problems, to avoid illness or exacerbation, facilitate early intervention and manage the implications of disease, disability and treatments in everyday living.

#### *Comprehensive Healthcare*

Comprehensive attention and response to all the health matters as they arise for the residents of a specified locality/marae/catchment area: the focus is on health in the context of everyday living for whole whanau/family, iwi and community groups, health determinants and achieving greatest benefit from the available health and related services.

The models are constructed to accommodate the great variability in ways the nurses are currently working but with acknowledgement of the trends in service delivery and employment. Whereas the framework incorporates current ways of working, the models propose development of rural nursing to have relevance in the new structure of service delivery by DHBs/PHOs. The ways the nurses have traditionally worked may seem to span two or more models but they are, at this time, primarily represented by only one.

The four models are presented in an order that, in general, reflects the evolution of nursing beyond hospitals over the past few decades. This has significance for the emergence of new forms of nursing practice. There is no hierarchical assumption attached to the framework. The interviews with nurses revealed how their work had advanced in all settings and was continuing to advance through their own efforts. The four models, therefore, represent nursing practice that is equally significant in the new healthcare sector.

## 5. DISCUSSION

The nurses' descriptions made it clear that the health sector reform had made a considerable impact on how nurses could work in rural areas. It had shaped what the nurses attended to, their activities and what these contributed to health and healthcare in rural areas.

### 5.1 Impact of Contracting

The contracting environment for public funding has been a particularly significant factor in creating the scenario of change for nursing. Employment arrangements have diversified as service providers have taken multiple contracts. In this context, while medical practice has continued as a coherent core of the health service, the practices of nursing, previously given coherence within traditional roles (district, mental health, public health, practice, Plunket nurses), have been splintered into discrete tasks (e.g. cervical screening, diabetes testing), skill sets (e.g. ACC related care, disease state management) and projects (e.g. coordination of the immunisation programme). Where nurses are employed as workforce, funding is for the contribution of nursing to the wider service (e.g. hospital treatment) rather than primarily for a nursing service. Nurse roles are reframed in support of service provision, limited in the extent to which nursing practice can directly address health matters not part of the core service (e.g. addressing the health circumstances of a whole family having difficulty managing everyday living with a member with a psychiatric diagnosis when the nurse is funded for the management of diabetes in another member).

This splintering of the roles has been associated with specialisation in nursing for increasing numbers of nurses e.g. asthma, women's health. Where nurses have been employed into positions in traditional roles in general practices, hospitals and outreach community services, the management structure for the service has retained some integration in the nurses' work. But even here the skill sets and outputs that underpin the contracts have given direction to the activities of the nurse at the expense of other activities. This is noted as a source of concern and grievance for them. Many nurses had multiple discrete components to their job or held separate part-time positions, their work funded through multiple contracts.

That is, specialisation has been driven by the employment arrangements related to contracts held by the employer. Further, these employment arrangements have bound the nurse roles and relationships within the respective sectors that differentiate the contracting processes: primary, secondary and tertiary. Whereas the practice of the GPs and medical specialists reached out into the community hospitals, the nursing in each sector is self-contained.

Nurses have recognised the implications of contracting and specialisation for healthcare. They note the increasing fragmentation and lapses in attention to critical health situations when there is no-one taking an overview of health matters concerning families and communities as wholes. To address determinants of health they see the need for a nurse whose scope of practice centred on health matters generally of the residents of geographically bounded rural localities.

The nurses employed by the more recently established service providers - community trusts/companies and iwi organisations – have worked to create a coherent nursing practice, not confined by the traditional service sector divisions. They have been employed to provide a nursing service directly accessed by a defined population. It was clear that when the nurse employees had a clear sense of their health care purpose, contract specifications could be accommodated without compromising the holistic nature of the practice. These nurses had a consulting clinic base but moved freely throughout their communities wherever health matters could be attended to. They reached into homes, out from maraes, and their networks of relationships reached into services of all health sectors: GP practices, specialists, hospitals, clinics. And they reached beyond the health sector wherever and whenever support was necessary. Most of these nurses do not include the first-response, on-call service as a component of their nursing role.

The nurses employed by the Maori/iwi set out with an established philosophy that gave a clearly articulated direction for their practice to improve the health of Maori people. Although their contracts were focused on specified disease state management, they were developing a practice that was whanau oriented in response to the most pressing need. They were particularly attentive to the contract specifications but this was just a part of their practice. They felt that if the contract requirements were less focused they would be able to work even more holistically, addressing the determinants of health in general, and still be just as effective in achieving health outcomes associated with the specified disease states because they were so prevalent.

## **5.2 Sustaining Traditional Rural Health Service Delivery**

The major sector changes have challenged the nurses to reconsider their work in relation to employment possibilities and many have responded innovatively. They referred to developing their activities, extending their work beyond the expectations of the traditional role titles under which they had originally been employed. Some implemented novel ways of working. Collectively they have adapted to the changes providing a fluid responsive workforce, although many have experienced this as fragmenting and it has not necessarily been satisfying.

It could be said that it is this responsiveness, evident in the nurses' descriptions, that has enabled the traditional service provision of hospitals and general practices to be sustained in rural communities. The general practices have continued in most places and some have expanded their service delivery with nurses extending their roles to support the GPs. The GPs who have grouped their practices centrally in a region have provided the opportunity for nurses to advance skills e.g. on-call and first-response accident and emergency cover; managing screening registers for registered clients.

Nursing in the small community hospitals governed by community representatives has also developed in support of both the GP practices and tertiary hospitals. This has created a 24 hour seven day interface through drawing on the pool of locally resident nurses as hospital and outreach staff. The large regional hospitals serving rural areas have continued with nurses employed both within the hospital and its outreach services to streamline access and promote shorter, more efficient throughput.

## 5.3 Innovation

The new service providers (iwi, communities of catchment areas) have opened doors to innovative service provision. They have employed nurses to directly address service contract specifications as a whole. Without the traditional core of medical practice giving the direction to the provision of healthcare these providers offered the challenge for nurses to shape their work in novel ways, directly and comprehensively addressing health matters. Because the contracts are held by trusts and Maori/iwi governed by representatives of the communities for whom the nursing service is funded, the nurses are directly accountable to their communities.

The difference between the two groups (traditional and non traditional) is emphasised in the descriptions of the nurses employed by non-traditional service providers but continuing to work alongside GPs who are also employees. In these centres, the nurses have constructed their own practice to address the health needs of clients directly. Their practice is independent of but complementary to the practice of the GP. The nurses reported persistent and hard work to negotiate skills and activities but were proud of the mutual respect in the collaboration achieved and the quality of the health service available to the residents of the service catchment area.

## 5.4 Complementarity and Integration

The nurses' descriptions revealed different forms of nursing practice quite clearly shaped by the employment arrangements: those shaping practice within the traditional service sector divisions, and those shaping practice that is not bound within any one sector division but facilitate movement trans-sectors and services. They are all in a process of development, changing with the shift in the health sector in general.

### 5.4.1 Models Within Traditional Service Sector Divisions

The scope of practice is differentiated according to hospital-outreach service provision and service delivery from general practices. The nurses employed provide the workforce, filling roles associated with prescribed activities that contribute to achieving the objectives of the service as a whole. The population of focus comprises the patients/clients accessing this service: either requiring an episode of treatment in hospital or consultation regarding a presenting health problem. In a general practice, the clients are those who are registered as clients of the GP governed service. The nurses fill positions with established job descriptions and communication networks. In the hospitals and large aggregated general practices their work is organised within formalised management systems and associated quality control.

These nurses had carved out a distinctly nursing contribution to the service: whoever accesses the service “*needing nursing*”. In both hospitals and general practices they identified a distinct sphere of practice as “*triage*” and “*a filtering system*” that streamline the passage through the service and access to other services, and reduces the workload of medical consultants and GPs. Those in small community hospitals viewed their work as supporting the outreach of the GP practice and of the medical consultants of tertiary hospitals for the most efficient service delivery: an efficient interface but not a nursing service in its own right.

In general practices the nurses identify the health promotion activities as distinctly a nursing service provided for the registered clients of the practice. In various ways they have adopted practices that are either delegated by the medical practitioners or support the prescribed medical treatments. Many have extended their skills to manage the more minor health problems people present with and to share the first-response and on-call emergency work. A few are anticipating extending the arrangements to prescribe medications for minor ailments and repeats.

Where the outreach service of a tertiary hospital provides the only access to healthcare in remote areas, the employment of the nurses has increasingly been brought within the centralised line management of the hospital. The work of the nurses, quality assurance and communication networks are identified in the context of a primary medical service and the core hospital and outreach service. Although the hospital holds contracts for the public health programmes, the nurses note that the health promotion activities expected of them are necessarily secondary to the more immediately demanding personal services. This is accentuated as the need for focused personal services grows (e.g. fewer GPs, transience and seasonal fluctuations in population).

Also increasingly, in line with the contracting environment, additional activities are extending their work (e.g. coordination of the immunisation programme). The regional outreach services from the hospital are increasingly specialised (e.g. asthma nurse, mental health team). The trend to specialisation is maintaining the currency of some aspects of healthcare for prevalent health problems available to rural people, but is also seen as creating or aggravating gaps.

Hence, the work of the nurses can be seen as combining the practices traditionally expected of nurses employed by GPs and hospital and outreach service providers. They replace the secondary services currently operating as small community hospitals and clinics in other not so remote areas. However they emphasise that they attend to the particularly nursing aspects of practice whenever it is possible.

All of these nurses in hospitals and general practices are managing the passage of patients through the episode of hospitalisation or consultation within a service, and between the primary, secondary and tertiary sectors. They are in positions to significantly influence access and integration of healthcare.

#### **5.4.2 Trans-Service Sector Models**

The more recently established service providers (Maori/iwi and community trusts/companies) have employed nurses to address the service contracts by providing a direct-to-community nursing service. Since community representatives govern the organisations, these nurses are directly accountable to their communities for the service they provide. Because there has been no precedent for service delivery in this way the nurses have been relatively free to construct the parameters of the scope of their own practice. This has been significant in allowing the nurses to look at health in a new way and to be directly responsive to the situations they face.

The population of focus for these nurses differentiates them within two models. In one model the nurses are employed to focus the nursing service on a population group specified in the contract; in the other model, the nurses are employed to provide a fully comprehensive nursing service. For both groups of nurses the population is geographically bounded as a rural catchment area or marae base, although they reach across all health service sectors into tertiary hospitals and other services in the cities as part of their care of patients/clients.

In the descriptions of their practice, these nurses focus on the health issues rather than on activities of service delivery. They primarily attend to the patterns of health need of their clients; they promote the health of whole families and whole communities as well as individuals, they are immediately responsive with some intervention or strategy for managing presenting predicaments, and facilitate access to other services. They are conscious of the determinants of health and illness in their particular areas and are mobile through their catchment areas to be able to address these both at an individual or home level and as advocates at a system level. They work from a clinic with face-to-face consultations, “korero on the marae” and organise hui, they are mobile to visit homes, schools, workplaces, and they have extensive and fluid networks of relationships with other health professionals, health workers and personnel across health service sectors and beyond the health sector.

One model in this category involves a scope of practice that is focused on a specified group within the population of the geographical area (e.g. disease state management: diabetes, cardio-vascular and respiratory). The contracts do draw the nurses’ attention to specific health outcomes, but they find their practice is essentially much broader. They experience considerable strain in constructing their practice to reconcile the expectations of the contracts and the expectations of their communities. They are grateful for mentors, both nursing and medical, to help them do this, but would like the freedom to work without the focused contracts.

## **5.5 Relationships Between Nurses and General Practitioners**

The relationship between doctors and nurses was a significant current in all the conversations. All of the nurses viewed the quality of the relationship to be essential to the way they could practice and they had all worked hard to create positive relationships. This has been found and explored in depth in other studies of the rural health service project (Ross, 2001).

In all the models the nurses had basically cooperative relationships with GPs and other medical clinicians/specialists. However the nature of collaboration in relation to healthcare provision differed. The first of the categories of models, where nurses were employed as the workforce in a hospital or general practice, involved a relationship through which the medical purpose focused the shared endeavour. The other category of models involved a collegial relationship with medicine and nursing practised independently. The nurses in the second category worked through extensive networks, responding to the needs of individual patients/clients. They could work in close collaboration with the chosen GP of their clients and reached into all services to interact directly with medical clinicians and specialists. As their practice became known they were called on directly by both GPs and specialists.

Where the more recently established service providers employed nurses who continued to provide the service previously provided within the traditional public health system, the relationship continued cooperatively as in the first of the model categories. However, it was increasingly being tested as the nurses struggled to maintain their service in the face of increasing demands to sustain the medical service.

In other places where the service provider employed both GPs and nurses (although with different funding) to operate a primary health care service, traditional expectations had to be repeatedly worked through to achieve a fully collaborative working relationship each time new GPs arrived.

## **6. THE DISTRICT HEALTH BOARD CONTEXT**

The four models incorporate the way nurses are currently working, given the changes in process as the health sector moves into the District Health Board environment. It is clear that the work of nurses within all models is essential to the healthcare of rural peoples. They are strategically positioned as an interface between people's private lives and the public health system. Positioned to make a major impact on the achievement of the Government's health strategy. This has particular significance for timely and appropriate access to healthcare, the integration of healthcare, the efficiency of medical consultations and treatments.

### **6.1 The Models in Relation to the Primary Health Care Strategy**

The models represent the position of nurses throughout the proposed primary health care structure. The trend towards diversifying employment arrangements associated with new roles and reconfigured relationships amongst providers is likely to continue as the funding organisations become established. It is anticipated that the way nursing practice is taking shape within the four models, as described, will continue to develop, given additional impetus through the emerging educational structure and requirements for assuring professional competence (Nursing Council of New Zealand, 2001). That is, nurses will continue to carve out a particular role in rural healthcare both as employees of PHOs led by medical practitioners, and as independent practitioner contractors of PHOs, Maori and Pacific Island providers, led by community representatives (assuming PHOs will eventuate with as community ventures).

It is expected that nurses currently employed by tertiary hospitals to provide a rural service in remote areas will increasingly have their role framed in relation to the core service of the hospital. Nurses employed by PHOs are more likely to provide the comprehensive service required. The formation of "agreements/collaboration and networks" between the provider groups has been noted as important to the provision of healthcare. Because nurses provide a fluid group of professional practitioners within and between all providers and service sectors, they will be key players in the integration and success of the new health system.

It can be seen that the nurses practising as professional practitioners spanning all services and sectors have a particular role to play in the new health system because of their mobility and attention to health matters, either focused or comprehensive, of whole families and whole communities. These nurses are in a position to facilitate community participation in health service development, effect the uptake of current health information, and promote self-care: that is, they are particularly relevant to the life (surviving and thriving) of rural communities.

### **6.2 Successful Service Delivery**

With respect to criteria of success of rural health services identified elsewhere (Dawson, 2000) the nurses in all models potentially contribute to successful healthcare. In working to the various service contracts and developing public health projects, their work can be assumed to have a direct impact on health outcomes. Their work streamlines consultations and eases the workload of GPs and medical clinicians in the hospitals. They facilitate transitions between services and service sectors (primary, secondary, tertiary and rehabilitation).

Their personal knowledge of, and relationships with, rural people maximises the effectiveness of medical treatments and the use of medical technology, and influences the satisfaction with the health service of patients/clients. They seek a collaborative team approach to healthcare. As a workforce they have been adaptable and flexible throughout the changes in the health system to support as much as possible a responsive and comprehensive coverage of health care for rural people.

However, some criteria of success are more relevant for the models of one of the two categories. The nurses working in the models of the trans-service/sector category discussed the development of their work with an unmatched vitality and commitment to their efforts. This was likely to be, at least in part, due to the novelty of their positions. But they had achieved considerable satisfaction through being independent in how they worked, and the new more collegial partnerships with GPs that this had given them. They could see their practice as significant in its complementarity with medical practice.

Nurses working in the models of the other category were also excited by some of the innovations they were making to expand their work, particularly pursuing specialty interests and independence in working to some contracted activities. But they expressed disappointment, sometimes disillusionment and frustration, about the health sector changes that had been reframing their roles and inhibiting the holistic nature of their nursing work. They could see how they could develop roles to contribute more to the health agenda but the contracts and employment arrangements created barriers.

### **6.3 Prescribing Medication**

The recent proposal for advancing nursing practice with nurses taking a role of “Nurse Practitioner” has opened up the debate about nurses differentially diagnosing medical conditions and prescribing medication (Nursing Council of New Zealand, 1999, 2001). Few of the nurses raised this as a major issue for them in their practice. Those who did were in remote areas and were already working closely with GPs and medical clinicians (either at distance or on site) but the communication between them was increasingly interfering with their respective practices. Of more importance to the nurses in general was the formalisation of ‘standing orders’.

It can be envisaged that some nurses working in all models might become certificated to prescribe medication, but the parameters would be established within the local rural nurse-medical practitioner partnerships within PHOs and/or the “agreements/collaboration and networks” between providers. It was clear from the descriptions of the nurses in the small and sparsely spread communities that their practice was necessarily generalist: the scope of their practice could not be defined by a particular specialist focus for disease diagnosis and prescription. Therefore, it is likely that the parameters for these nurses to prescribe medication will be very varied and decisions made locally.

## 7. CONCLUSION

Telephone conversations with rural nurses gave the opportunity to explore the nature of nursing in rural areas and how it might be presented as models of nursing within the emergent health service sector. While the way nurses were working was shaped by the complicated employment arrangements and changing roles and relationships, many had taken the opportunity offered by the contracting environment to reconstruct a practice through which they could make a direct contribution to the health of their local communities. The changes in the funding of health services to contracting has divided the nursing contribution to healthcare: the traditional sector-bound specialising workforce approach to nursing and the newer freely mobile comprehensively responsive nursing approach.

A splintering of nursing has occurred as the contracting environment has impacted on employment arrangements and divided the nursing scope of practice into two categories: bounded by the parameters constructed by the service provider within primary, secondary or tertiary sectors; bounded by the health needs of a specified population and the reach across all services and sectors required for them to be addressed.

Where nurses have been employed by traditional service providers with management structures that position them within the workforce for delivery of the service, few have held a coherent practice in line with established roles (district nursing, public health nursing). Many have taken up multiple part-time positions, sometimes with different employers (e.g. public and private), in different sectors (e.g. primary and tertiary), in different localities. This division of traditional nursing practices has been emphasised by the trend to specialisation. Particularly where the various health services for a region have aggregated and there are numbers of nurses working from a common base, nurses have grouped into teams incorporating various specialty expertise. This has been a welcome and satisfying development for some nurses, but a concern for others because of the fragmentation and gaps in care when there is not a nurse close to the community and taking an overview of health for families and whanau.

Where the more recently established iwi/Maori providers and community trusts/companies have held the contracts, the nurses have been employed to provide a health service directly to the Maori/communities these employers represent. These nurses have had the freedom to develop a coherent practice. Although some have had a particular focus to this practice as specified in the contracts (diabetes and other disease states), they all refer to the health of their whanau, families and communities as their core practice.

All the nurses claim the main significance of their work is their knowledge of rurality and determinants of health, disease and disability, shaping their particular community, and the lives of individuals and families within it.

It seems logical that the two groups operating together in the same area would be complementary and very effective. However, the employment arrangements within the contracting environment are not conducive to the interrelationships and collaboration that would be necessary. How the nurses interact with each other across services and sectors holds potential for significant effectiveness and efficiency in the healthcare received by residents in rural communities.

If nurses continue to advance their practice within these models, and expand their networks to link with each other across the distinct settings, the findings of this study suggest they would effect an integration of healthcare previously not possible. This will need the support of the new District Health Boards.

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