THE ROLE OF RURAL NURSES: NATIONAL SURVEY

REPORT OF RESPONSES IN A RURAL NURSE WORKFORCE QUESTIONNAIRE

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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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SURVEY DESIGN & METHODOLOGY

1. Purpose

A survey approach was used to efficiently reach as many nurses as possible involved with nursing in "rural" areas throughout New Zealand to build a profile of nurses involved in the provision of healthcare beyond the urban centres. Another purpose was to inform nurses of the rural healthcare project and encourage them to contribute their experience to the development of health services in the new health service structure.

2. Recruitment

Historically, in New Zealand, there has been no specified role entitled "rural nurse". Therefore there has been no comprehensive national database, and there were no criteria to guide dissemination of questionnaires and recruitment of nurses as survey participants.

Questionnaires were sent to the nurses on the list held by the National Centre for Rural Health (NCRH) and, in addition, to all nursing organisations and employing agencies (including HHSs). The covering letter asked for assistance in reaching potential participants: those who identified themselves as "rural". Questionnaires were disseminated by mail at the beginning in January 2000 and return requested by the end of February 2000. A pre-paid addressed envelope was included. Anonymity was respected.

3. Respondents

500 questionnaires were disseminated. 21 questionnaires were returned by nurses on the NCRH list with a letter noting they were not "rural nurses". 86 nurses returned questionnaires with responses to at least some questions . One of these was too late for inclusion in the data analysis. That is, the survey findings are drawn from analysis of the data from the returned questionnaires of ***85 nurses*** who identify themselves as "rural" in at least some ways.

4. Questionnaire construct

The source was a questionnaire constructed and used for a survey of "rural nurses" in the Southern Regional Health Authority region of the South Island in 1996 (Ross, 1996). It was later modified and used in Victoria, Australia to construct the database required for the development of rural nursing in that state (Duffy et al, 1999). Further modifications were made for this 2000 national survey.

The initial construct was a conceptualisation of the nurse's work, role and employment in rural healthcare provision based on experience in New Zealand nursing and drawing on studies undertaken in other countries. The questions required fixed-choice response with request to elaborate. An annexed section provided for extended descriptive responses to open-ended questions. The responses to these questions are reported separately as a distinct qualitative component of the project.

It was intended that the fixed-choice questionnaire would elicit information according to known parameters of the work and role of nurses involved in rural heath service delivery. The extended descriptions would provide illustration of how the nurses experience and perceive their work and role in addressing community health needs around the country. The findings from the project would build the profile of the nature, structure and position of the role of rural nurses in addressing community health needs in New Zealand to contribute to policy and service development in the new health service structure.

It has become clear that there can be no definitive statement of a "rural nurse" at this time. However, the findings draw attention to aspects of the current circumstances of nurses in rural settings which will assist in the second phase of the National Rural Nurse Project: the exploration of models for the future provision of healthcare for rural populations.

The survey questions were organised according to five categories:

- Personal characteristics. Questions related to the demographics of the respondent group and reasons for residency in a rural area
- Professional characteristics. Questions related to qualifications.
- The workplace. Questions elicited information about employment, funding, positions held and conditions.
- Professional development. Questions related to quality assurance: ways and supports for maintaining competence.
- The nature of the job. Questions related to aspects of the work of the nurses, including interaction with other health professionals and preparedness. Particular information about the "on-call" acute care component of the work was elicited.

5. Analysis of data and presentation of findings

The data were collated by EpiInfo.

An overview of the data led to the identification of themes to organise the presentation of the work and role of rural nurses. The findings are presented according to four major themes:

Characteristics of the nurses
Conditions of employment as a rural nurse
Holding a professional position as rural nurse
The work of the nurse

A brief discussion presents general conclusions and recommendations that will inform and give direction to the subsequent phase of the project.

FINDINGS

1. Characteristics of the nurses

Characteristics of the nurses included the general demographic factors, qualifications, and a description of rural living.

1.1 General characteristics

Demographic data on gender, age and ethnicity are presented.

i. Gender and age

Respondents were asked to note male or female and year of birth.

- All but one were female.
- Four did not give a year of birth.

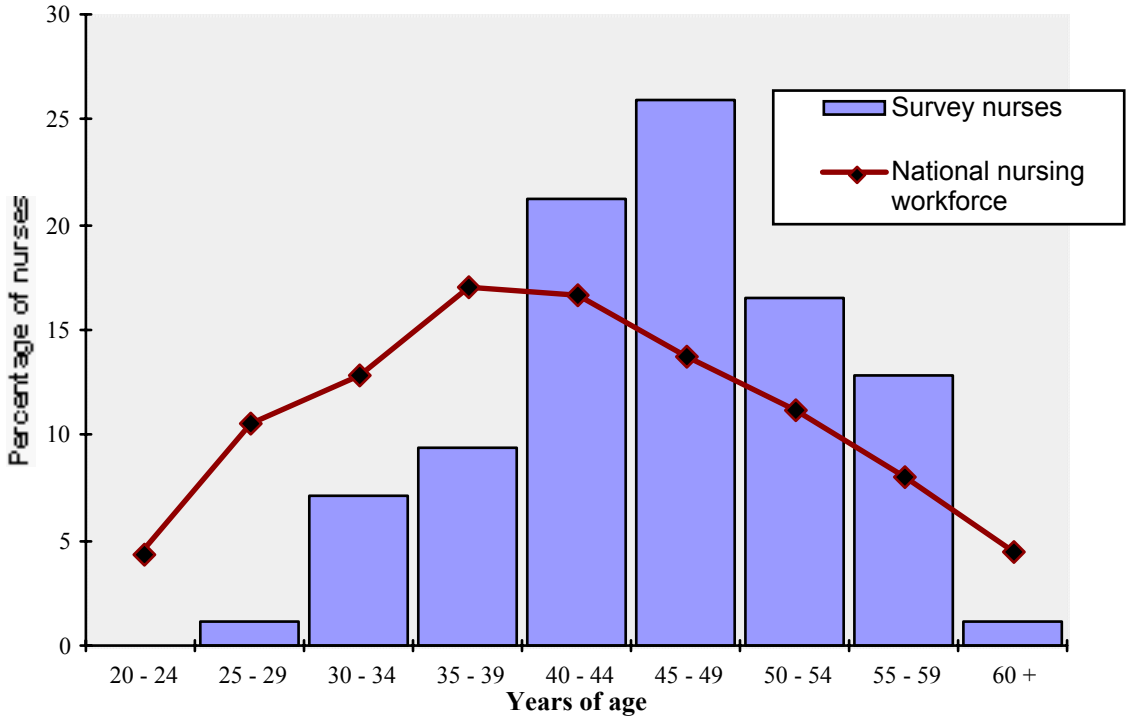
Responses to the year of birth question are presented as decade age groups.

- Mean age was 46.3 years
- 17.7% (15) were under 40 years; one under 30 years.
- Nearly half (40, 47.1%) were in their 40s
- 30.6% (26) were 50 or over.
- The range was 29 to 60 years.
- The modal group was 45 to 50 years.

TABLE 1.1 Age of respondent nurses

Years of age	Number	% of all respondents	Cumulative %
25 < 30	1	1.2	1.2
30 < 35	6	7.1	8.3
35 < 40	8	9.4	17.7
40 < 45	18	21.2	38.9
45 < 50	22	25.9	64.8
50 < 55	14	16.5	81.3
55 < 60	11	12.9	94.2
60 +	1	1.2	95.4
No response	4	4.7	100.1
	85	100.1	

FIGURE 1.1 Age of nurses



The demographics of the nurse group differ considerably from the national nurse workforce (NZHIS, 1997). Survey data were reduced to five-year groups for comparison. There was a lower proportion of men (1997 national ratio 1:16.2). This might be a reflection of the type of work, income level, lack of career opportunities in rural healthcare or just a feature of the sampling.

- A greater proportion was in the upper age groups. The modal group was much larger, and 10 years older, than the model group in the national nurse workforce (25.9% aged 45-49 in the survey group compared with 17% aged 35-39).
- 30.6% (26) of respondents 50 and over compares with 23.7% in the national nurse workforce.
- 17.7% under 40 compares with 44.8% in the national nurse workforce.

This comparison suggests that, whereas both the rural nurse group and national nurse workforce show an aging trend, it is exaggerated in this rural nurse group. Given the considerable over-representation of nurses from the Canterbury and Otago regions, and under-representation of Maori (refer 1.1.2) it is possible the difference in age is not so great.

1.1.2 Ethnicity

The nurses were asked to select one or more of listed ethnic groups. No-one listed more than one. Those of Maori descent indicated whether they "identified as Maori" and named their hapu/iwi.

- Seventy six (76, 89.4%) identified themselves as NZ Pakeha/European.
- Two (2, 2.4%) identified as NZ Maori
- Five (5, 5.9%) were "other European"
- Two (2, 2.4%) were of other not-identified ethnic groups.
- Five (5) said they were of Maori descent and named their iwi but three (3) of them noted they did not identify as Maori.
- Iwi represented were: Ngati Porou (3), Ngati Warere/Tainui, Ngati Mutanga

The proportion of rural nurses identifying primarily as Maori was considerably lower than in the national nurse workforce (5.3% in 1997) and iwi are poorly represented. But if ancestry and identification of iwi are considered indicators of Maori ethnicity in terms of the cultural safety of healthcare, the proportion (5, 5.9%) is consistent with the national nursing workforce (5.3%).

However, given the Maori population in rural areas and the inequality in health status, the representation of Maori nurses amongst this group of respondents is too low. This raises questions about our methodology as well as the current ability of rural health services to meet the obligations of the Treaty.

1.2 Qualifications

The nurses selected from a list of qualifications to indicate the type of registration held, post-registration certificates in community related specialisations and other educational qualifications. They were asked to indicate what educational programmes they were currently undertaking to upgrade their qualifications.

All had the basic general nurse registration and a few had more than one qualification which gave them either a formal specialty preparation in *rural nursing* or a specialty component in their rural nurse role such as midwifery, child health and public health.

1.2.1 Registration held

- Only registered nurses participated.
- Most (74, 87.1%) reported General & Obstetrics registration (RGON).
- Thirteen (13, 15.3%) reported Comprehensive Nurse registration (RCN). Since the two registers are mutually exclusive, it is apparent that at least two respondents did not answer correctly.
- Ten (10, 11.8%) had additional registration as midwives.

The number of RGON respondents is expected given the age distribution. This means the nurses have not had the newer, more comprehensive, integrated and intensive educational preparation spanning physical and mental health (there used to be separate General/Obstretric and Psychiatric Nurse registers).

1.2.2 Educational qualifications

- Five (5, 5.9%) indicated they held a bachelor's degree. A few held additional special field qualifications.
- Eight (8, 9.4%) held the Certificate in Primary Rural Health Care.

- Three (3, 3.5%) held a Plunket Certificate.
- Four (4, 4.7%) indicated they held a qualification in public health but this was unspecified.

1.2.3 Education in progress

A list of seven options for upgrading qualifications were listed including academic programmes, continuing education, and specialty programmes in rural health.

- Several (at least 7, 8.2%) did not respond to this question.
- Fourteen (14, 16.5%) were undertaking programmes to gain qualifications in the specialty field of rural health: six (6, 7.1%) at certificate level and eight (8, 9.4%) at the diploma level.
- Eight (8, 9.4%) were studying to convert their basic certificate or diploma qualification to a bachelor's degree.
- A few (3) were enrolled in the beginning postgraduate papers of masters degree programmes.
- 53 (62.3%) of the respondents noted they were currently upgrading their qualifications through continuing education. Whereas some of these qualifications were certificates for acquiring specific skills most were not specified. There were some references to attendances at local ad hoc sessions.
- At the most, 25 (29.4%) were upgrading their qualifications formally at that time, and 14 (16.5%) in the specialty field of rural health (Certificate or Diploma).

Some nurses stated they had previously achieved parts of programmes leading to qualifications, or were in the process of enrolling.

1.3 Residency in rural areas

Questions related to why and for how long the nurses had resided in rural areas.

1.3.1 Decision to reside in a rural area.

Nurses responded to eight listed *factors* commonly influencing the decision to reside in a rural area. They noted the extent of impact on a four point scale: "a lot", "some", "a little", "not much".

It is assumed that those who did not respond to any one factor considered this factor irrelevant. The extent of impact of each factor showed great variability with all factors dividing the nurses into distinct groups: either a considerable influence ("a lot" or "some") or minimal or no influence ("not much" or no response). Every factor was of great influence to at least some nurses; no single factor was an influence to all respondents.

- 49 (57.6%) respondents gave the highest rating to *partner's employment* and the same number gave the highest rating to *lifestyle*. 59 (69.4%) rated *partner's employment* "a lot" or "some", and the same number for *lifestyle*. However, many did NOT note these as influencing factors at all: 15, 17.6% - *partner's employment*; 19, 22.3% – *lifestyle.*
- Of those who indicated *employment* as an influencing factor (53, 62.4%) half rated it as a considerable influence ("a lot" or "some")
- For over half of these nurses (15, 28.3% of all respondents) it was a major influence ("a lot").

- Out of all respondents (85) this was 31.8% (27) and 17.6% respectively. More than a third of the nurses (32, 37.6%) did not note it as an influence.
- The extent of influence of *financial considerations* was generally very close to that of *employment.* It had the greatest number non-respondents, and the smallest number noting it as being of considerable influence (26, 30.6%; "a lot" or "some"). 61.2% (52) noted it as "not much" or no influence.
- 44.7% (38) of the nurses were considerably influenced ("a lot" or "some") by an *interest in working in rural health* and 28% (24) were influenced "a lot", while 31.8% (27) did not note it as being of any influence.
- More than a third (30, 35.2%) were influenced "a lot" by the factor *born and lived in a rural area*, and this expanded to 47% (40) with those for whom it was "some" influence. For half the respondents (43, 50.6%) this had no or "not much" influence.
- *Family connections* was a major influence for 29.4% (25) but "not much" or no influence for 62.3% (53).
- *Professional challenge* was of considerable influence to 36.5% (31) while more than half (49, 57.6%) did not view it as an influence at all.

The inconsistency in responding and many non-respondents suggest the variability in pattern and the likelihood of non specified influencing factors. All the identified factors did have an influence on at least some nurses and little or no influence on others. *Employment* for themselves, *professional challenge, interest in working in rural health* and *financial considerations* were very influential for the smallest number of nurses and were insignificant for the largest groups. *Born and lived in rural areas* and *family connections* were major influences for some but little if any influence for a similar number.

Given the mature age group, gender and basic qualifications of the nurses, the extent of influence fits with expectation: more are working in the rural area for personal reasons than because of a professional interest in the field as a specialty. For greater numbers of nurses, personal reasons are more related to *partner's employment* and *lifestyl*e than to *family* or *financial considerations.*

1.3.2 Duration of residency

Respondents were asked to record how long they had lived in rural areas: a) "current area" and b) "other rural area". All but one nurse responded. This affirms that respondents were almost all rural residents even if not actually working in the area.

- The range of years resident in rural areas was 2.5 – 58. 10.6% (9) had lived in rural areas for their whole life, three of them currently living in their home area.
- Five (5, 5.9%) had lived in a rural area for less than 5 years, half the number of nurses in any other five year group.
- 17.8% (15) had been living rurally for less than 10 years.
- Over half had lived there more than 15 years.

- Of those who responded, half (42, 49.4%) had lived in one or more rural areas before moving to the current area.
- Almost two thirds (53, 63.1%) had lived in their current rural area more than 10 years.
- years was the minimum length of time living in the current area of practice.

These data suggest that this group of nurses are long term rural dwellers. That is, they have continued to be drawn to live in a rural area either because of need or preference for the way of life. Many of these nurses have "their roots" in rural life and have seldom moved away from it: they are "stayers" in rural life. This is what would be expected of the age and gender of the group, and consistent with the major reasons given for living rurally (above).

Only a relatively small, and dwindling, number had moved to live in rural areas in recent years. This might be explained by the need for more mature, practically educated and experienced nurses to be able to work autonomously, or the changes in demography of rural areas (decreasing numbers associated with the shift to urban living). But, given the major factors noted as influencing residence in rural areas, it seems clear that they were participant members of their rural communities, preferred to live there, and had a spouse employed in the vicinity.

2. Employers of nurses in rural areas

This section presents information about the employers of rural nurses. Factors include: the locality of the workplaces, who employs nurses in rural areas, and the sources of funding.

2.1 Locality

Questions on locality of the workplace related to the geographic spread and extent of rurality of the workplace.

2.1.1 Geographic spread

The nurses were asked to select from North Island or South Island options and to name the locality. Four did not respond.

- 41.2% (31) worked in the North Island
- 58.8% (50) worked in the South Island
- Stewart Island was not represented.

The greater proportion in the South Island does not represent the population numbers (75% reside in the North Island), but it is more reflective of the spread of residents in rural areas. Because the South Island is more sparsely populated it is more likely to have more health care providers identifying as "rural".

All but one of the 14 broad administrative regions defined by the public health funding arrangements created originally as Area Health Board districts were represented. There was no respondent from Wellington. No pattern of workforce proportion of nurse to population number or particular client group could be identified.

2.1.2 Extent of rurality

Nurses were asked to differentiate the locality of their "principal nursing work activity" according to three categories: "rural, "semi-rural" and "urban", and then to describe it. Three did not respond.

TABLE 2.1 Locality of principal nursing work activity

	No.	%
Rural	55	64.7
Semi rural	23	27.1
Urban	4	4.7
No response	3	3.5
Total	85	100.0

- Almost two thirds (55, 64.7%) identified their locality as "rural". However, descriptions indicated that very different meanings of "rural" were being assumed.

- The 63.5% (54) who gave a written description, referred to different aspects of rurality and a wide range of criteria.
- Spread of catchment area eg confined to a "town",
  servicing range of "30 km radius" or "large rural area".
- Population of base town eg "small rural town of 250",
  13,000 residents
- Distance of practice base from nearest base / "cottage" hospital (distance or time of travel)
  eg "close by" - to 66km;
  3 minutes - to 3.5 hours

The great variability in definition was further apparent in the following:

"Solo GP practice" noted as "isolation" when it was 2 km from the "major hospital".

Place of work noted as "remote" in the outer Marlborough Sounds.

Four indicated their locality was not rural. It is likely that these were the nurses working in management positions in centralised agencies associated with service delivery in more "rural" areas.

That is, whereas all identified with "rural nursing", there was no consistency in definition of "rural" as a locality of work activities. The respondent group of nurses were representative in terms of locality spread around the country. However, it is not known whether they do actually represent the "rural nursing localities" because there is no definition of rurality.

2.2 Employing agency

Information on the employing agencies is presented in responses to questions relating to the type of service and employing service organisation Nurses.

2.2.1 Type of service

Nurses were asked to select from a list of 11 types of service those that characterise their employment. Respondents selected more than one service type. This suggests that the nurses

were employed by either multiple organisations or they found that the given types of service could not adequately characterise their work. It is possible both occurred. Additional comments identified many, varied and novel ways of working in a diverse provider environment, often spanning two or more of the given service categories. This multiplicity of service types and inadequacy of traditional descriptors to characterise the work of the nurse is consistent with the responses of the nurses to the question about "job titles".

TABLE 2.2 Types of service that characterise nurse employment

Service type	No.	% of all respondents
Doctor's surgery	49	57.6
Community health service	43	50.6
Multi-purpose service	23	27.1
Hospital	13	15.3
Public Health	7	8.2
School education	6	7.1
Rural mental health team	5	5.9
Rest home	3	3.5
Nursing centre	3	3.5
Mental health	1	1.2
Private hospital	1	1.2

- The largest group of nurses were employed in a *doctor's surgery* (49, 57.6%).

Because 38 of the respondents identified themselves with the title "*practice nurse"* and GPs were noted as employers of 37 (refer 2.2.2), it appears that at least one nurse employment position associated with medical services no longer fits the title of "practice nurse".

- Three (3.5%) identified their employing service type as a *nursing centre*. These nurses differ from others in identifying a particular nursing "service type" rather than service types defined by employers. This has significance in the discussion of roles in relation to employment and the nature of professional nursing practice.

2.2.2 Employing service organisations

Respondents selected from a list of five categories of employing service organisation. Two additional categories were identified as: private company and Maori provider.

It is possible that those who answered this question identified more than one category. This would be consistent with the responses to the other questions of this type which have indicated that some, perhaps many, nurses had more than one employer.

- *GPs* and *HHSs* were, together, the employers of most of the group (37, 43% and 23, 27% respectively). These were not necessarily distinct groups of nurses.

The employment of nurses by *community trusts* (12, 14.1%), *IPAs and private organisations* as relatively new developments (apart from GPs) in health service delivery, shows nurses are

spread throughout the health sector, including the new initiatives, although numbers are small.

TABLE 2.3 Employing organisation

Employer	Number	% of all respondents
GP	37	43.5
HHS	23	27.1
Community trust	12	14.1
IPA	2	2.4
Self employed	2	2.4
Private company	2	2.4
Maori provider	1	1.2

2.3 Funding sources

The nurses were asked to select from a list of eight funding sources to identify how their "nursing practice or employing practice generates its income". Many nurses identified more than one source which is consistent with the diversity of employment situations. It is not possible to know whether some funding sources were obscured within others. Actual funding sources may not have been known by some of the respondent nurses. The responses express the nurse's level of knowledge and understanding of the service structure and administration.

TABLE 2.4. Sources of funding

Source of funding	Number	% of all respondents
Accident Compensation Corp. (ACC)	52	61.2
Fees from patients	49	57.6
General Medical Services (GMS)	36	42.4
Obstetrics	24	28.2
Budget holding	21	24.7
Independent Practitioner Assn. (IPA)	16	18.8
Private medical insurance (PMI)	15	17.6
Capitation	15	17.6

- ACC was the funding source identified by the largest group of the nurses. That is, an aspect of the work for many of the rural nurses (52, 61.2%) was related to accident and

injury (involving one or a combination of: first aid, follow-up management of injury, rehabilitation to maximum independence).

- Many nurses (49, 57.6%) indicated that *fee from patients* was a funding source. Whether fees were paid directly for nursing practice or for the service of the employing organisation is not able to be determined. Given the responses to other questions relating to employment in this section, it can be assumed that fees were mainly not paid directly for nursing practice.

- The nurses who indicated funding through the *GMS* (36, 42.3%), and probably also those funded through *capitation*, *budget holding, PMI, IPA*, were apparently referring to the funding of the employing service.

At least the two respondents who were self-employed nurses might have been funded directly by fees. This number might be increased if the two who claimed "midwifery" as a title were included, perhaps a few more of the ten who held midwifery registration, and some or all of the 14 nurses employed in the community trusts if they provide a solely nursing service. However, that still leaves a substantial majority of nurses (more than two thirds) whose jobs are not only dependent on the income of their employer, but are also important in enhancing the income of the employer and generating funds for the service organisation.

3. The nurses as rural employees

Aspects of employment as a rural nurse are presented as: title, length of time in the current job, hours of work, income and job retention.

3.1 Title

The nurses were asked to state their job title/s. All responded.

- More than half of the respondents (44, 51.8%) identified themselves with an elaborated nurse title and most of these had combinations of traditional titles, new titles and descriptors. Six (6) noted the newly introduced title "nurse practitioner" amongst other titles.
- Some of the nurses identified only one title: "practice nurse" (25, 29.4%) which was by far the largest group using a single title. Others were "district nurse" (3), "staff nurse" (3), "nurse manager" (2), "nurse practitioner" (2).
- All but the last of these ("nurse practitioner") are traditional nurse titles in New Zealand, associated with particular employing agencies, expectations of job description and skills.
- The most frequently used title, alone or in combination with other titles or descriptors, was "practice nurse" (38, 44.7%). Next was "district nurse/community health nurse" (12, 14.1%) and then "public health nurse" (7, 8.2%).
- "Rural" as a descriptor was included in the titles of 8.2% (7).
- Other descriptors used to give particular meaning to traditional roles related to:
  - Role eg administrative, research, director, manager
  - Specialist field (knowledge) eg palliative care, emergency
  - Employment conditions eg level of seniority, part-time, coordinator, independent.

- Two nurses gave a title that indicated autonomy as a professional practitioner: "rural nurse practitioner", and one of these used it as her sole title.
- Although 11.8% (10) noted they held midwifery registration as a qualification, only two stated "midwife" as a job title.
- Two nurses identified their single title as Special Area Medical Officer (SAMO) which is not a nurse position. Similarly two others did not specify nurse or nursing in their title.

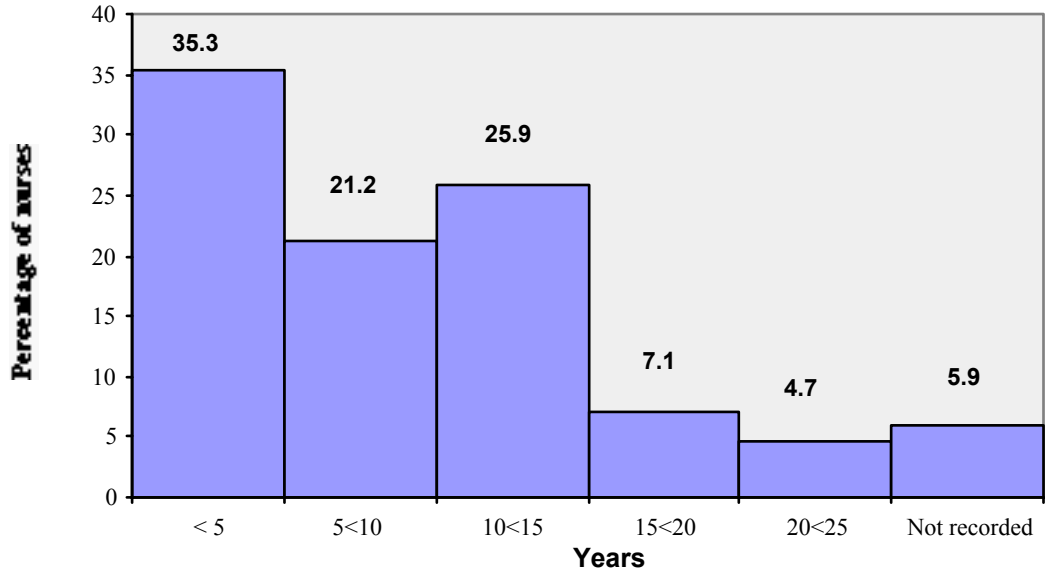
The great variability of titles, and the frequency with which additional descriptors were needed to identify a title and elaborate on traditional titles suggests considerable confusion about the roles of nurses in rural areas. This is consistent with the considerable restructuring of service delivery since the health reforms: the employment and expectations of nurses in the rural roles no longer fit with the traditional role titles.

There is hardly any recognition of a particular professional role for a nurse in a field of "rural" healthcare. The proliferation and elaboration of titles suggest that employers shape the currently held positions, and expectations do not necessarily match traditional positions.

3.2 Length of time in the current job

Nurses were asked to state how long they had been working in their current position(s) in years and months. Space was given for two currently held positions to be noted. When length of time in more than one job was indicated, the job of longest duration was identified as the primary job.

FIGURE 3.1 Years in current primary job



- 35.3% less than five years; 15.3% (13) had been in their positions less than three years.
- Over half of the group (50, 58.8%) had been in their current primary position five years or more; over three quarters (67, 78.8%) three years or more.
- The range was 6 months to almost 25 years.
- Half of those who responded (40) had been in their positions between five and fifteen years.
- 11.8% (10) had been in their positions 15 years or more.

- Eleven (11, 12.9%) noted the duration of time in a current secondary position, and two in a third position as well.
- Except one, these nurses had been in their second and third positions six years or less, and seven of them less than 4 years.

The few nurses in positions less than 3 years suggests a tendency to hold positions which would be expected of this group nurses who had been long term residents in rural areas and had ties there other than employment opportunities. However, the considerable number in their positions less than five years and the recency of some in picking up new second and third jobs, suggests there was flexibility in the positions the nurses took on, and increasing mobility between jobs. The difference between number of years in current positions and years of residence in rural areas, and the relatively small number holding positions 15 years or more, show these nurses had not been in their positions continuously. They may have taken time out for family reasons, or held jobs in urban areas for periods of time.

These findings are consistent with the opening up of new employment opportunities associated with the funding changes and restrucuting of the health reforms. It also suggests fragmentation of nurses' work. But they have obviously been a workforce resource that has been drawn upon to support the changes in health service delivery in rural areas.

3.3 Hours of work

The nurses were asked to "describe employment" in relation to four stated possibilities of employment hours: *"permanent full time", "permanent part time", "reliever on call*" and *"contract"*. Then they were to record the "average hours per week".

Not every nurse responded to the forced choice part of the question, but everyone did record number of hours. There were many and diverse combinations of work hours recorded, presumably in relation to their different job situations. Over half of the respondents (44, 51.8%) did not answer with a single (average) number of hours, giving instead a range of hours within their working week. Some indicated different working hours for different jobs. It is assumed that the options given in the questionnaire were not adequate to describe the pattern of work of these nurses. Some broad generalities are presented.

- Most of the nurses (78, 91.8%) indicated they were working in "permanent" jobs.
- There were almost equal numbers in full time (38, 44.7%) and part time (40, 47.1%) employment.
- Two were on contract and one a reliever on call.

- There was a wide range of working hours per week (5 to 50+), fairly evenly spread up to 40 hours.

- 40% (34) indicated 40 hours or more, with 16.5% (14) indicating that they worked more than 40 hours ranging up to 60 hours.

The interest in "part time" employment might be explained by the reasons for living in rural areas, particularly *family reasons* and *lifestyle.* Similarly, the "permanence" of the employment situation is consistent with other findings of stability in rural residence and employment, although several indicated a range of hours worked per week. The data suggest that nurses have roles that are very flexible and for many the hours of work are excessive.

3.4 Income

Nurses were asked to state their annual gross income from their employment/practice. Only 32.9% (28) responded. This might be explained by a reluctance to reveal what is considered personal and private information, but also by the variability in employment over a year and from year to year.

Because of the low number of responses and different numbers of hours worked, it is not possible to draw conclusions. However, the range shows considerable variability in income. Five earned $50,000 or more which gives an indication of the potential remuneration for nurses working in the rural field. Whether the positions were clinical or management is not known.

3.5 Job retention

Information on job retention is presented in the responses to questions that addressed job satisfaction and what factors influenced the nurses to continue in their jobs.

3.5.1 Job satisfaction

A question asked how satisfied the nurses were with a list of 15 characteristics of employment considered to represent significant issues to them in their employment. A four point scale was used to elicit responses on the extent of satisfaction with each of the characteristics: "a lot", "some", "a little" and "not much". Any other issues could be added.

No one of the listed characteristics was rated by all nurses. The non-respondents were either nurses who were strongly dissatisfied or believed that the characteristic was irrelevant. Therefore the rating of satisfaction as "a lot" or "some" is considered to mean relatively well satisfied; "a little" or "not much" is considered to mean relatively little satisfied.

- The characteristic that most satisfied ("a lot") the largest number of nurses was *utilising a wide range of skills/variety of practice* (58, 68.2%). Three did not respond and no respondents were "not much" satisfied.
- Whereas several nurses were not very satisfied, more than 80% were relatively well satisfied with the *conditions of employment*, *support from employers*, *nature of professional practice*:
- *the number of hours worked every week*
- *availability of annual and other leave*
- *availability of continuing education*

- *support from employer*
- *peer support*

- *practising primary health care nursing*
- *working as part of a team*
- *sense of professional independence/responsibility/confidence*

- The characteristics with which the greatest number of nurses were least satisfied ("not much" satisfied) and few were well satisfied were :
  Opportunity for transfer (40, 47.1%)
  Opportunity for promotion (35, 41.2%)
  Availability of nurse locums (25, 29.4%)

These are expected characteristics of the work conditions of practitioners living in isolated communities. They were amongst the four listed items that also had larger numbers of non-respondents, which suggests they were characteristics of little relevance or sources of great dissatisfaction to a considerable number of nurses.

There was greater variability in degree of satisfaction shown in the responses to
Availability of continuing education
Clinical skills update
Study leave
Support from nursing administration.

This variability may be because they were more locally determined. They are factors related to the professional development and support of nursing practice.

- Similarly *opportunity for transfer* was not at all important for many (the highest non-response rate: 27, 31.8%).
- *Support from nursing administration* was not important for 20 (didn't respond) but almost half (47.1%) were at least moderately satisfied.

Other issues appended by the nurses reflected dissatisfactions that were local. Examples included:
lack of supportive relationships with managers, nurses in other fields of nursing, receptionist and doctors
a "flat structure" and lack of nursing administrative structure which obstructed promotion
the stress of being a "sole practitioner" which meant the nurse had to "switch roles frequently during a week's work"
the cost and accessibility of education.

These comments reflect an awareness by at least some nurses of the consequences of a lack of an identifiable "role", practice and administrative structure that should provide the necessary framework for nurses to nurse in rural areas effectively and efficiently.

Amongst those who responded, there was considerable satisfaction with the features as outlined even if there were some dissatisfied. More nurses were likely to be more satisfied with characteristics of their work that concerned the professional practice than with

characteristics that were locally determined by employers and workplaces. This suggests that, for some, the full impact of professional practice is not well supported within localised conditions of employment and workplaces.

3.5.2 Factors influencing continuation in the job

The nurses were asked how much particular personal and social factors influenced their decision to remain working in the rural area. Fifteen factors were identified and responses given according to a four point rating scale: "a lot", "some, "a little" and "not much".

Several nurses did not respond to each of the factors, perhaps because it was not relevant to them in their employment or personal situation, or perhaps because it was a negatively influencing factor. The wide spread of responses to the listed factors, the large number of nurses not responding, and the small number of additional comments (7), suggest a greater complexity than can be represented in the listed factors. The additional comments implied that *decision to remain working in a rural area* was not the issue of concern.

- The major influences for the greatest number of nurses were *sense of community* and *physical attractiveness of the area*.
- Consistent with the given reasons for living in a rural area, *employment opportunities for partner* was a very important influence ("a lot" and "some") for more than half of the nurses (49, 57.6%) but not as important to as many as *sense of community* and *physical attractiveness of the area.*
- Two of the factors understandably divided the group into those who rate the factors as important and those who rate them as of little influence: *access to social/family network* and *employment opportunities*.
- Of little ("not much") or no interest (no response) to the largest numbers *were availability of childcare* (69, 81.2%), *community facilities/shopping* (63, 74.1%) and *career move* (54, 63.5%).
- *Career move* was an important influence ("a lot" or "some") for less than a third (26, 30.6%) and only six (6, 7.1%) saw it as a major influence. This low proportion might be because educational opportunities are not available, there is no clear career path identified, or a lack of interest.

These findings are consistent with the numbers of nurses in higher age brackets.

4. The work of the nurse

The work of nurses was considered in relation to the roles within which they practised, being knowledgeable in practice, the support to maintain roles and practice. On-call work for accident and emergency care was identified as one of the significant components of nurse's work to focus the final section.

4.1 Role parameters

In this section information is presented on the roles and work generally expected of nurses in relation to clients, their health and care in the rural sector. Further information on the nurses'

roles related to working with other personnel concerns the teaching/supervision of nursing and medical students, and collaboration with identified health professional groups.

4.1.1 Components of the role and work of the nurses

29 components representing traditional and current aspects of the work of the nurses were grouped within a previously developed framework and nurses were asked to select all those that were "appropriate to their situation". All but two nurses responded.

No two nurses selected the same combination of components. No one component was selected by more than 80% (68) of the nurses. That is, the pattern of role/work components was unique to each nurse.

There was a range in number of components selected from the total list of 29: from two to almost all, but most nurses selected multiple components. Many of these listed components were traditional nurse role titles. As traditional titles the terms (eg district nursing, public health nursing) signify a clear role, employer and work expectations within past service structures of the health system. Generally responses to this question suggest that very few of the nurses still identify with those traditional roles. This is consistent with the responses to the question about employee title (Section 3.1).

- The title selected by fewest was *midwifery*; 11 identified this although only 10 of the group had a midwifery qualification.
- There were few *first on call* "all the time" (refer Section 4.5).
- The most commonly selected components were those grouped under the title *hospital*. At least two thirds of the nurses selected five of the six *hospital* components (between 57, 67.1% and 68, 80%).
- The sixth hospital component, *diagnosis*, was selected by far fewer (38, 44.7%) and was one of the least selected components out of the whole list of 29.

What was understood by *diagnosis* is not known. It is used in the nursing literature in relation to a pattern of characteristics of a client that require nursing intervention as well as the more common use in medicine in the naming of a disease or syndrome indicating the need for treatment prescription.

- *Health promotion role* as a separate component was selected by two thirds of the nurses (57, 67.1%), while the *health promotion* in relation to the *hospital* group of components was selected by more than three quarters (66, 77.6%).
- *Plunket* was selected by 32 nurses although only three out of the whole group of 85 said they held a Plunket Certificate when asked for qualifications held (refer Section 1.2).

Other components identified by individual respondents included:

Consultant
ACC contract
Listening ear
Patient advocate
Liaison .

Some local and/or specialist activities were identified, including skills that would probably be used by other health professionals if they had been available. That is, there was a tendency

for the nurses to be 'filling the gap' when other health professionals were not providing a service in rural areas.

These findings are consistent with responses to other questions in the questionnaire. They show considerable confusion about the meaning of terminology used in this question which is associated with a fragmented identity as a rural nurse. Their work was not consistently defined. It was very varied, locally responsive, and fashioned according to the demands of different employers and requirements of employment situations. It incorporated aspects of many roles and practices of nurses and other healthcare workers in other settings.

That is, a particular rural nurse "role" had not been envisaged by the respondents which would provide a coherent organisation of components of the nurses' work.

4.1.2 Teaching/supervision of nursing and medical students

The nurses were asked to rate on a four point scale the extent of their "enthusiasm" about teaching/supervising *nursing students* and *medical students*: "a lot", "some", "a little", "not much".

- Half of the nurses indicated they were very enthusiastic ("a lot") about *teaching/supervising nursing students*, and 88.2% (75) were at least moderately enthusiastic ("a lot" or "some").
- There was less enthusiasm about teaching/supervising medical students. 20% (17) were very enthusiastic ("a lot"). A third (29, 34.1%) had "a little", "not much" enthusiasm or did not respond.

These findings show that most nurses see teaching/supervision of nursing students as integral to their role but were less keen about a role in teaching/supervising medical students. The difference may be explained by their confusion about their role and lack of a clear understanding of what teaching is required for medical students. It is probably also associated with traditional relationships between doctors and nurses that continue for many today when role boundaries are unclear.

4.1.3 Collaboration with other health professionals

The nurses selected from a list of 15 health professional groups and ranked the frequency of their contact with them on a four point scale: "daily", "weekly", "less than monthly", "never".

The inconsistency of responses to this question suggests that collaboration is a very complex issue. Not all nurses responded. It is possible that the diversity, unpredictability and flexibility of the work of the nurses, revealed in the responses to other questions, could not be presented by the term "frequency of contact".

Some trends are tentatively suggested from the nurses of those who did respond:

- The professionals with whom most nurses are most frequently in contact, and fewest "never" had contact, were: *practice nurses* and *district nurses*, *GPs* and *pharmacists*.
- *Ambulance personnel* were not used very often (less than half of the 74 who responded), but very few were "never" in contact.

- All but two acknowledged their contact with the *GP* (83, 97.6%). By far the largest group of those who responded (60, 72.3%) were in contact "daily" and another 22 (26.5%) less frequently. Only one nurse was "never" in contact.
- The professionals with whom the largest groups of respondents were seldom ("less than monthly") or "never" in contact were *dentists* and *psychologists*. And they were also those with whom the smallest group of respondents were in frequent contact ("daily"). More nurses were in contact seldom ("less than monthly") or "never" with *social workers* and *psychologists* than in frequent contact.
- The nurses were more in contact with each other than with other groups. Frequency of contact with *Plunket*, *public health* and *secondary care nurses* tended to be less than "daily" or "weekly". However, 12.9% (11) said they were "never" in contact with other *rural nurses* and 19 (22.4%) "never" in contact with *Plunket nurses*.

Several other groups were identified by respondents as "health professionals" with whom these nurses had contact, including conventional and non-conventional therapists, nurses and other therapists with a specialty focus. Many noted that their contacts were telephone consultations. Contacts might be regular even if infrequent, or irregularly frequent.

These data suggest that the nurses worked most closely with *GPs* and *pharmacists* but also kept close contact with other nurses in traditional community based roles (except Plunket nurses). Contact was more infrequent with secondary care groups (nurses and specialists) and professionals from outside the health sector.

4.2 Competence

Questions about being knowledgeable in practice related to ongoing education, scope of practice, skills required in the role. Maintenance of competence was addressed in questions relating to evaluation of practice, feelings of confidence and competence in their work, and what further education the nurses believed they needed.

4.2.1 Skills required

In an open ended question, opinions were sought on what specific skills a nurse requires for rural practice.

There was a prolific response to this question. Many noted the diversity of skills they need for the flexibility required in the job and attempted to give examples. One referred to "Jill of all trades" drawing attention to a gender dimension of the role which could be associated with often-voiced concerns about the value given to the nature of the work and the position of women in the workplace.

The most noted capabilities of the nurse can be categorised as: relating with others, personal traits and abilities, and experience:

Relating with others including clients, peers, doctors and other health professionals: eg "ability in communication", "to listen", "maintain confidentiality", "networking", "build a rapport, trust", "negotiation/advocating", "counselling", "manage role boundaries", "cultural awareness".

Personal traits and abilities: eg "dedication", "common sense", "compassion/patience", ability to work autonomously, ability to rationalise work and home life, "innovative, stamina! Open-minded, likes a challenge, independence, team player, pride in rural practice", practicality.
Experience: eg "broad background in many areas", ability to prioritise

A few specific technical skills were noted. They included:
"Assessment", "basic diagnosis skills"(one nurse only), "advanced level first aid", "triage", "plaster application", "defibrillation", "ECG", "basic suturing".

Despite the eagerness to respond to this question there was little consistency in interpretation other than the few specific skills. A few nurses referred to the role as comprising a combination of general and specialist practices: specialist skill plus generic nursing eg "A great asset to know the 'whole picture' of the patient, ie family situation", "knowledge of the community", pharmaceuticals, sexual health.

4.2.2 Scope

Respondents were asked if their role involved them "working outside your normal scope of practice". If "yes" they were asked to list five activities they "would do most often".

- Ten (10, 11.8%) did not respond to this question. Probably the meaning of the term "scope of practice" was not understood: this is currently debated in the literature. This is consistent with the confusion between role, skill and employer requirements shown in the responses to other questions.
- 41.3% (31) of those who responded to this question believed their role required them to work beyond their scope.
- Four out of ten of those who responded could identify what was not an appropriate expectation of them. This could be explained as their sense of a lack of knowledge or skill (eg attending to clients in a specialty field, or skills normally undertaken by a medical practitioner), perhaps their status or remuneration, perhaps overlap of tasks or lack of time.

Several identified their activities in relation to the titles of other practitioners (eg counselling). The listed activities seem to be those that are normally expected of other personnel, spanning administrative work, the work of nurses in other employment settings, and the work of the doctor. Five (5) nurses listed activities that were clearly expectations of medical practitioners, three of them noting that these activities were undertaken in consultation with medical practitioners by telephone.

Whatever the reasons for believing they were working outside their scope of practice, it seems that these nurses were unclear about "scope of practice". They had absorbed tasks expected of others and beyond what they believed was their expertise. They were 'filling the gaps'. This term was used by one nurse elsewhere in the questionnaire.

4.2.3 Ongoing education

Nine ways of receiving and maintaining ongoing education were listed and nurses asked to indicate whether they used each.

TABLE 4.1 Ways of receiving/maintaining ongoing education

Type of ongoing education	Number	% of total respondents
Reading nursing/medical journals	75	88.2
Nurse colleague/s	70	82.4
Self-taught	63	74.1
General practitioner (GP)	53	62.4
Continuing professional education: weekend	50	58.8
sessions	49	57.6
Continuing professional education: evening sessions	37	43.5
Extramural study	31	36.5
University/tertiary education	24	28.2
Information technology		

- The most common ways of maintaining ongoing education were through *reading nursing/medical journals* (75, 88.2%) and interaction with nurse *colleagues* (70, 82.4%). The widely disseminated nursing journal Kai Tiaki and some medical literature were noted elsewhere in the questionnaire as major sources for information.
- Three quarters of the nurses (63, 74.1%) claimed they were *self-taught*. This might be a reflection of the belief that experience is important in developing knowledge, but also it might reflect the understanding that the nurse herself is the initiator in seeking information rather than being required to undertake training.
- The *GP* and *continuing professional education through weekend and evening sessions* were sources of ongoing education for over half the nurses (62.4%, 58.8% and 57.6% respectively).
- The least accessed source was *information technology* (24, 28.2%) which is consistent with the responses to other questions (refer Section 4.4.2). This suggests that many of the nurses either did not have IT facilities readily available or did not use it for educational purposes.
- *University/tertiary education* was the source of ongoing education for just over a third (31, 36.5%).
- *Extra mural study* may have been interpreted as a form of other listed educational possibilities but was identified by 43.5% (37). Nurses interested in higher education to achieve formal qualifications, who are isolated in their rural roles, would be likely to study extramurally.

These data, along with data from previous questions, suggest that the nurse participants preferred and made use of their own professional networks (peers and professional literature) for education, but also draw on educational and update opportunities at local level. Although in higher age groups, several nurses indicated they were looking to formal tertiary educational possibilities. This finding is not consistent with the responses to the questions about qualifications (Section 1.2). Therefore it is assumed that the educational opportunities the nurses were referring to were not part of programmes for formal qualifications.

4.2.3 Evaluating competence

One question asked if there was a system for reviewing the advice the nurse gave to clients. Another question required the nurses to state their opinion ("yes" or "no") on which of six possible evaluator groups were appropriate: *peers, employers, Nursing Council of NZ, professional nursing organisation, educational institution, self evaluation.* Other possibilities were appended.

Four factors believed to be important for evaluating competence in "giving advice" were listed and nurses asked to indicate whether there was, or was not, a review system in place: *knowledge, skills, performance, outcome.*

- Many did not respond to each factor (19, 22.3% to 20, 23.4%).
- Less than half (38, 44.7% to 39, 45.9%) of the participant nurses indicated they had a system for reviewing the advice they give: the same number for each of *knowledge, skills* and *performance*, and one more for *outcome*.

The many additional comments suggested that the review systems in place were not readily represented by the given factors – they were not understood in that way. However, they also show an awareness of the importance of review, and multiple ways to review (eg one nurse noted: "Follow up! Follow up! Follow up!").

Some of the systems in place were formal, but there were many and varied informal systems:
Formal review systems:

Practice Nurse Telephone Guidelines Manual (Otago)
Critical incident forms
Resource books
Abuse protocols
Public health standard and protocols for vaccination

Informal review systems: Most referred to the persons reviewing rather than the content of the advice:

Self review
Peer review: other nurse practitioners
Client feedback
GPs/doctors and other health professionals

Some comments referred to the media for reviewing: telephone debriefing, discussion, documentation of work.

Some comments suggest less commitment to a review system eg "I guess the patients let us know". One nurse expressed the "need for a planned system". It was generally implied that it was an ad hoc process.

These data suggest considerable confusion about the whole area of review and accountability. It is in the formal higher education programmes that this is studied and few had completed these qualifications.

Opinions of who should be the evaluators competence:

- Some did not respond to each evaluator group implying a "don't know" category.

- *Self* and *peer evaluation* were thought to be appropriate means of evaluating competence by most of the nurses (78, 91.7% and 76, 89.4% respectively). Few thought these were not appropriate and there were hardly any non-responses.
- The *employer* was seen as an appropriate evaluator by the next largest number (62, 72.9%), but 14.1% (12) thought it was not appropriate and the remaining 12.9% (11) "did not know".
- Opinion of *educational institution* as evaluator was most ambiguous: 42.4% (36) were positive, 34.1% (29) negative. This was the largest group indicating the inappropriateness of any evaluator group. Almost a quarter of the nurses (20, 23.5%) did not respond.
- Opinion of the *Nursing Council of NZ* was only a little less ambiguous.
- Evaluation by a *professional nursing organisation* was viewed as appropriate by just over half (50, 58.8%).
- Around a quarter of the nurses "did not know" whether *Nursing Council of NZ*, *professional organisation* and *educational institutions* were appropriate as evaluators of competence.

These data suggest that nurses believe they should primarily be their own evaluators, many having doubts about non-nurses evaluating them. Otherwise the nurses tended to favour the sources of competence evaluation that were closer to their work and less institutionalised. This was supported by the additional written comments. Many elaborated their belief in the importance of competence evaluation, but also expressed a concern that evaluators will not understand their rural nursing practice. This might also explain the concern of a third of the nurses (29, 34.1%) that evaluation by an *educational institution* is not an appropriate way to evaluate competence.

The number of "don't know" responses suggests that many of the nurses might not have considered how competence should be evaluated and did not know the increasing concern about quality assurance in nursing and the health sector generally.

Additional sources of evaluation included:

Consumers

Colleagues of other professions and institutions who were "working collaboratively with same clients".

4.2.4 Confidence and competence in the role

One question asked how long it had taken the nurse to "feel confident and competent in the role". Responses were on a 6 point scale of time from "immediately" to "2+ years". Another question asked the nurses for the identification of areas of practice in which they believed they needed further education.

Time taken to be "confident and competent in the role"

- 11.8% (10) of the nurses did not respond.
- No-one selected the option of "don't feel confident and competent".
- 30.7% (23) of the 75 who responded felt *confident and competent* within 6 months and three were immediately *confident and competent*.
- Over half (40, 53.3%) felt *confident and competent* within a year.
- One in five (15, 20%) took at least 2 years in the role to feel *confident and competent* .

That all the nurses did feel *confident and competent* is consistent with the stable domicile and employment situations of this group. The variability in how long it took for them to feel *confidence and competence* might be explained by the different perspectives of what the terms meant. However, it can be understood in the light of the very limited formal and/or standardised review systems which would have developed their awareness of competence, and the relatively small number of nurses who had undertaken formal higher education. One nurse commented that the diversity of the role was a factor prolonging the achievement of *confidence and competence in the role*. That so few felt *confident and competent within a year* suggests that experience in the job was important. This is supported in the additional comments by the nurses and is consistent with opinion surfacing throughout the questionnaire.

Several nurses added comments even though not given space for it. This suggests that the topic of *confidence and competence* raises important issues for the nurses that were not addressed within the question format.

Areas of practice requiring further education:
Nurses were asked to indicate whether or not there were areas of practice needing further education, and to list the areas.

- Three nurses (3.5%) noted there were not any areas of practice in which they needed further education and 32.9% (28) did not respond. This reluctance to specify where education was needed might be explained in many ways, but it is likely there was confusion about the question.

It is possible that those who did not respond were those currently undertaking or intending to start higher education programmes.

One nurse explained s/he did not need further education currently because s/he only accepted work that s/he felt comfortable and confident about. Another referred to the "GP as gate-keeper" and "working to very narrow contracts". Most respondents noted their need for continually updating skills and knowledge. The topics were very varied – for the nurses as individuals, and for the collective of respondents.

Specified aspects of practice identified by several nurses were: assessment and counselling skills, concerns of particular age groups, information about particular diagnostic categories, and specific treatment approaches (eg plastering was mentioned repeatedly). There were occasional references to wider social issues, and community development.

These data further express the confusion of roles and work of the nurse in rural areas, making it difficult to specify what education they need. It is likely that a lack of definition of the term "areas of practice" was a factor in the confusion. The findings reflect the findings reported in other sections expressing a diversity of job requirement, local variation, and lack of clear definition of role.

4.3 Support

Information was sought of how and what sort of support the nurses had for their practice. Questions related to the media for accessing resources, particularly access to informational technology, and professional support within nursing.

4.3.1 Accessing resources

Respondents selected from a list of eight media for acquiring knowledge for practice, and professional and personal "support".

Acquiring knowledge for practice:

- All but two nurses (83, 97.6%) attended *continuing professional education/courses/conferences*.
- More than three quarters (68, 80%) accessed *journals*. Many of these (21, 26.3%) identified Kai Tiaki, the New Zealand Nursing Journal, as the only journal they accessed. Since they receive this through their membership of the New Zealand Nurses Association and its specialist sections (eg Practice Nurse and District Nurses Sections) at least 38 (44.7%) did not actively access journals. The extent of up-to-date professional nursing knowledge was therefore not very extensive. The accessibility of a range of professional journals is generally restricted to libraries in urban centres.
- The *internet* was used by fewest nurses (27, 31.8%).

Other media related to personal and professional support:

- Few nurses (18, 9.4%) did not access support from *other rural nurses/health professionals*.
- Three quarters (66, 77.6%) accessed *personal support in the community.*
- The smallest number (52, 61.2%) accessed *professional support in the community*.
- Networking through use of *internet* (27, 31.8%) or *email* (36, 42.4%) was used by a smaller number of nurses than other media.
- Relatively few used *computer as network* (30, 35.3%) to either acquire knowledge or to connect with others for personal or professional support.

Those who elaborated on their selections noted that accessing support and knowledge is very important and they were motivated but resources were not always there to be accessed. That is, the nurses in general made use of at least some resources when they were available and when they had the means to access them. However, a sizeable proportion relied on courses being available to keep themselves informed.

4.3.2 Informational technology (IT)

Having access to informational technology was considered essential as support for nurses to remain up-to-date in practice. Questions related to what sort of access they had and how they used it. The nurses were asked to select from three locations for accessing IT ("home", "work" and "community resource"), and the type of networks they used.

- 12.9% (11) had *no access at all* to IT at home
- 7.1% (6) had *no access at all* at work, and the same number had no access through a community resource.

Therefore, at least three quarters (63, 74.1%) could access IT through at least one location.

Of those who had access to IT…

- More had access at work than at home.
- 70.6% (60) had a computer facility at work
- Two accessed computers in the community.
- Just over half (47, 55.3%) had computer facilities at home but did not necessarily use it for *emai*l or *internet* (12, 14.1%).
- Few were using it either at home or at work for *CD ROM education programmes* (8, 9.4%), *electronic databases* (8, 9.5%) or *international resource* information (8, 9.5%).
- 18.8% (16) of the nurses made use of the *Rural Nurse National Network (RNNN) email link*, some at home and some at work. Since 42.4% (36) of the nurses claimed that membership of RNNN provided a support mechanism, it seems that, for many, the email network was not the medium for that support.

Some nurses elaborated on "community resource". Other locations included: the local library, hospital library, other health centre, husband's workplace, local council, friend. Several said their employers were soon to provide computer facilities, while a few were not hopeful.

These findings suggest that the nurses were not using informational technology very much for professional reasons. More were using it for networking purposes than for accessing information for practice. Many (almost half) do not yet have access to computers at work. While a few are so committed to its use that they seek community resources and some share facilities with other institutions, It seems that the potential for support of nurses in rural practice is yet to be exploited.

4.3.3 Professional support

Information is presented on what *mechanisms* the nurses used to gain support from the nursing community relating to their day-to-day work. Respondents selected from eight mechanisms and some further elaborated on how *health centres*, *journals*, *professional organisations* provided support.

TABLE 4.2: Mechanisms that support practice

Support mechanisms	Number	% of total respondents
Continuing professional education updates	79	92.9
Membership of professional organisations	75	88.2
Professional journals	72	84.7
Professional resources ie library, study etc	51	60.0
Membership of Rural Nurse National Network (RNNN)(NZ)	36	42.4
Clinical supervision	27	31.8
Mentor	24	28.2
Exchange visits to other health centres	18	21.1

- Most of the nurses used *continuing professional education updates* (79, 92.9%), *membership of professional organisations* (75, 88.2%) *and professional journals* (72, 88.2%) to support their practice. All of these support mechanisms would be readily

accessible to the nurses without requiring them to move out of their residential and work areas.

- Those using other academic sources (eg library, study) (51, 60%) had possibly enrolled in study that gave them access from time to time. These data are not consistent with data from other questions which suggests confusion over the questions and terminology.
- Less than half (36, 42.4 %) drew on the *RNNN* (NZ). The relatively small number is likely to be because of the wide national spread of respondents and the recency of development of the National Centre for Rural Health in Christchurch with its attention to a specialty field of rural nursing.

Relatively few were using a mentor (24, 28.2%) or clinical supervision (27, 31.8%). This may be explained by the isolation of many of the rural nurses. The data affirm the suggestion noted in other sections of the report that there was confusion amongst the nurses about review processes and quality assurance. It is only relatively recently that the whole notion of mentoring and clinical supervision has been considered a useful means of addressing the growing challenges of quality assurance.

These data suggest that most nurses had a general interest in keeping up with knowledge to inform their work, and were able to do this through traditional well established mechanisms for disseminating information. Fewer drew on recent IT innovations, but the comments showed they were keen for more support. The isolation of many nurses in rural areas and the stability of their work patterns over long periods of time were likely to be factors influencing the further development of their support mechanisms.

If relatively small numbers are using IT to access support, as shown in the findings from other questions, it is inevitable that their main sources will be the readily accessible reading material and that they would appreciate the benefits of membership of well-established and resourceful professional groups.

4.4 On call for accident and emergency care

Accident and emergency care is known to be a component of the work of nurses in rural areas. It is of particular significance because it requires nurses to participate in "on call" processes, performing skills normally expected of medical practitioners. Questions relate to the extent of nurses' involvement, the preparation and support for the job demands, the inter-relationship of nurses and GPs and the nurses' work conditions.

Only those who "provide first on call health service" were asked to respond to the questions in this section. Just less than half of the nurses (40, 47.1%) indicated they were *not* providing first-on-call health services. The figures in this section relate to the remaining 45 nurses only. However, fewer than 45 answered the questions, so the findings are very speculative.

The variability in numbers choosing to respond and the extent of additional comment suggest that, for a group of these nurses, a description of their work was very complex. The nurses elaborated considerably on the listed factors in additional comments.

4.4.1 Collaboration with GPs

Three variations in scenario of how rural nurses work first-on-call in collaboration with GPs were outlined and the nurses asked to select the one nearest to their own situation. 29 of the 45 nurses (64.4%) responded. There were many additional comments.

- By far the greatest number of these nurses (19, 42.2%) identified themselves as *rural nurses working alongside GP but also providing first-on-call health service at times in place of GP.*
- Four (4, 8.9%) had a GP who *provided first-on-call services when visiting for clinics, but otherwise provided the services themselves*.
- Six (6, 13.3%) *provided first-on-call services all the time without any regular GP services*.

There were many and very variable scenarios of first-on-call services appended. Many of them were working collaboratively within networks of nurses employed in a range of settings. As well as being first-on-call, many also mentioned the out-of-hours follow-ups of clients at home. Many comments revealed that the nurses were filling in for GPs when they were not available, and flexibly responding to the need for emergency cover when necessary.

4.4.2 Hours of work

The nurses were asked to indicate when they provide a first-on-call service and to state their hours of work. Some worked evenings, nights, weekends. Very few of the nurses volunteered their hours:

- Six ranged from 5 to 64 hours per week
- Seven ranged from 1 to 30 days per month
- Seven were first-on-call *all the time.*

These might not be discrete groups of respondents. That is, most nurses did not - perhaps could not - give an estimate of their hours. Those who did showed very great variability. It is likely that patterns of first-on-call are locally determined responding to what is required in quite different contexts. Given the variability in working situations, it is probable that there was no consistency for any individual nurse through time.

4.4.3 Support

Questions about the support for nurses in their first-on-call work related to expert back-up, access to appropriate equipment, availability of guidelines and educational preparation for the work.

Expert back-up:
Nurses were asked to identify which of five situations of professional expert back-up they had. Six did not respond.

- *Ambulance personnel and transport* was the professional back-up accessible to most nurses (only 4, 8.9% did not).
- 27 had the *GP always available for telephone calls*.
- 26 had the *hospital available for telephone advice*.
- Considerably fewer had other *rural nurses* (13) or a GP *available to attend the situation* (11).

- Two nurses had all of the given professional expert back-ups and all but five had more than one. When the *GP was always available to attend the situation*, there was no other back-up; this would be the least autonomous role for a nurse in dealing with medical matters.
- One nurse had no back up other than from a *GP available on the telephone*; this would be the most isolated of situations requiring greatest autonomy of judgement.

Other personnel involved were identified as other health professionals, some with specialist focus (eg mental health), and non-health professionals (eg firemen, police, Maori wardens).

Only two indicated that their back-up system was not satisfactory to them, although some noted they experienced difficulties with collaboration. Several comments indicated that they just have to make the best of their situations and capabilities.

4.4.4 Accessibility of equipment:

The nurses were asked to state whether they had all the equipment they required to assist when dealing with patient emergencies. Eight did not respond.

- 26 of the 37 respondents to this question believed they had all the equipment they required when dealing with patient emergencies.

Several nurses elaborated with comments about equipment. Mostly these were expressing an awareness of the importance of having appropriate equipment accessible. A few stated inadequacy and plans to upgrade. Many referred to PRIME as the source for acquiring the appropriate equipment. One nurse had concerns that the service she was providing did not meet the PRIME criteria and therefore she believed the equipment was not adequate.

4.4.5 Availability of guidelines

The nurses were asked if they had guidelines to assist them when acting as first-on-call, and if "yes" what form they took: "written", "verbal" or "mixed". If "no" the nurses were asked if they would like to have guidelines.

- 26 of the 36 respondents had guidelines; three of them did not identify the form they took.
- About half (12) had them in written form
- A few (3) were verbal.
- Eight had a mixture of written and verbal.
- Of those who did not have access to guidelines (6) only two said they would like to have them.

It is likely there were different interpretations of the term "guidelines". However, for several of the nurses, guidelines do not seem to have been available, and some did not see them as necessary.

4.4.6 Educational preparation

The nurses were asked what preparation by their current employer. Six alternatives were listed. 33 responded.

- A third of the respondents had had *orientation*.

- The most common preparation was *skills update* (20).
- Of the nurses who had *skills update*, 12 did not have *orientation*.
- Nine had *formal in-service* education.
- A quarter of those who responded (8, 24.2%) had *no preparation*.
- Very few identified either *hand over time* (3) or *university education* (3).

- Most (20) of those who responded thought their preparation was satisfactory; 10 did not.

Of those who elaborated with comments, one referred to the reason for unsatisfactory preparation as the lack of a "formal on-call role". Experience was seen as important in the development of expertise; supervision and mentoring were claimed to be ways to help this.

These data suggest that the educational preparation for first-on-call work is not consistently available and many of the nurses were working without it.

4.4.7 Remuneration

A question asked the nurses to select from options of how they were paid.

- 23 were paid for their on-call commitment; 14 were not paid.
- Of those nurses who were paid, half (11) were paid by the hour, 4 per session, 2 per week and 1 monthly. 9 received an additional payment for attending a patient.
- For 16 of the nurses, the on-call allowance was included in their annual gross income.

The additional descriptions of on-call payment showed little consistency amongst the few respondents. Some were paid only when actually called out, some a flat fee, some according to the number of patients seen. Some were automatically first-on-call because there was no-one else to do it. Some were compensated for travel, some not.

Two nurses agreed to "on-call" in order to support the GP and keep the medical service in the community – the effort was reported as unsuccessful.

A question asking for the amount of on-call allowance was answered by only 13. This could not be related to the nature of the on-call arrangements so the data are omitted.

First-on-call was presented as a very variable, locally shaped component of the work of these nurses, flexible and responsive to critical events. The nurses were involved in different sorts of collaborative networks. Generally there seemed to be a positive feeling amongst most of them about providing emergency care - or at worst, it was acceptable to most. The feelings about the level of remuneration were less positive.

DISCUSSION

A discussion of these findings is organised into six sections: general findings and conclusions, survey design and methods, workforce issues, employment of nurses, a specialty rural nursing practice.

1. The work, role and employment of "rural nurses"

According to the descriptors of the nurses' work underpinning the structure of the questionnaire, there was little consistency in the employment, conditions of work or professional role of a "rural nurse" amongst the nurse respondents. Their current work presents as diverse and fragmented according to job availability, work settings and conditions. There was repeated indication that they were "filling gaps" in the provision of healthcare in an ad hoc way.

These findings reveal a vacuum in relation to a role for nurses in rural areas. Whereas there is a call for nurses to bring their knowledge and skills to the development of primary health care (King, 2000a; National Health Committee, 1999), there is no consistency identifiable in how the work of these nurses is addressing the health needs of rural communities. Almost all of the nurse respondents had qualifications from educational programmes that had prepared them to take traditional titles associated with defined roles and employment positions within the health system prior to the major health sector reform of the early 1990s.

In recent times, the provision of healthcare in rural areas has increasingly become a particular area of concern and is now identified amongst the priorities of the new funding agreement (King, 2000b). However, the findings of this survey show that no clear role for nurses in addressing rural health need has emerged to replace the roles of former times that included rural nursing. Traditional nurse roles and practices apparently no longer represent the work being expected of nurses in today's employment situation. The confused employment patterns and work of the nurses express the upheaval and time of transition of health service delivery.

The group of nurses surveyed have been recognised by service providers as a valuable workforce pool. They have obviously been flexibly responsive to the requirements of multiple employers through taking up new positions. Most had their roots in rural life, had a sense of confidence and competence in their work, worked cooperatively with a wide range of health professionals and used local opportunities to maintain competence. They carried out many tasks that facilitated, and were likely to have eased the work of the medical practitioners.

But the employment situations have apparently not provided the opportunities and support required for a coherent professional practice of "rural nursing". This group of participants identify strongly as "nurses", most choosing to link with and be supported, educated and supervised within nursing networks, but they do not identify as "rural nurses" other than because of the locality of their home and/or work.

Therefore, it can be said that the full contribution that nurses might make to the health of rural communities is yet to be realised. This would require consideration of recruitment, education that is accessible and addresses the particular health issues relating to rurality, structures for ongoing quality improvement, and service delivery models that support professional nursing practice. This has considerable resource implications.

The current nurse role vacuum invites new models of healthcare provision, constructed to enable nurses to contribute directly to the health of rural communities to complement the contributions of other health professionals, especially General Practitioners. This would provide for more coherent, integrated and responsive healthcare with better health outcomes.

While the findings of this survey must be read as tentative, they do indicate how a considerable number of nurses, who identify with rural healthcare and are spread throughout the country, viewed their work. As presented, they do provide useful information about the diversification of healthcare provision occurring in the system and position of nurses.

This enables us to point to issues and trends that will inform the subsequent examination of models of healthcare provision for rural people in the second phase of the 2000/2001 National Rural Nurse Project undertaken within the National Centre for Rural Health, funded by the Health Funding Authority.

2. Survey design and methods

Issues relating to the recruitment of participants and construction of the questionnaire need consideration in the interpretations of the findings.

2.1 Representation of rural nurses throughout New Zealand

Despite a determined effort to reach all nurses around the country, it is not known how extensive the coverage of "rural nurses" actually was. Eighty-five nurses responded to the "rural nurse survey". There are 3814 nurses employed in "HHS and non-HHS community services" (Ministry of Health, 1999) but there is no data on the proportion of these nurses serving rural populations. Geographically, the spread of respondents was comprehensive with only the Wellington region not represented. It is unlikely the numbers in each region are proportional. A continuum of the degree of isolation of the work base of the nurses was widely represented: from close-to-urban to end-of-the-road settlements.

Further, it can be inferred from the responses to the questions about residing and working in rural areas, that the findings are drawn from a sample of nurses who are knowledgeable about life, health circumstances, and employment conditions of rural communities. They identify themselves as involved with "rural nursing" whatever meaning this had for them. Therefore, while findings cannot be generalised, there is important information.

2.2 The questionnaire:

While the questions were structured to seek responses to known factors of the work and employment of nurses, the surveyed nurses were responding at a time of major change in the

health sector with repeated restructuring of health services and funding arrangements. The variability and inconsistencies in response to the questionnaire can be viewed as expression of the flux in the provision of healthcare, changing structures and confusion of roles across workforce groups. In the light of the response to this 2000 survey, the questionnaire would be considerably modified if used again.

Very few of the questions had responses from the full number of 85 respondents. The inconsistencies and the many appended comments and elaborations of responses express multiple interpretations of the terms used in the questions and work that is not readily represented within the questionnaire structure. Further, given the demographic data and geographic spread of the respondent group, it is likely that many nurses who might be identified as "rural nurses" did not participate.

Some notable confusions of the nurses reflected in their responses related to the inter-relationship of concepts of role, title, qualifications, skills, professional practice and service delivery. The term practice was interpreted by some to mean the nurse's professional work with patients/clients, the tasks they performed, and by others the medical agency that employed them ("the medical practice). Advanced nursing education programmes prepare nurses to develop a clear scope of practice and the knowledge to be able to make their essential contribution to rural health as specialists.

3. Definition of "rurality"

Underlying the difficulties in survey design is the lack of any defining criteria for "rural" and "rurality". It is only recently in New Zealand that "rurality" has begun to be defined to express the specific characteristics of rural life relevant to the provision of health services. Without definitions, or a recognised position title, qualification, or specialty scope of practice of a "rural nurse", it is not possible to study the existing services, nature of healthcare and workforce issues concerning rural populations.

There is need for "rurality" to be defined to give parameters to the emerging specialty field of rural healthcare. This definition should enable the differentiation and roles of professional practitioners

It would be helpful if the Nursing Council of New Zealand recognised the trend towards a specialty nursing field and role, by adding a category of "principal type of work" to the annual workforce survey.

4. Workforce issues

4.1 Recruitment and retention

This was predominantly a mature group of women who were long-term residents in rural areas, choosing to live there because they enjoyed the life and their spouses worked there. Many had held their positions for a considerable time to become confident and competent in their work . They had their roots firmly set in rural New Zealand and were close to the people they served in terms of understanding everyday living and health. These are important qualities required of a health workforce.

However, there is obvious need to recruit and retain a well qualified workforce with a view to the future. The survey data point to significant features of the current workforce resource that need to be taken into account in the further development of rural health services:

- narrow ethnic representation likely to affect the responsiveness of services to need
- older age cohort of nurses that will lead to a depleted workforce of experienced nurses in the future
- little preparation in mental health care
- lack of an identity as a rural nursing practitioner
- limited educational opportunities and resources for specialist practice
- limited structure to monitor and maintain competence
- lack of employer support for their work that many had experienced.

The recruitment of nurses from Maori and other non-Pakeha ethnic groups of the population to achieve a more representative workforce nationally is an issue for the wider profession to attend to. Regional variation in the rural Maori population and the relationship between Maori Health Initiatives that other health services that serve them will need to be considered. Strategies that support the networking of all nurses, encouraging as wide a range of ethnicities as possible, for the purposes of sharing information and specialist professional mentoring would improve the cultural safety of rural healthcare.

A recruitment programme is required to widely target nurses, particularly those with comprehensive registration. And the new field of specialist practice and its educational requirements will need to be presented to students and teachers in undergraduate programmes as well as within the nursing communities where clinical specialties, scopes of practice, and credentialling are now being identified and discussed.

Retention has obviously not been a concern with this survey group of nurses, but may become more of an issue with the growing emphasis on credentialling and the eventual replacement of the current group of nurses with career-oriented nurses. Conditions of employment are becoming more important.

4.2 Education and career structure

The survey data show that, if healthcare is to be responsive to the health needs of contemporary rural communities, it is timely for a specialist career structure with a coherent programme of higher education are required to support recruitment and retention with a long-term vision. Few of the survey nurses had had the comprehensive pre-registration nursing preparation (RCompN) which provides for a more holistic and scientific foundation for evidence based practice than the former hospital-based preparation (RGON). For many of the nurses, skills had been acquired on the job in an ad hoc way when courses, teaching sessions and literature became readily accessible or when taught by employers. An educational structure for a specialist career will need to take into account the competence of nurses with different pre-registration qualifications, and post-registration experience.

The surveyed group included some nurses who had undertaken the recently introduced Postgraduate Certificate/Diploma in Primary Rural Health Care offered by the University of Otago at the Christchurch School of Medicine. This programme has provided the starting point for constructing an educational framework for a career in rural nursing. Further development of the programme would support the development of new roles and the collegial

relationships with general practitioners necessary for a more coordinated approach to the work they are increasingly required to share (eg skills required of first-on-call).

The data showed that the nurses had made little use of computer technology for educational purposes, many without access to it. The skills and abilities to access sources of knowledge, critique and apply research, collaborate with others in research and development projects would be essential components of higher education to address the competency issues shown by the survey.

5. Employment

The diversifying employment situations and lack of a career structure shown in the survey imply that nurses' work is fragmented. Roles and positions relevant in the new health service structure will require reconsideration of the employment conditions and contractual arrangements to support nursing practice alongside, and complementary to, the practice of medical practitioners.

The lack of consistency apparent in how the nurses participated in the first-on-call accident and emergency service provides illustration of the need for a more collaborative approach between nurses and general practitioners. Facilities and technology to support the strategies on which the nurses rely to update knowledge and maintain competency are required of employers.

The data showed some nurses to be employed by organisations (at least HHSs) that serve both rural and urban populations, and others to be simultaneously employed by rurally based organisations (eg "Doctor's surgery") and the major town/city based organisations. Whereas GPs are identifiable as rural or urban practitioners in primary health care, the nursing workforce is less differentiated and the work of at least some nurses spans primary and other sectors. In this way they have been more adaptable and responsive to changes in the service delivery. The practice of the nurse differs from GPs even if some tasks are shared.

This raises questions about the idea of amalgamating roles of nurses working in the community and positioning them within the proposed funding model of Primary Care Organisations (Coster and Gribben, 1999). People would be denied some essential health care. Further, the potential for integration of the healthcare of rural residents when nurses move between sectors, rural-urban settings, and centrally-locally based services would be lost. It isn't the overlap of traditional roles (eg district nurses and practice nurses) that needs to be addressed, rather it is the confusion of what constitutes professional nursing practice.

These issues will be taken into account in the exploration of different models of nursing in rural health care in the second phase of the 2000/2001 National Rural Nurse Project.

6. A specialist practice of rural nursing

The findings point to the need for a specialist rural nurse role relevant in the contemporary provision of health services. This requires the articulation of parameters of the scope of the specialty rural nursing practice and preparation of nurses in higher educational programmes to work in this way.

A scope of practice would identify:

- the health needs of rural communities to be addressed by nurses (population characteristics and the meaning of "health", "rurality" and "need")
- the knowledge and skills that enable these health needs of the rural communities to be met
- the links with GPs, other health professionals and health workers, that will achieve specified health outcomes
- professional framework for maintaining quality and credentialling.

The work of the nurses within their various positions has been defined only in terms of traditional roles that assume certain skills and capabilities. These have been associated with employment in a service structure that has changed considerably in the past few years. The survey shows, in general, that there is not a clear professional practice emerging for the new health service context in rural areas although the work of the National Centre for Rural Health has begun the project. The National Rural Nurse Project provides the opportunity to review the positioning of nurses in the new health system with a specialist scope of practice that will complement other health practitioners in contributing to the health of rural people.

> *A rural nurse lives and breathes rural air. She/he does not sit in a city building gazing into electronic data bases. There is dust and dirt and mud and grit in her work. She does not smell of polish.* (Survey participant)

RECOMMENDATIONS

- Definition of "rural" and "rurality" that identifies the parameters required for surveying and planning the health workforce in New Zealand beyond the urban centres, and in particular to contribute to the construction of the scope of nursing practice.
- Definition of a clinical career structure for nurses specialising in rural nursing.
- Definition of an educational framework to support career advancement in the specialty.
- Establishment of a rural nurse specialty within the structure of professional credentialling for nurses.
- A project to define the rural nurse and scope of nursing practice for the future in the context of community health needs that will inform the Ministry of Health's workforce planning work.
- Articulation of a recruitment and retention strategy.
- Submission to the Nursing Council of NZ to request the addition of "rural nursing" as a "type of work setting" for the annual nursing workforce data collection.
- Proposal and guidelines for employer review of strategies to support the development of the scope of practice of rural nurse specialists, a collaborative structure for service delivery, access to IT, a coordinated structure for first-on-call that recognises the capabilities (competencies) of nurses.

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AUTHORS & ACKNOWLEDGMENTS

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Merian has a career background in nursing education and research that has focused on the modelling of nursing practice relevant in the new era of health care. Her doctoral research at the University of Minnesota was an exploration of the changing perspective of 'health' and how the complexity of 'family health' might be addressed. She joined the National Rural Nurse Project team to analyse the survey data.

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Jean set up the Centre for Rural Health with a GP colleague in 1994. She is the Co-Director of the National Centre for Rural Health. Her role has been in the leadership and development of the role of rural nurses, both professionally and personally, on a national and political level. She is the founder and coordinator of the Rural Nurse National Network.

Jean's role also includes lecturing in rural primary health. She has been part of the rural health team developing the Interdisciplinary Diploma of Primary Rural Health from its inception. She has a background in rural practice both in the UK and in New Zealand. Jean has recently submitted a Master's thesis on Teamwork in the General Practice Setting.

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Te Whare Whakakotahitanga Mo Te Hauora Taiwhenua

ROLE OF RURAL NURSES SURVEY

January 2000

Personal Characteristics

1. Are you: *Male* ☐ *Female* ☐

2. In what year were you born? ……..

3. How much did the following factors influence you to live in a rural area?
(Please tick box/es)

	A lot	Some	A little	Not much
Employment				
Partner's employment				
Lifestyle				
Interested in working in rural health				
Born and lived in rural area				
Family connections				
Financial considerations				
Professional challenge				

Other……..

……...

……..

4. How long have you lived in your current area or any other rural area?

Current area ……

Other rural area ……

5. Which ethnic group or groups do you belong to?

NZ European/Pakeha…… ☐ 1
Other European……. ☐ 2
NZ Maori……... ☐ 3
Samoan…….. ☐ 4
Cook Island Maori…… ☐ 5
Tongan…….. ☐ 6
Niuean…….. ☐ 7
Tokelauan……. ☐ 8
Fijian…… ☐ 9
Other Pacific Island groups……. ☐ 10

cont'd.....

Southeast Asian…… ☐ 11
Chinese……. ☐ 12

Indian…… ☐ 13
Other Asian…….. ☐ 14
Other ethnic groups……. ☐ 15

(NZ Health Survey, 1996-1997)

6. Are you of Maori descent? *Yes* ☐
No ☐
Don't know ☐

7. Do you know the name(s) of your hapu/Iwi? *Yes* ☐
No ☐

What is the name and region of your hapu/Iwi? …….…….
……..

8. Do you identify as Maori? *Yes* ☐
No ☐

Professional Characteristics

9. Please indicate the current qualifications/titles that you hold:

	Yes	No
Registered Nurse - RGON		
Registered Nurse - RCpN		
Registered Nurse - BN		
Registered Midwife		
Plunket Certificate		
Public Health		
Certificate in Primary Rural Health Care		

Other……..
……...
……...

10. Are you currently upgrading your qualifications?

Yes	No

Continuing Education		
Converting to Bachelor's Degree		
Master's Level Postgraduate Paper		
Master's Thesis		
Clinical Master's Level		
Certificate Primary Rural Health Care		
Diploma Primary Rural Health Care		

Other……..

……...

……...

Your Workplace

11. What is/are your job title(s)……...

……...

12. How long have you been working in your current position(s)? …. *Years* …. *Months*

…….. …. *Years* …. *Months*

13. Which of the following terms do you think best describes the locality of your principal nursing work activity?

Rural ☐[1]
Semi Rural ☐[2]
Urban ☐[3]

Please describe ……

……..

……..

14. Where do you work?

North Island ☐
South Island ☐

What is the name of your locality?……

15. How would you characterise the organisation in which you work?

Yes	**No**

Community Health Service		
Doctor's Surgery		
Hospital		
Multi-purpose Service		
Rest Home		
Nursing Centre		
Mental Health		
Private Hospital		
Public Health		
School Education		
Rural Mental Health Team		

Other……

……..

……..

16. What is your employment situation?

Self employed ☐1
HHS ☐2
General Practitioner ☐3
Independent Practitioner Association ☐4
Community Trust ☐5

Other……..….

……..

……..

17. How would you describe your employment?

Average hrs worked per week:

1☐ *Permanent full time* ……...…….
2☐ *Permanent part time* ……...…….
3☐ *Reliever on call* ……...…….
4☐ *Contract* ……...…….

18. Does your nursing practice or employing practice generate its income by:

Yes	**No**

General Medical Services (GMS)		
Capitation		
Budget Holding		
Accident Compensation Corporation (ACC)		
Private Medical Insurance		
Independent Practitioner Association		
Fees from Patients		
Obstetrics		

19. How satisfied are you with these issues in your current workplace? (Please tick)

	A lot	**Some**	**A little**	**Not much**
Number of hours worked every week (inc. on call)				
Utilising a wide range of skills/variety of practice				
Practising primary health care nursing				
Availability of annual & other leave				
Availability of continuing education				
Availability of nurse locums				
Study leave				
Peer support				
Clinical skills updates				
Working as part of a team				
Support from nursing administration				
Support from employer				
Sense of professional independence/ responsibility/confidence				
Opportunity for promotion				
Opportunity for transfer				

Other……..

……...

……..

20. How much did the following personal and social factors influence your decision to remain working in a rural area?

	A lot	Some	A little	Not much
Sense of community				
Physical attractiveness of the area				
Cost of living				
Recreational opportunities				
Financial security				
Access to social/family networks				
Employment opportunities for partner				
School/social opportunities for children				
Employment opportunities				
Education for children				
Community facilities/shopping				
Availability of childcare				
Access to health care for own needs				
Employment opportunities for you				
Career move				

Other……..

……...

……..

Professional Development

21. Do you access any of the following resources?

	Yes	No
Continuing professional education/courses/conferences		
Journals		
Support from other rural nurses/health professionals		
Professional support in the community		
Computer as network		
E-mail		
Internet		
Personal support in community		

Please describe:……

……

……

22. How enthusiastic do you feel about teaching/supervising students?

	A lot	Some	A little	Not much
Nursing students				
Medical students				

23. Do you use any of the following professional support mechanisms?

	Yes	No
Mentor		
Clinical supervision		
Professional resources, ie., library, study, etc.		
Exchange visits to other health centres		
Professional journals		
Continuing professional education updates		
Membership of professional organisations		
Membership of Rural Nurse National Network (New Zealand)		

Which Centres? ……..

……..

……..

Which journals? …….

……..

……..

Which professional organisations? ……

……..

……..

Other……..

……...

……..

24. If you have access to the following information technology, please indicate by ticking the boxes where that access is located:

	Home	Work	Community resource
Computer			
E-mail			
Internet			
Rural Nurse National Network e-mail link			
CD ROM education programmes			
Electronic databases			
International resource information			
Local school			
No access at all			

If you have ticked "community resource", *please describe:*

……..

……..

……..

Other……..

……...

……..

25. Do you think the following are appropriate ways to evaluate your competence as a rural nurse?

	Yes	No
Evaluation by peers		
Evaluation by employers		
Self evaluation		
Evaluation by Nursing Council		
Evaluation by a professional nursing organisation		
Evaluation by an educational institution		

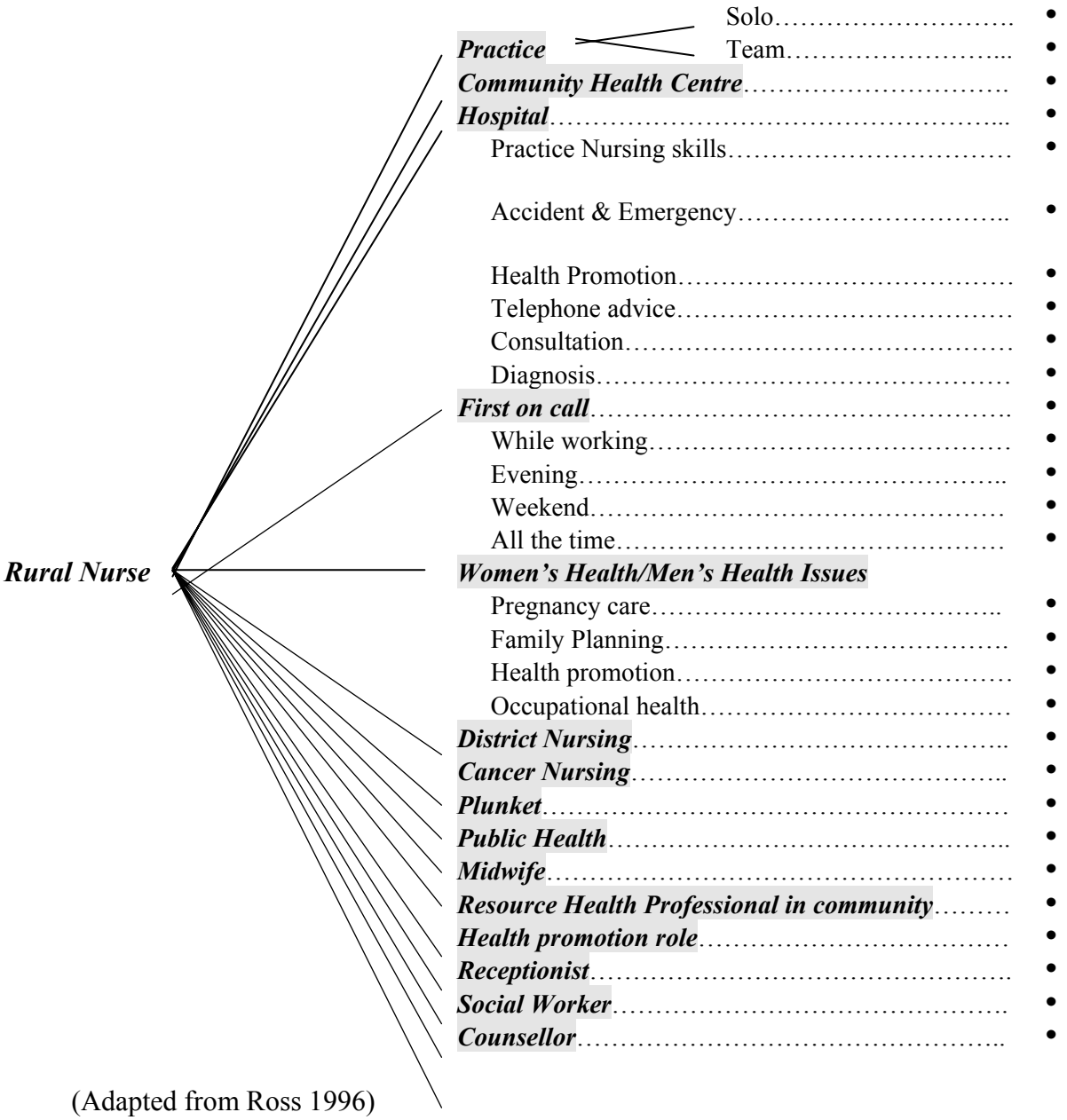
Other……..

……...

……..

The Nature of Your Practice

26. Rural nurses are often required to be confident and competent in many areas of their work and the following are an example of the variety of skills included. Please tick box/es which are appropriate in your situation:



(Adapted from Ross 1996)

Other …….

……...

……...

27. Which health professionals do you work with most? Please tick the box which best describes the frequency of your contact:

	Daily	Weekly	Less than Monthly	Never
Rural Nurse				
Practice Nurse				

District Nurses				
Plunket Nurses				
Public Health Nurses				
General Practitioners				
Physiotherapists				
Dentists				
Pharmacists				
Secondary Care Nurses				
Secondary Care Specialists				
Midwives				
Social Workers				
Psychologists				
Ambulance Personnel				

Other……..

……...

……..

28. Does your nursing role involve you in working outside your normal scope of practice?: *Yes* ☐ *No* ☐

If "no", go to question 29.

If "yes", please list five of these activities you would do most often:

1……

2……

3……

4……

5……

29. Tick the option that is closest to your situation:

a) *Rural Nurse **not** providing first on call health service* • [1]

(If you ticked this option, please go to question 38)

b) *Rural Nurse working alongside General Practitioner but also providing first on call health service at times in place of General Practitioner* • [2]

c) *Rural Nurse with visiting General Practitioner/s who provide/s sessional clinics but also providing first on call health service at other times* • [3]

d) *Rural Nurse working without any regular General Practitioner/s services but also providing first on call health service all the time* • [4]

I provide first on call health service (*please tick box/es appropriate to your situation)*:

Evenings	•	*How many hours per evening*	*week*	*month* .....
Nights	•	*How many hours per night*	*week*	*month* .....
Weekends	•	*How many hours per weekend*	*week*	*month* .....
All the time	•	*How many hours per weekend*	*week*	*month* .....

What are your average number of hours on call: *per week* .....
per month .....

e) *Do you find yourself in a different scenario?*

Please comment.....

.....

……

30. When you provide a first on call health service, what professional back up do you have?

GP always available to attend the situation ☐[1]
GP always available for telephone calls ☐[2]
Rural nurse colleagues ☐[3]
Hospital available for telephone advice ☐[4]
Ambulance personnel and transport ☐[5]

Other……..

……...

……...

31. Is this level of backup system satisfactory to you? *Yes* ☐ *No* ☐

Please comment…….

……..

……..

32. Are you paid for your on call commitment? *Yes* ☐ *No* ☐

If yes, how are you paid while on call?

Per hour ☐[1]
Per session ☐[2]
Per week ☐[3]
Monthly ☐[4]
Time off in lieu ☐[5]
Other ☐[6]

Please describe …….

……...

……...

Do you receive an additional payment if you attend a patient? *Yes* ☐ *No* ☐

33. What is your annual gross income from this employment/practice? …….

Does this include an on call allowance? *Yes* ☐ *No* ☐

What would be the total monetary value of your on call allowance per month? …….

34. What preparation by your current employer did you undertake for your on call role?

Orientation ☐[1]
Skills update ☐[2]
Formal in-service ☐[3]
Hand over time ☐[4]
No preparation ☐[5]
University education ☐[6]

35. Was this preparation satisfactory? *Yes* ☐ *No* ☐

If not, please comment……..

……...

……...

36. Have you all the equipment you require to assist you when dealing with patient emergencies? *Yes* ☐ *No* ☐

Please comment…….

……..

……..

37. Do you have guidelines to assist you when you are first on call? *Yes* ☐ *No* ☐

If "yes", are these guidelines: *Written* ☐[1]

Verbal ☐2
Mixed ☐3

If "no", would you like to have official guidelines? *Yes* ☐ *No* ☐

38. In your role, when giving advice, is there a system for reviewing the following?

	Yes	No
Knowledge		
Skills		
Performance		
Outcome		

What system do you use?……..

……..

……..

39. How long after you commenced your rural nurse role did it take you to feel confident and competent in the role?

Immediately ☐1
3 - 6 months ☐2
7 - 9 months ☐3
10 - 12 months ☐4
1 - 2 years ☐5
2+ years ☐6
Don't feel confident & competent ☐7

40. What specific skills do you think a nurse requires for rural practice?

…….

…….

…….

…….

41. Are there any areas of practice in which you believe that you need further education? *Yes* ☐ *No* ☐

Please list ……

…….

…….

…….

42. How do you receive and maintain your ongoing education?

	Yes	No
Self taught		
Nurse colleague/s		
General Practitioner		
Continuing Professional Education: weekend sessions		
Continuing Professional Education: evening sessions		
Reading nursing/medical journals		
Extramural study		
Information technology		
University/tertiary education		

43. Please describe your nursing practice

Where to start? Try recalling a positive event which made you feel good or competent as a rural nurse, or perhaps a negative event which made you feel incompetent or unhappy with your performance.

The following points may assist you with your description:

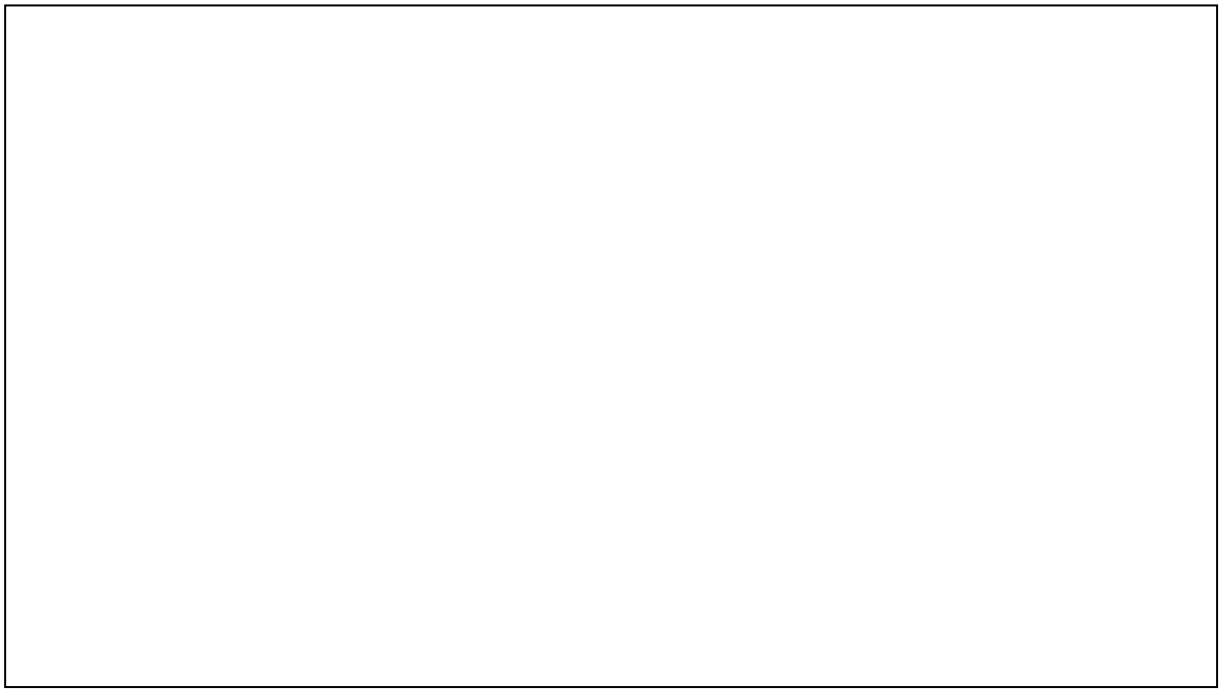
1. What was the context of the event (eg., time of day or week, staff resources)?
2. What happened (detailed description including how long ago the event occurred)?
3. Why was the event significant?
4. What were your concerns at the time?
5. Can you describe your thoughts and feelings during and after the event?
6. What did you find particularly demanding about the situation?

7. Why was it important to do what you did?
8. What was particularly satisfying and/or frustrating about the situation?
9. What do you believe was the outcome for those involved?
10. Is there anything else you would like to share about what the rural nurse's role involves and how things happen?

(Adapted from the Remote Area Nurse Competence Project 1999:72)

Description of your nursing practice:

Description of your rural nurse role:



Does your role need to be further developed to meet the needs of your community?

Yes ☐ *No* ☐

Please indicate how your role may be further developed to accommodate your community health needs:

Any further comments you would like to make:

……...

……...

……...

……...

……...

……...

……...

……...

(All replies to questions will be treated in complete confidence)

❖ ❖ ❖

If you have any queries or would like to be informed of the aggregate research findings, please contact:

Jean Ross, Rural Nurse Coordinator
National Centre for Rural Health
Dept Public Health & General Practice
St Elmo Court, PO Box 4345, Christchurch

Ph: 03 364 0410 Fax: 03 364 0451
E-mail: jean.ross@chmeds.ac.nz

If you are willing to contribute further to this study with a rural visit or interview, please contact Jean Ross or fill in the details below:

Name…….. Day contact no. ……..

Address……..

Thank you for completing this questionnaire
Please return it in the enclosed prepaid envelope

Te Whare Whakakotahitanga Mo Te Hauora Taiwhenua

May 2000

Rural Nursing Questionnaire

Thank you very much for returning your completed questionnaire on the "National Role of Rural Nursing". I am presently analysing the data from the questionnaire and Shelley Jones is doing the same with your description of practice and stories.

We aim to have all data analysed by the end of June when we will be in a position to share the results. The results and recommendations will be offered for your comments in a number of ways:

- In a written discussion document which will be sent to you.
- In a written discussion document which will be sent to all rural nurses including the Rural Nurse National Network nurses on our database.
- In a written discussion document which will be sent to organisations, Ministry, funders, HFA, etc.
- In the form of a presentation within the rural nursing stream of WONCA conference which will be held on 24 June in Christchurch.

This is a very exciting time for rural nurses and we look forward to sharing the results and recommendations with you and receiving your comments to the discussion paper. We will then be in a position, later in the year, to formalise the scope of rural nursing practice in New Zealand. It is hoped this will lead to a structured systematic career framework for rural nursing.

If you need to discuss any aspects of this research with me and if you would like to register for the rural nursing stream of the WONCA conference, please don't hesitate to contact me or the conference organisers. The conference organisers are Conference Innovators and can be contacted as follows:

Phone:	03 379 0390
Fax:	03 379 0460
E-mail:	wonca@conference.co.nz
Website:	www.rnzcgp.org.nz

Kind regards

Jean Ross
Rural Nurse Coordinator
Rural Nurse National Network Coordinator