The Nature of Nursing Practice in Rural and Remote Canada

Martha MacLeod, PhD, RN
University of Northern British Columbia

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Aim of the Study

- to examine and articulate the nature of registered nursing practice in primary care, acute care, community health, continuing care (home care) and long term care settings within rural and remote Canada

The Study Components

- **Survey**
- **Registered Nurses Data Base (RNDB)**
- **Narrative Study**
- **Documentary Analysis**

Principal Investigators and Decision-maker

- **Martha MacLeod**
  University of Northern British Columbia

- **Judith Kulig**
  University of Lethbridge

- **Norma Stewart**
  University of Saskatchewan

- **Roger Pitblado**
  Laurentian University

- **Marian Knock**
  B.C. Ministry of Health Planning (to 2003)

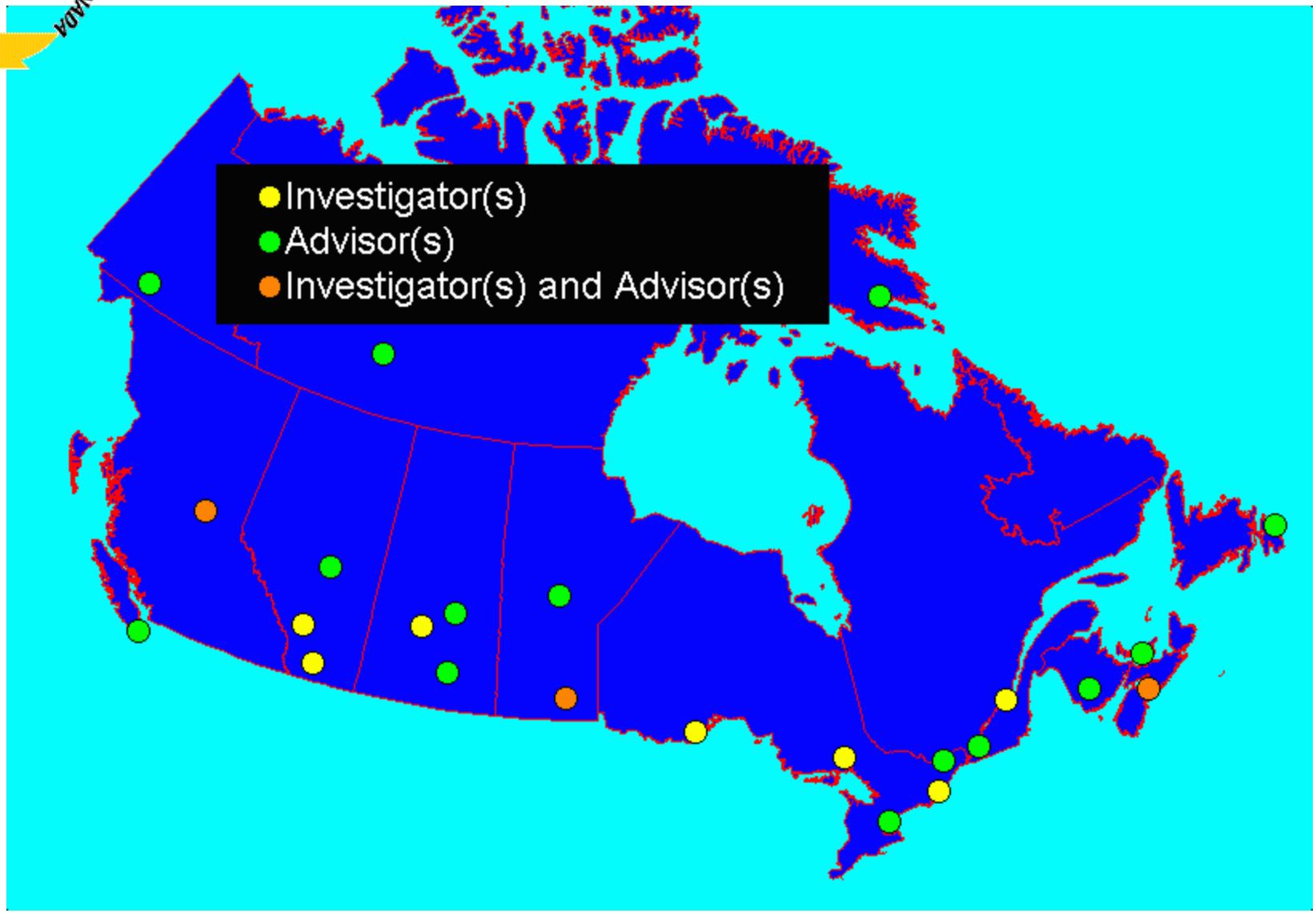
Co-Investigators

- **Ruth Martin-Misener**
  Dalhousie University
- **Ginette Lazure**
  Université Laval
- **Jenny Medves**
  Queen's University
- **Michel Morton**
  Lakehead University
- **Carolyn Vogt**
  U. Manitoba
- **Gail Remus**
  U. Saskatchewan
- **Debra Morgan**
  U. Saskatchewan
- **Dorothy Forbes**
  U. Saskatchewan
- **Barbara Smith**
  U. Saskatchewan
- **Carl D'Arcy**
  U. Saskatchewan
- **Kathy Banks**
  BC Women's Hospital
- **Elizabeth Thomlinson (to 2004)**
- **Lela Zimmer**
  UNBC

Advisory Team Members

- Cathy Ulrich, BC
- Anne Ardiel, BC
- Debbie Phillipchuk, AB
- Cecile Hunt, SK
- Donna Brunskill, SK
- Marlene Smadu, SK
- Marta Crawford, MB
- Sue Matthews, ON
- Suzanne Michaud, QC
- Roxanne A. Tarjan, NB
- Adele Vukic, NS
- Barb Oke, NS
- Elizabeth Lundrigan, NF
- Joyce England, PEI
- Barbara Harvey, NU
- Madge Applin, NWT
- Elizabeth Cook, NWT
- Fran Curran, YT
- Jan Horton, YT
- Francine Anne Roy, CIHI
- Kathleen MacMillan, FNIHB – Health Canada
- Maria MacNaughton, FNIHB - Health Canada
- Lisa Dutcher, Aboriginal Nurses Ass'n
- Lisa Little, CNA

NURSING PRACTICE IN RURAL AND REMOTE CANADA



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- Nova Scotia Health Services Research Foundation
- British Columbia Rural and Remote Health Research Institute
- Saskatchewan Industries and Resources
- Provincial and Territorial Nurses Associations
- Government of Nunavut
- Canadian Institute for Health Information

Rural and Remote Nursing

Access to Care

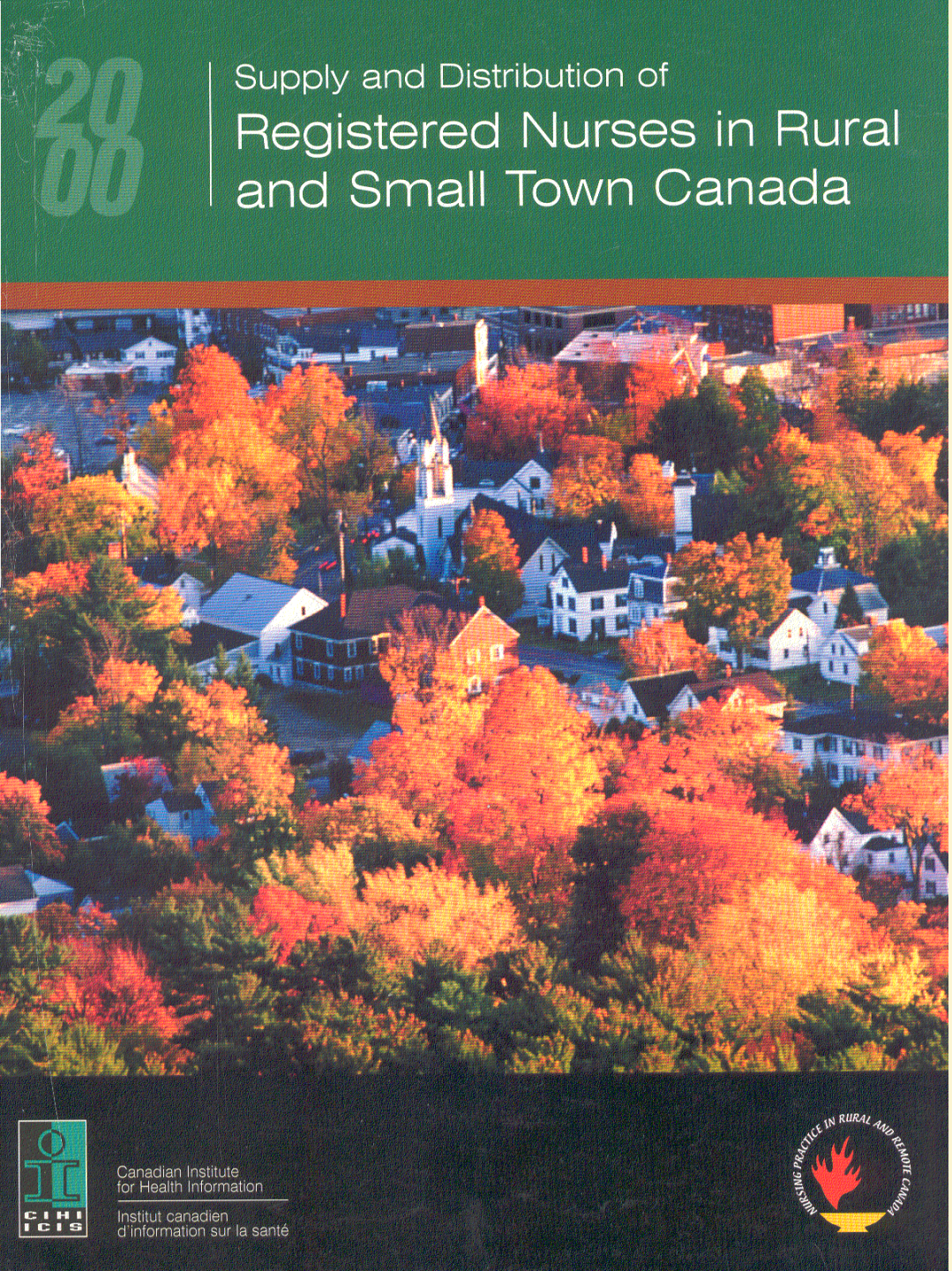
Quality of Care

Sustainability of Care

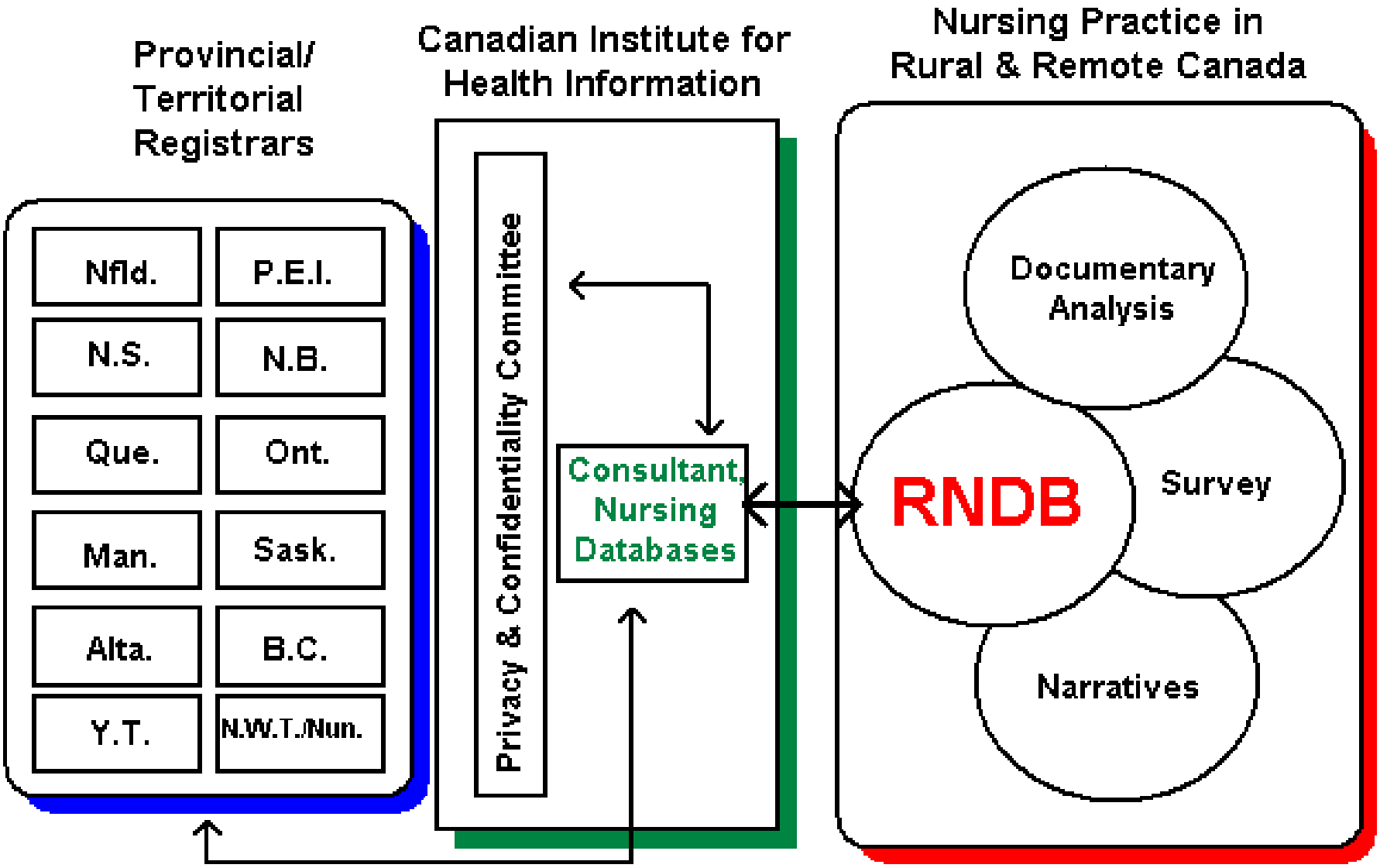
Access to Care

- **Supply and Distribution of Nurses**

- **Education of Nurses**



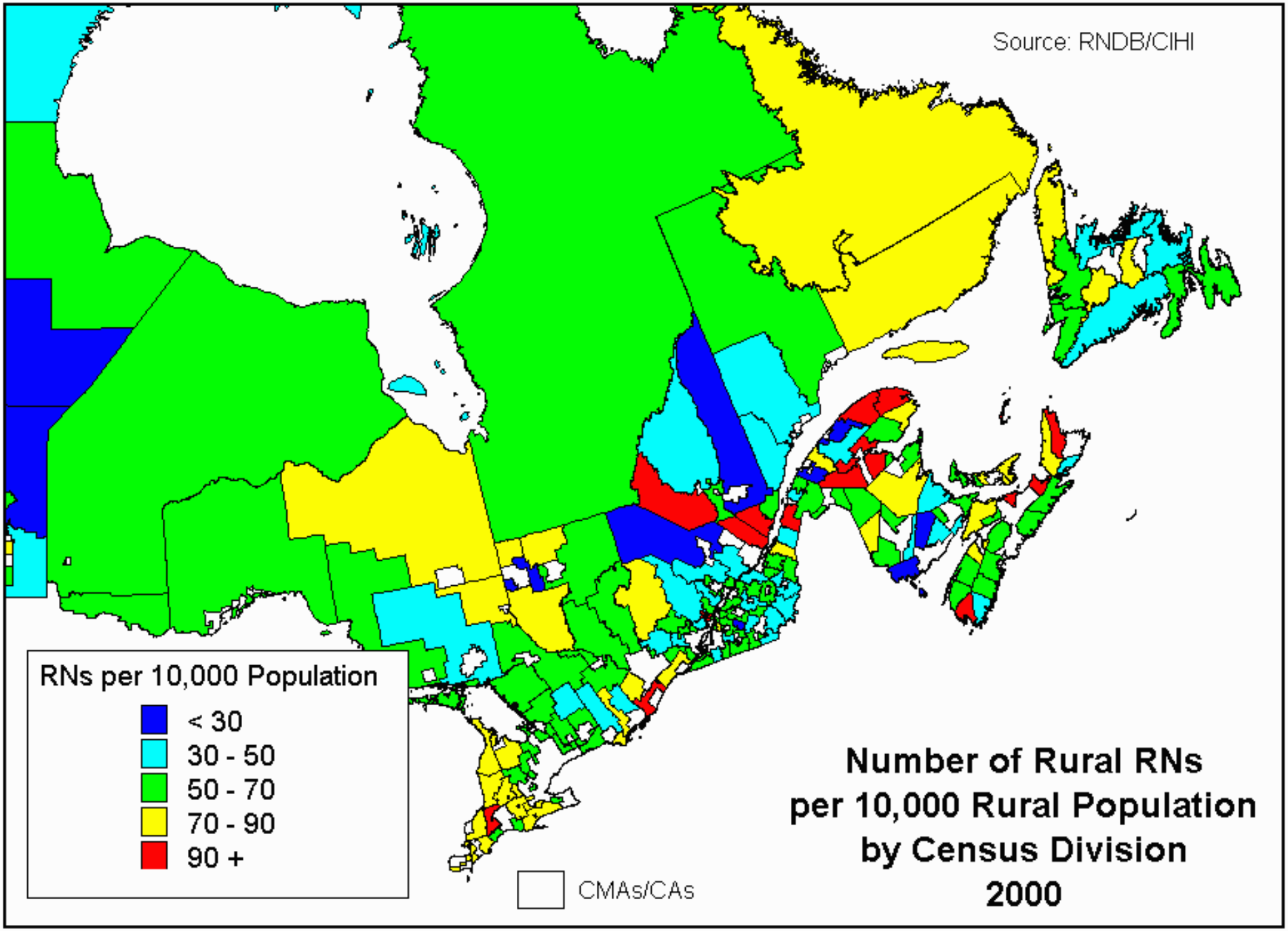
How many Registered Nurses are there in rural and remote Canada?

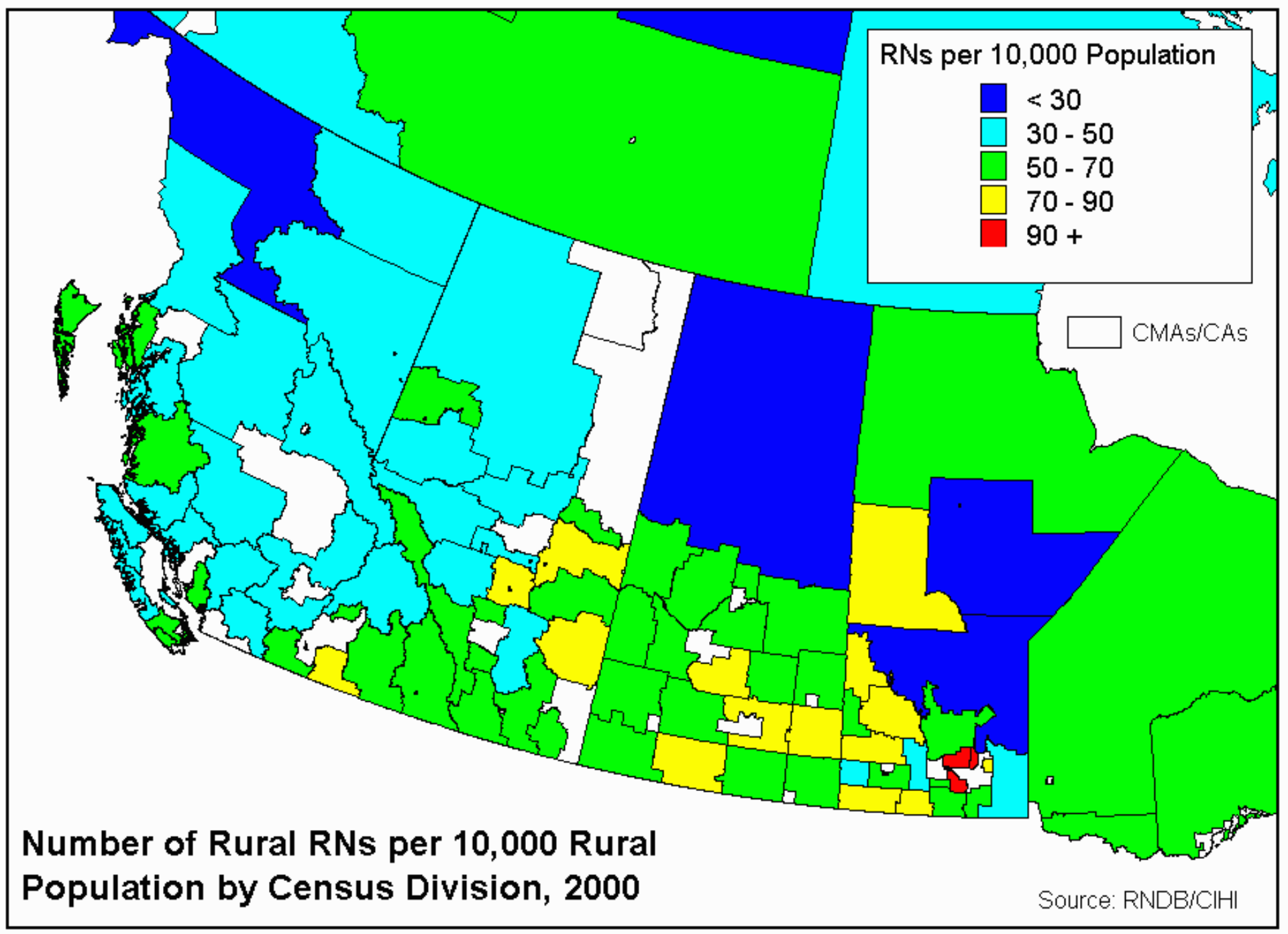


Registered Nurses Database

Year	Number of rural (RST) RNs	% of all RNs	Rural (RST) % of total Canadian/ BC population
1994	42,303 3,133	18.0 11.4	22.3 15.6
2000	41,502 3,165	17.9 11.4	21.7 15.1
2002	40,648	17.6	20.6

2002 – based on CIHI figure generated without Quebec data


Source: RNDB/CIHI
RNs per 10,000 Population
< 30
30 - 50
50 - 70
70 - 90
90 +
CMAs/CAs
Number of Rural RNs
per 10,000 Rural Population
by Census Division
2000


RNs per 10,000 Population
< 30
30 - 50
50 - 70
70 - 90
90 +
CMAs/CAs
Number of Rural RNs per 10,000 Rural Population by Census Division, 2000
Source: RNDB/CIHI

.. an aging workforce

- **Rural RNs -Canada/BC**
  - **1994 average age: 40.6 years/43.2**
  - **2000 average age: 42.9 years/45.6**
- **Urban RNs**
  - **1994 average age: 41.6 years/42.3**
  - **2000 average age: 43.5 years/44.3**
- **All RNs**
  - **1994 average age: 41.5 years/42.4**
  - **1998 average age: 42.6 years**
  - **2000 average age: 43.4 years/44.4**
  - **2002 average age: 44.2 years**

Access to Care

- **Education of Nurses**

Documentary Analysis Methods

- conducted to achieve a contextual understanding of the policy and practice environment
- systematic collection and analysis of relevant documents according to the policy cycle: policy formulation, policy implementation and policy accountability (Rist, 1994)
- using this cycle, developed a guide to examine the materials
- located 200+ documents with input from advisory board - over 150 analyzed

Education Level of RNs in Rural Canada/B.C., 2000

(Source: RNDB)

Diploma	81.4%	78%
Bachelor's	18%	21%
Master's/Doctorate	0.6%	1%

Educational Preparation of RNs in Rural and Remote Areas

- Little information in available reports
- No government documents located that discuss the need to provide educational opportunities for students in rural sites

- Most nursing associations equate rural with accessibility issues regarding education

- Entry-level competencies focus on generic requirements

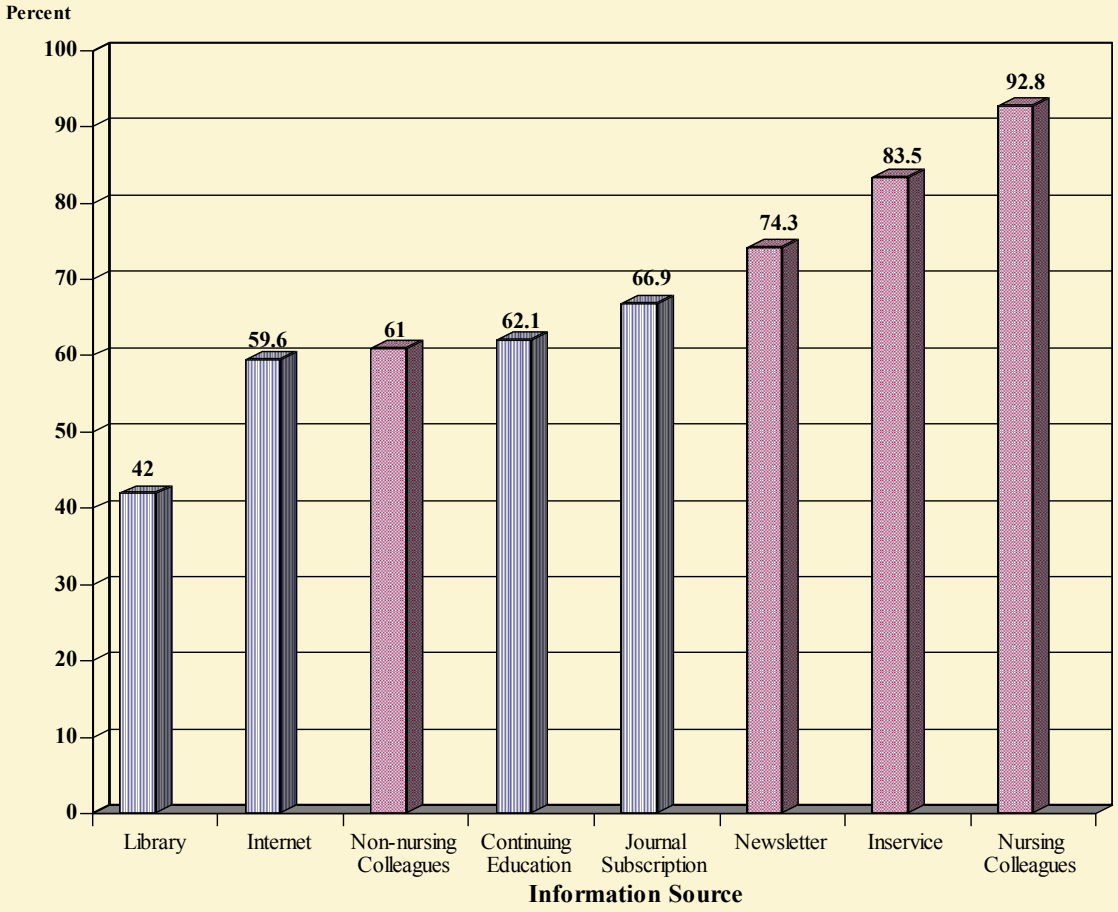
- Education for remote practice links it with First Nations health issues
- Education documents discuss programs with rural focus at locations such as UNBC, University of Saskatchewan, First Nations University of Canada

- No indication of any telehealth education occurring within nursing programs

- Nursing programs prepare graduates to be computer-literate but technology not always available or feasible in rural and remote settings

- Extended mentoring or orientation programs need consideration (documentary analysis) but do not replace basic education with employment mentoring (narrative)

Sources of New Information on Nursing Practice



Source: 2001-2002 Nursing in Rural and Remote Canada Survey (N=3440)

- The three information sources used most frequently by rural and remote nurses (than any other suggested source) are nursing colleagues, inservice, and newsletters.
- Nurses are 32% more likely to use newsletters than the library to inform their practice, and 21% more likely to use inservice than continuing education to obtain new information on nursing practice.

Advice for Educators

(Source: Narratives)

- Need for reality-based education
- Part of curriculum offered in rural settings
- Educators who are specialized and experienced in rural practice

General Comments from Rural Nurses

(Source: Narratives)

- Most basic education does not prepare new grads for rural and remote practice

- Rural health nursing needs to part of all basic nursing programs

Quality of Care

- **Community as Shaping Practice**
- **Practice Components**
- **Working on the Edges of Practice**

Narrative Approach

- 152 Nurses (11 Francophone)/BC - 27
- Areas of Practice: Acute, Long-term Care, Public Health, Home-care, Community, Primary Care
- Telephone Interviews
- Analysis: interpretative phenomenology & thematic analysis

NURSING PRACTICE IN RURAL AND REMOTE CANADA

Approximate Location of Narratives Respondents Based on Place of Work

Community Shaping Practice

- Size, distance, demographics
- Expectations of communities
- Knowing the client in the context of community; the community in the context of the client

Size, Distance, Demographics

As I stepped off the ski plane I stepped into a foreign world. My role as a nurse was changed completely and my personal life soon became unfamiliar to me in my unfamiliar surroundings

We do get a lot of moms with children with various things, but mostly with kids, you know, it's the head colds, bad ear, sore throat, bit of abdo pain. […] Our kids are basically a healthy population.

I remember being up in this same community and working 36 hours straight, no sleep, no break, nothing

Expectations of Communities

I always say it's a double edged sword because they hold you to high respect because you're their own.[…] . And because of that you can't be the normal person that you are. You have to always be this person that everybody looks up to. And the clinic is situated on the top of a hill, so that I can look down at all the [community] around me. And most times I feel that way, that people think it's like that. That I'm the person on the hill looking down on everybody else. And there's a lot of pressure to be the perfect person when you're the nurse.

Knowing the Client: Knowing the Community

We are very responsive in our community because we see those people in our churches and in our grocery stores. And so you know we try and be all things to all people, maybe that is kind of bad. But in the end we are the one who see these people outside of our work life too.

Advice: Listen to Learn- Learn to Listen

Number one, do a lot of listening initially, and very little talking

Listen to your nurses! Listen to them and respect their opinions and have an open dialogue

Teach them how to use resources – how to find the answers. Don't give it to them.., don't feed it to them….

Quality of Care

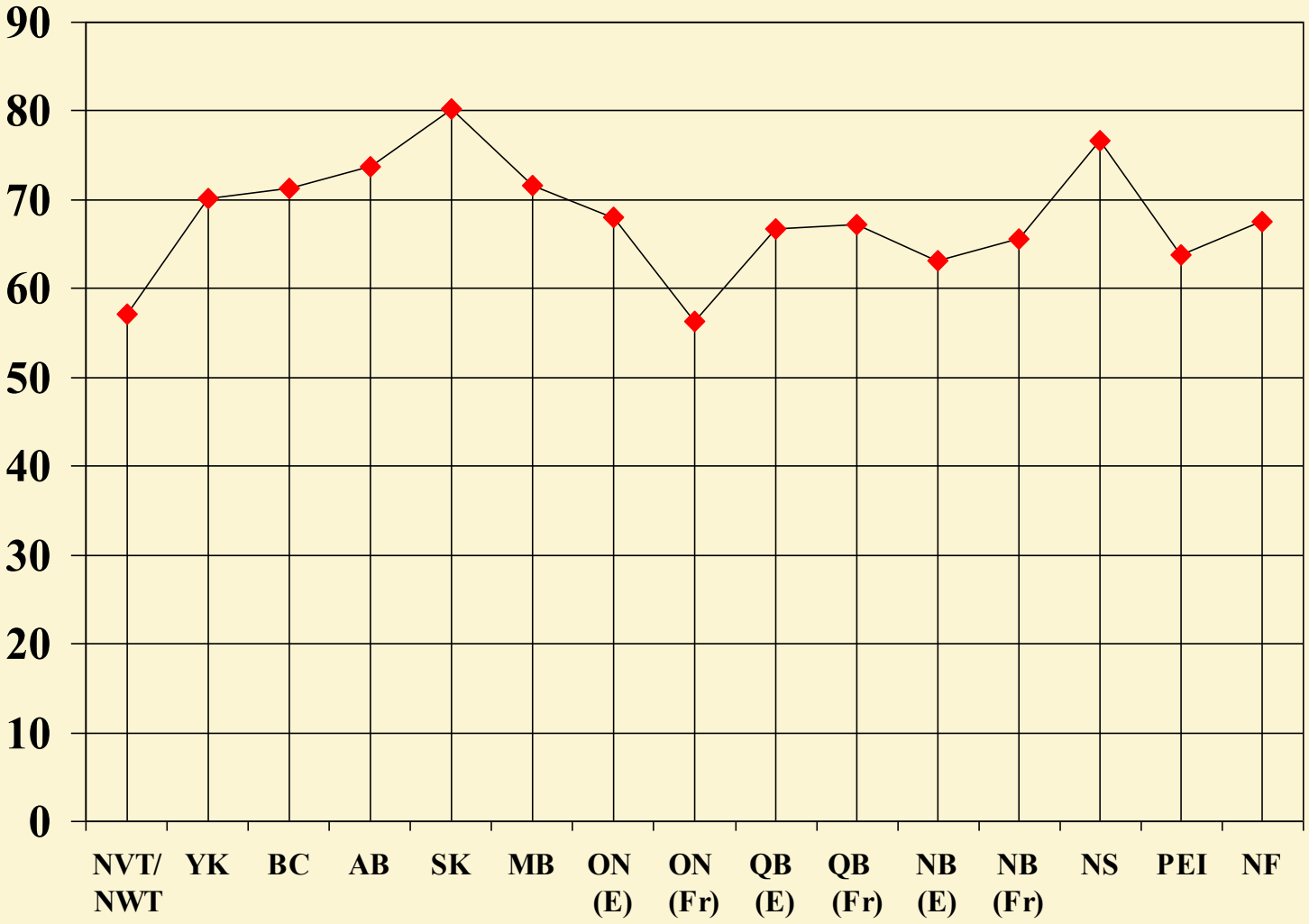
- **Practice Components**

Survey Method

- Mailed questionnaire with persistent follow-up
  (Dillman's Tailored Design Method)

- Sample (N=3933)(BC=330; BC/AB = 783)
  1) random sample of registered nurses (RNs) living in rural areas in all Canadian provinces
  2) total population of RNs who work in outpost settings or the northern territories

Sample Response Rates by Province and Territory (N=3933)



Source: 2001-2002 Nursing in Rural and Remote Canada Survey

Primary Care as Main Practice

- **National – 8.3%**
- **Territories**

  Nunavut – 20%; Yukon – 15.6%; NWT – 11.5%
- **Provinces**

British Columbia - 10%
Ontario – 13.5%
Newfoundland – 6.1%
Alberta – 5.7%
Quebec – 4.6%
Manitoba – 11.4%
Saskatchewan – 8.4%
New Brunswick – 6.1%
Nova Scotia – 4.9%
PEI – 0%

Main Area of Nursing Practice
BC and All of Canada (n = 3493*)

Practice Area	BC (%)	All of Canada (%)
Acute Care	44.5	44.4
Long term Care	15.5	17.7
Community Health	18.2	16.1
Home Care	7.3	8.7
Primary Care	10.0	8.3
Other	4.5	4.8
Total n	330	3493

Survey question: "In which of the above practice areas do you spend most of your time?"

***Excluded here – education, administration, research**

Advanced Decision-Making or Practice

- **Total – 39.1%**
- **Territories – 47.8%**
- **Provinces**
  - **Ontario – 50%**
  - **BC/AB - 42.7%**
  - **SK/MB – 38.7%**
  - **Atlantic – 32.6%**
  - **Quebec – 31.0%**

Health Promotion in Community

- **Total – 48.6%**
- **Territories – 56.3%**
- **Provinces**
  - **BC/AB – 54.7%**
  - **Ontario – 52.7%**
  - **SK/MB – 49.3%**
  - **Atlantic – 44.9%**
  - **Quebec – 36.6%**

BC and All of Canada (n = 3493)

Scope of Practice	BC (%)	All of Canada (%)
Advanced nursing practice and decision-making	49.1	39.9
Facilitation of community health promotion activities	52.6	47.8
Nothing in my day is routine	69.1	63.3
I am required to take on other roles depending on demand	63.0	58.2
I use protocols specific to ANP	47.0	36.9
Total n	330	3493

Maternity Care

BC and All of Canada (n = 3493)

Components of Practice	BC (%)	All of Canada (%)
Pre-natal Care	37.9	35.1
Management of labor	32.1	22.8
Management of delivery	28.5	20.8
Post-natal care	49.1	40.5
Total n	330	3493

General Diagnostic Tests

BC and All of Canada (n = 3493)

Components of Practice	BC (%)	All of Canada (%)
Ordering diagnostic tests	34.2	28.5
Performing diagnostic tests	40.3	32.5
Interpreting diagnostic tests	40.6	35.0
Total n	330	3493

Medication and Referrals

BC and All of Canada (n = 3493)

Scope of Practice	BC (%)	All of Canada (%)
Prescribing medication	20.0	17.8
Dispensing (not administrating) medication	60.9	46.7
Direct referral to an *allied health professional*	54.5	49.3
Direct referral to a *medical specialist*	22.4	21.9
Total n	330	3493

Emergency/Acute Care

BC and All of Canada (n = 3493)

Scope of Practice	BC (%)	All of Canada (%)
Suturing	19.1	20.2
Taking X-rays	6.4	8.2
Casting/Splinting	26.7	25.4
Evacuating patients	42.4	37.0
Pronouncing death	46.4	41.8
Total n	330	3493

Specific Diagnostic Tests

BC and All of Canada (n = 3493)

Scope of Practice	BC (%)	All of Canada (%)
Performing pap smears	15.2	15.9
Audiometry	14.5	12.6
Refraction	3.9	3.8
Pulmonary function testing	9.7	12.4
Total n	330	3493

Quality of Care

- **Working on the edges of your practice**

"Something just didn't feel right. I called the doctor but I couldn't articulate my concerns and she was kind of cranky on the phone, she said, call me when you know what you're talking about …..when you know. And this was one of the nights that I was on for 17 hours straight with hardly a break. And we'd had a really, really busy time… we were all extremely exhausted …. I don't remember ever being so exhausted. And I asked one of the nurses who was still up, I sort of ran it over with her, and she said, ….oh, I can't, I'm too tired, I can't really talk to you about this … And I was exhausted so I just kind of thought okay, maybe he'll be okay. He'll make it to the morning, the nurse will see him then and if he needs to go out he can go out.

The hardest thing I find is deciding not to do anything with a patient. Deciding that everything is okay. Like if somebody is acutely ill, you can start IVs and give them antibiotics and do chest x-rays. That's easy. But it is having the confidence to say no I don't think this is something really serious, and they can go home and come back and see us again in the morning.

Sustainability of Care

- **Predictors of Intent To Leave**
- **Migration of Nurses**

Sustainability of Care

- **Predictors of Intent To Leave**

Predictors of Intent To Leave Variables

- Individual
  - Sociodemographic & professional
  - Satisfaction with work & community
- Worklife
- Community

Predictors of Intent To Leave

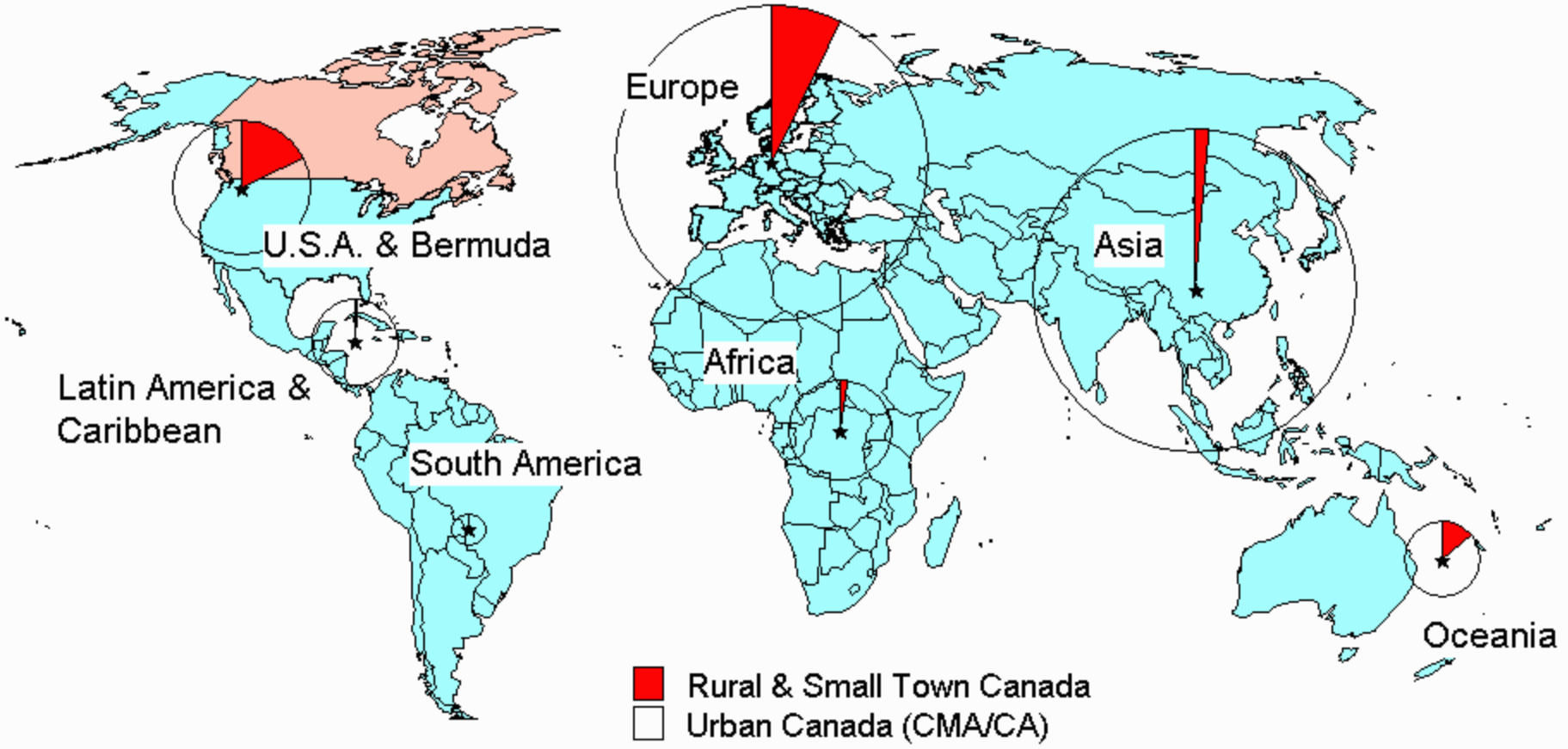
Registered Nurses were more likely to intend to leave their present nursing position within the next 12 months if they:

- Were male
- Reported higher perceived stress
- Did not have dependent children or relatives
- Had higher education
- Were employed by their primary agency for a shorter time
- Had lower community satisfaction
- Had greater dissatisfaction with job scheduling
- Had lower job satisfaction re: autonomy
- Were required to be on call
- Performed advanced decisions or practice
- Worked in a remote setting

Sustainability of Care

- **Migration of Nurses**

Major World Region Origins of the International Nursing Graduate RNs of Canada



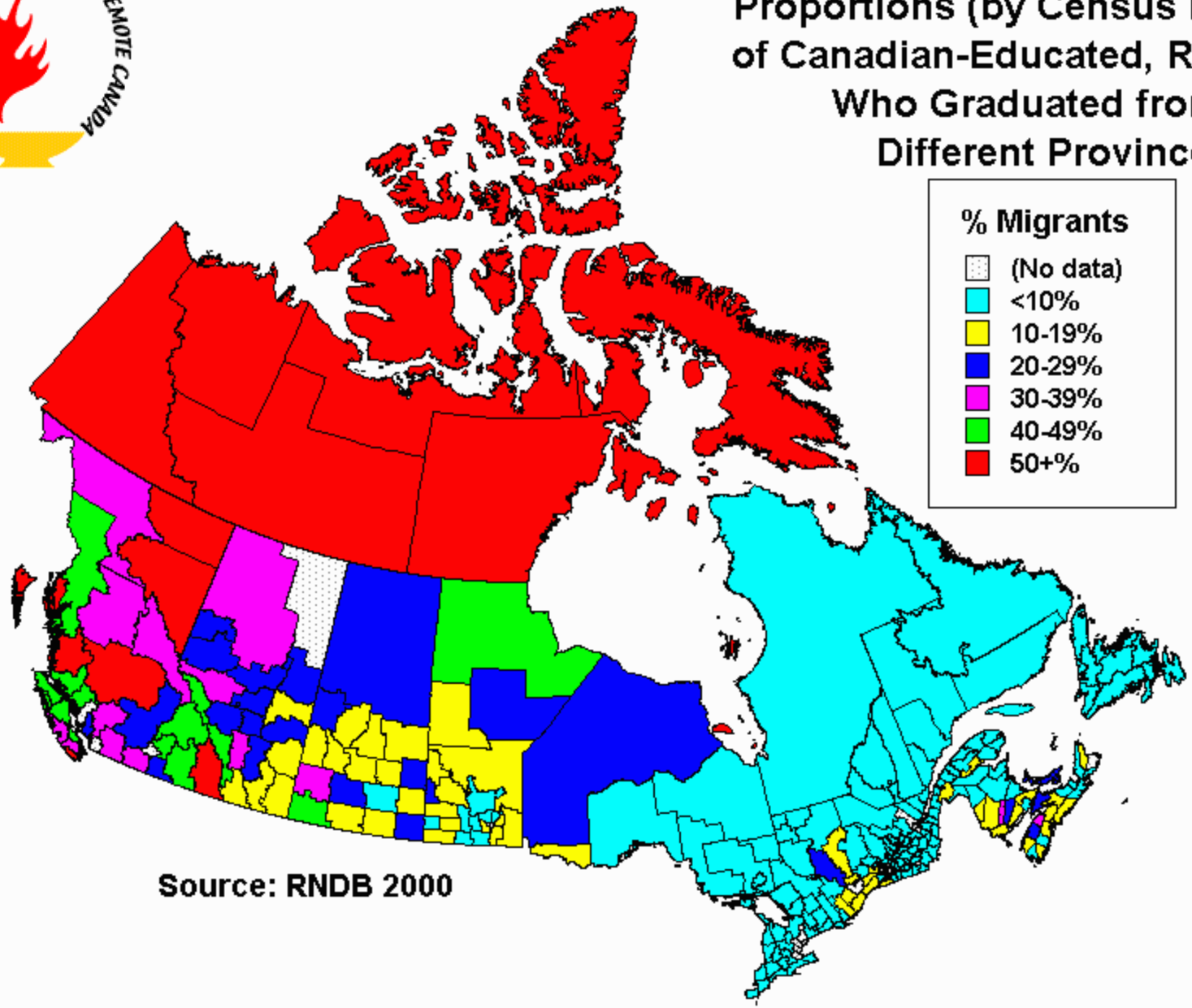
Source: RNDB/CIHI, 2000

International Nursing Graduates

- In 2000 14,177 international nursing graduates were registered and employed in nursing in Canada - (4,010 in BC)
- 5.7% of international nursing graduates worked in rural Canada - (BC: 263 or 6.55%)
- But this represented only 1.9% (BC: 8.3%) of rural RNs
- Therefore, our analyses focus on **INTERNAL MIGRATION** of Canadian-educated, rural RNs

NURSING PRACTICE IN RURAL AND REMOTE CANADA

Proportions (by Census Division) of Canadian-Educated, Rural RNs Who Graduated from a Different Province



Source: RNDB 2000

Correlates of Migration

Correlates	% Migrants	Odds Ratio
Gender		
Male	7.2	1.00
Female	12.0	1.31*
Highest Nursing Education		
Diploma	11.0	1.00
Baccalaureate	14.9	0.90
Graduate Degree (MA/PhD)	24.0	1.55*
Full-Time/Part-Time Employment		
Part-Time	10.8	1.00
Full-Time	12.7	1.07*

Correlates of Migration (Continued)

Correlates	% Migrants	Odds Ratio
Place of Work		
Hospital	10.6	1.00
Nursing Station	34.4	2.40*
Nursing Home/Long-Term Care	10.4	0.69*
Home Care/Community Health Centre	14.1	0.86*
Education/Association/Government	17.8	1.10
Other	12.8	0.96
Primary Responsibility		
Direct Care	11.9	1.00
Administration	10.8	0.68*
Teaching/Education	18.2	1.41*
Research	11.1	1.18

Correlates of Migration (Continued)

Correlates	% Migrants	Odds Ratio
Position		
Manager	14.5	1.00
Staff/Community Nurse	11.7	1.07*
Other	10.1	0.72*
Metropolitan Influenced Zone		
Strong MIZ	8.4	1.00
Moderate MIZ	10.1	0.84*
Weak MIZ	15.4	1.31*
No MIZ	16.5	1.32*

Internal Migration: Items to Consider

- RNDB “internal migration” = 11.8%
- Survey “internal migration” = 26.7%

- By 2006, Canada is projected to lose the equivalent of 13% of the 2001 RN workforce through retirement and death (O’Brien-Pallas et al., 2003)
- For many rural communities, MIGRATION of RNs may be equally or more significant!

Nature of Nursing Practice

Recognizing nurses and the complexity of rural and remote practice

- Access to Care
- Quality of Care
- Sustainability of Care

Implications

- Create a “rural lens”
- Understand and support the fact of the inseparability of nurses’ professional and personal roles
- Provide supports at a distance - in-person and via technology
- Partner with nurses and communities in recruiting and retaining nurses

Implications

- Develop new models of interprofessional practice
- Attend to the needs of Aboriginal communities
- Develop undergraduate and post-graduate education for rural nursing

Implications

- Develop and design relevant continuing education
- Do not rely on recruiting nurses from overseas
- Improve nursing databases and rural indicators

Contact Information

Overall Project and Narratives:

Tel: 1-866-960-6409

e-mail: rrn@unbc.ca

macleod@unbc.ca

http://ruralnursing.unbc.ca

Project Coordinator:

Donna Bentham, RN, BSN

Documentary Analysis:

(403) 382-7119

e-mail: kulig@uleth.ca

Survey:

(306) 966-6260

e-mail: stewart@sask.usask.ca

RNDB:

(705) 675-1151 ext: 3355

e-mail: rpitblado@nickel.laurentian.ca

Rural Nursing Lens

- A tool to help train the attention and perception of those who develop policies, programs and services
- Spotlights the needs and realities of rural nursing
- Helps to ensure that policies, programs and service changes will be sensitive to rural realities and implemented appropriately

Discussion Questions

- What would you like to see happen differently in 5 years in rural nursing in your area of practice?

- What would be one key policy or practice change that could address it?

Discussion Questions Cont'd

- What would need to be communicated to those who do not live the day-to-day reality of rural practice in order to create this policy or practice change (in an appropriate or implementable way)?

Discussion Questions Cont'd

- What are the things that REALLY, REALLY matter?