

**Review of MRI Siting Options**  
**For**  
**The Central Region of Newfoundland and**  
**Labrador**

**February 28, 2009**

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Mr. Richard Nurse, BA, M.H.Sc

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## Mandate:

To advise the Newfoundland and Labrador Department of Health and Community Services on the most appropriate location for the new MRI for the Central Region.

To make any and all other observations and recommendations about improving MRI access and services as the review team deems appropriate.

## Context:

The first MRI unit in Newfoundland was installed in St. John's some 15 years ago. Within weeks, the demand for MRI scans made the need for additional units throughout the province apparent and similar demands in other provinces became the focus of a Federal/Provincial/Territorial (F/P/T) "working group" and of "special technology" funding.

A related needs assessment (the Kucharczyk Report) commissioned in the early 2000's, focused on MRI services and needs in Newfoundland. Among other findings, this report called for replacement of the original MRI unit; a second unit for St. John's and the installation of a third unit in either Corner Brook or Central Newfoundland.

While the original unit was replaced, the number of MRI units remained unchanged, and, in 2003, the Minister of Health and Community Services of the day convened a consultation meeting with some 40 representatives of the province's health system to help determine the location of a second MRI unit. While well intentioned and while participants agreed on the need for a provincial plan for MRI services, in the absence of a plan, this consultation did not result in a consensus on the specific question of where the second unit should be sited.

Over the ensuing five years a second unit has been located in St. John's and a third in Corner Brook. All three units are in high demand and are sometimes unable to meet agreed wait time parameters for access to Diagnostic Services. (Appendix I – Recommended Wait Times for Diagnostic Services). For example, some emergency MRI referrals to St. John's exceed the 0-24 hrs guideline and some non-urgent cases wait considerably longer than the recommended 0-30 days for their MRI – sometime due to staff shortages.

The Government of the Province of Newfoundland and Labrador announced its decision to fund a Magnetic Resonance Imaging (MRI) machine for the Central Region in its 2008-2009 budget.

Subsequently, and in consultation with the Central Region, the Department of Health and Community Services appointed a three-person team to conduct a review of the site options (Grand Falls-Windsor and Gander) for the new MRI.

The provincial population is 505,000 and the Central Region catchment area has a population of some 95,000 and includes two regional facilities for primary and secondary care – James Paton Memorial Health Centre in Gander and the Central Newfoundland Regional Health Centre in Grand Falls-Windsor. Each regional facility has historically served a share of the total region and also offers select specialty services to the entire Central Region.

At present patients from the Central Region are referred to St. John's or to Corner Brook for their needed MRIs or alternative, and, because of difficulties with distance and wait times, on occasion more invasive diagnostic procedures are used as an alternative to MRI.

### Methodology:

While the Department of Health and Community Services and or the Central Health Board of Directors might have elected to make a determination on the specific location of the new MRI unit it was decided that an external review of the two siting options should be commissioned to ensure that all related factors or criteria could be objectively considered and a timely siting recommendation made and implemented.

The Review Team conducted a review of available population and patient flow information, hospital services and human resources data for the Province and the Central Region (Appendix IIa & IIb) and researched the current literature on current and projected MRI applications and utilization. As part of its information gathering process the team also conducted on site interviews with key decision makers and clinical leaders at both sites (Appendix III). Subsequent to the site visits the team sought confirmation /validation of information and opinions provided by interviewees.

It must be said that as a consequence of these interactions and this review process the complexity of the decision became apparent to the review team. While arguments were put forward for one or another site we were reassured by the majority opinion that an MRI unit anywhere in the Central Region will be a significant improvement in diagnostic services and patient care.

As later sections of this report will demonstrate the choice of a given site is not one that could have been made by anyone on the basis of a single and particularly compelling criteria or argument. This is, out of necessity, an “on balance” report and recommendation. It is the result of the team's consideration of the implications of selecting one or another site, of the “on balance” best choice for the residents of the Central Region and, to a lesser degree, the province's health system.

## Findings and Observations:

The Board and Leadership of the Central Health Region is excited about the decision to fund an MRI unit for the Central Region and, at the same time, is anxious to have the decision of the unit's location made as soon as practical. Prior to the most recent health system restructuring the eastern and western sections of this Region were separate and sometimes competing entities. While the decision to fund an MRI unit for the region is seen by all as a very positive one, the deliberations on site options and choice have proven somewhat divisive.

An early decision on the site question is understood by the review team as critical to the success of this regional organisation and to the successful delivery of MRI services to the Central Region. Conversely, an involved medical staff, united around a region wide commitment to decision-making, resource allocation and to patient services is key to the effective implementation of this siting decision.

Like earlier assessments of MRI needs in Newfoundland and Labrador, this review team examined such factors as screening criteria, standards of care, access and such performance measures as wait times, scans/1000 population and scans/hour of operation.

From the team's review of current utilization and wait time data it is apparent that some patients are not accessing available MRI services within acceptable timeframes. Emergency patients sometimes wait beyond the 24 hr. target and some non-urgent requests wait well beyond the best practice standard of 28 days. For want of available paediatric anesthetist support some children wait more than a year for requested MRI scans. Patients from the Central Region have the same wait time experience as their fellow Newfoundlanders. Clearly, the justification for this 4<sup>th</sup> unit is well established.

While wait time criteria for various levels of urgency exist, the review team was not able to confirm that clinical screening protocols exist for the region or are systematically applied to monitor the appropriateness or otherwise of scan requests. Such an approach is considered a key success factor as a truly provincial model for quality MRI services becomes possible with the addition of this new unit. Similarly, the new unit, regardless of location, must be understood to be a resource of Diagnostic Imaging (DI) Departments at both facilities in the region.

Prior to 2000 MRI related literature suggested that some 20-30 scans/1000 population would be an appropriate predictor of demand. From then to now the number of scans /population has continued to rise. In an as yet confidential report to the Ontario Ministry of Health, the fact that older patients present with disorders requiring MRI and that new clinical applications for MRI units continue to emerge – sometimes replacing more invasive DI modalities – resulted in estimates of clinically justifiable utilization levels of approximately 65 scans/1000 population in 2008 with adjustments upward in subsequent years. Wait time targets, as currently published by DI Departments in Corner Brook and St. John's are consistent with targets elsewhere in Canada and should be applied to the Central Region's services as well. A performance target for the number of scans/hour of

operation (perhaps in the range of 1.2-1.3 scans/hr.) should also be established in consultation with MRI providers in similar settings as hours of operation decisions for all MRI units are made on future.

The availability of Radiologists and Technologists with MRI training and experience is clearly a key success factor as the new MRI unit is established. It is also reasonable to project that younger radiologists and technologists will be attracted to and retained by DI Departments with a full array of diagnostic modalities. In its review the review team was satisfied that both sites can offer at least one radiologist (or more) with MRI training and experience and can deliver MRI trained technologists once a site decision is known.

That said, it is the team's view that a region wide continuing training programme and a recruitment and retention strategy for DI services is another key success factor as this service is introduced.

Recommendation(s):

### **Recommendation 1**

**It is recommended that the new MRI unit for the Central Region be located at James Paton Memorial Health Centre (JPMHC, Gander, NL).**

#### **Rationale**

**Access** – The east/west populations within the Central Region are not remarkably different and a standard of 90% within 90 minutes would not decisively tip the site decision in one or another direction. That said, with the unit sited in Gander, patients from the Center-West area would now have access to two units within 90 minutes, in both directions. Similarly, and from a provincial systems perspective, some patients residing between Gander and St. John's may now have some limited access to the unit at JPMHC.

**Demand** – While it is predicted that the clinical applications for MRI scans will continue to broaden, it is also true that the major usage will continue to be investigation of musculoskeletal problems, neurology and cancer care. While not at the levels predicted by some interviewees, it can be predicted that approximately 45-50% of demand in the foreseeable future will be orthopedic in nature. Also, while a considerably small share of MRI scan requests are truly emergency, most trauma requiring MRI is orthopedic in nature and JPMHC is the designated orthopedic service provider.

**Cost/Benefit** – While some data was provided to suggest that capital costs (renovation and installation) might vary by site option (see Appendix IIa), the review team was of the view that as a one time cost, such variances, if they existed, were not significant determinants in this decision. The most recent data, received during the review process, suggested little or no variance on capital cost exists – “The current estimate is \$1.25m for either site.” (MRI Consultant Data Statistics, November 26, 2008)

**Human Resources** – Representatives for both site options advised the review team that MRI trained radiologists and technologists were and/ or would be available whatever the site decision might be. That said, it is the team’s view that regardless of the site decision, a region-wide Clinical Competency Training Programme and a region-wide Recruitment and Retention Strategy is essential to the long-term success of the MRI service.

## **Recommendation 2**

**It is recommended that the leadership of both DI Departments in the region be encouraged to guide development of a region-wide model for coordination and delivery of the MRI services - including leadership on the formalization of a Standards and Quality Agreement with other MRI providers in the province.**

### **Rationale:**

This service should be understood to be a regional service and can effectively be used as a vehicle for fostering positive working relationships among all radiologists in the region and all MRI services across the province. With this in mind, the MRI equipment tender/purchase process should ensure that appropriate equipment for reading and for interpreting scans will be available at the DI Departments at JPMHC and CNRHC.

Standardization of MRI access and utilization guidelines and processes (which practitioners can best identify) will be a critical success factor for this and other essential diagnostic services.

## **Recommendation 3**

**It is recommended that the Dept of Health and Community Services invite a representative group from the Province’s regional health authorities to recommend, or re-affirm where they currently exist, the following MRI services benchmarks or targets:**

- **Wait time targets – it is understood that these exist and it may just be a matter of establishing mechanisms for ensuring that adjustments can be made when targets are consistently unmet in a given region.**
- **Scans/1000 (population) targets**
- **Scans/hour of operation targets**

**Rationale:**

Without agreed upon performance standards, the appropriate hours of operation for a given MRI service cannot be accurately determined or defended. While the review team does not presume to offer specific targets; it is worth noting that industry standards, while ever changing, are readily available.



## APPENDIX I

### DIAGNOSTIC SERVICES URGENCY/WAIT TIME CLASSIFICATIONS

<b>Urgency</b>	<b>Description</b>	<b>Acceptable Time Frame</b>
<b>Priority 0 Emergent</b>	Conditions with serious threat to life that require immediate diagnostic testing	0 – 24 hours
<b>Priority 1 Urgent</b>	Conditions for which there is potential for deterioration and/or deficit and for which the diagnostic procedure facilitates clinical diagnosis and management.	0 – 14 days
<b>Priority 2 Non Urgent</b>	Conditions for which the procedure facilitates patient health care planning. Routine appointment scheduling does not adversely affect patient outcomes.	0 – 30 days
<b>Priority 3 Follow-up</b>	Conditions for which patient management requires subsequent examinations.	Variable
<b>Priority 4 Screening</b>	Conditions for which a screening examination is requested for a specific future date, as recommended for population health.	Variable

Developed in collaboration with the Newfoundland and Labrador Association of Radiologists (NLAR) by the Diagnostic Imaging Waitlist Management Committee, Eastern Health May, 2007; Revised for Western Health April 2008.

Appendix IIa  
 Department of Health and Community Services  
 MRI Services  
 October 20, 2008

**A. WAIT TIMES (September 30, 2008)**

<u>Category</u>	<u>St. John's</u>	<u>Corner Brook</u>
Emergent	2 days	1 day
Urgent	14 days	7 days
Non-Urgent	14-378 days	49-84 days

Notes:

- (1) The two MRIs in St. John's are operating 16 hours daily (since March – April 2008). The MRI in Corner Brook is operating 12 hours daily (since August 2007).
- (2) The wait time for non-urgent MRIs in St. John's ranges from 14 days for cardiac to 378 days for spine.
- (3) Wait times for children requiring general anaesthesia is 470 days in St. John's due to limited availability of paediatric anaesthetists.
- (4) The wait time for non-urgent MRIs in Corner Brook ranges from 49 days for extremities to 84 days for head.

**B. MRI PROCEDURES**

	<u>St. John's</u>		<u>Corner Brook</u>	
	<u>2006/07</u>	<u>2007/08</u>	<u>2006/07</u>	<u>2007/08</u>
Total	5465	5924	3090	3814
Central Region	229	N/A	1204	1475
% Central Region	4	N/A	39	39

**C. MRI REFERRAL PATTERNS FOR CENTRAL REGION 2006/07**

	MRIs done in Corner Brook	MRIs done in St. John's
Area 1 - Gander and Area	265	119
Area 2 - Twillingate/Fogo	44	20
Area 3 - Lewisporte and Area	84	19
Area 4 - Grand Falls/Windsor and Area	512	43
Area 5 - Connaigre Peninsula	52	13
Area 6 - Springdale/Baie Verte/Buchans	247	15
<b>Total</b>	<b>1204</b>	<b>229</b>

**D. SPECIALTY SERVICES IN CENTRAL REGION**

**Gander**

Orthopaedics  
 Ophthalmology  
 Nuclear Medicine  
 Breast Screening  
 Satellite Dialysis  
 General Surgery  
 Internal Medicine  
 Paediatrics  
 Obstetrics/Gynaecology  
 Neurology  
 Outpatient Psychiatry,  
 Radiology,  
 Pathology  
 Visiting Dermatology  
 Cancer Treatment

**Grand Falls-Windsor**

Urology  
 ENT (Ear, Nose, Throat)  
 Neurology  
 Inpatient and Outpatient  
 Psychiatry  
 Full Dialysis and Nephrologist  
 Support  
 Ophthalmology  
 Paediatrics  
 Dermatology  
 General Surgery  
 Internal Medicine  
 OBS/GYN  
 Radiology  
 Pathology  
 Visiting Orthopaedics  
 Cancer Treatment

**E. POPULATION LIVING IN CENTRAL REGION**

	<b><u>Gander</u></b>	<b><u>Grand Falls-Windsor</u></b>
Within 60 minutes	36,665	31,975
Within 90 minutes	60,649	53,062
Within 120 minutes	79,396	70,848

**F. RADIOLOGIST HUMAN RESOURCES**

**Gander**

Draft Provincial HR Plan recommends 3.9 FTE;

3 provisionally licensed, fee-for-service radiologists with international training

4-10+ years in Gander

**Grand Falls-Windsor**

Draft Provincial HR Plan recommends 4.8 FTE;

4 fully licensed, fee-for-service radiologists

2 Canadian trained, 1 international trained and the other writing Canadian College exams

1 radiologist with MRI training

**G. PHYSICAL PLANT CONSIDERATIONS**

**Gander**

Existing Space  
\$600,000 +

**Grand Falls-Windsor**

New Construction Required  
\$1.2 million +

**H. IMPACT OF PACS**

The PACS is in operation in Gander and Grand Falls-Windsor. Consideration will have to be given to the impact on PACS. Specifically, this would entail a review of potential storage space expansion, information flow and timelines of and availability of PACS information.

**I. DRIVING DISTANCE**

- |                                      |   |   |
|--------------------------------------|---|---|
| Bonavista Peninsula                  | - | 24,000 people   |
| Intersection with TCH at Clarenville | - | 1 hour and 54 minutes to St. John's<br>1 hour and 29 minutes to Gander<br>2 hours and 29 minutes to Grand Falls |
| Burin Peninsula                      | - | 21,600 people   |
| Intersection with TCH at Goobies     | - | 1 hour and 37 minutes to St. John's<br>1 hour and 44 minutes to Gander<br>2 hours and 45 minutes to Grand Falls |

Baie Verte	-	6140 people
	-	2 hours and 7 minutes to Corner Brook
		1 hour and 46 minutes to Grand Falls/Windsor
		2 hours and 44 minutes to Gander
Springdale/Robert's Arm/Triton	-	8135 people
	-	1 hour and 48 minutes to Corner Brook
		1 hour and 2 minutes to Grand Falls/Windsor
		2 hours and 1 minute to Gander
Gander		
to St. John's	-	3 hours and 21 minutes
to Corner Brook	-	3 hours and 36 minutes
Grand Falls/Windsor		
to St. John's	-	4 hours and 19 minutes
to Corner Brook	-	2 hours and 38 minutes

Source: Department of Finance  
NL Statistics Agency – Road Distance Database

## APPENDIX IIb

### MRI DATA and STATISTICS For CENTRAL HEALTH (Supplementary Information as requested by Review Team) November 2008

#### Key Contributors

Sherry Freake, Chief Operating Officer, Gander  
Judy Budgell, Corporate Improvement Department  
Doug Ellsworth, Regional Director, Paramedicine and Medical Transport  
Philomena O'Grady, Assistant Director, Health Information  
Wayne St. Onge, Regional Director, Diagnostic Imaging  
Stephanie Power, Regional Director, Corporate Communications

## Preamble

This report represents a statistical overview of health services provided throughout the Central Health region as it pertains to information required by the MRI Consultants.

### Central Health Bed Count

Regional Health Centres	Breakdown of Services	Total Beds
Central Newfoundland Regional Health Centre		
Bassinettes	14	
Family Medicine	17	
General Medicine	21	
Intensive Care	9	
Obstetrics	10	
Pediatrics/Surgery	13	
Psychiatry	20	
Surgery	26	
<b>Total (including bassinettes)</b>		<b>130</b>
James Paton Memorial Regional Health Centre		
Bassinettes	14	
Critical Care	8	
General Surgery/Pediatrics	21	
Medical <sup>1</sup>	21	
Obstetrics	14	
Orthopedic Surgery	20	
<b>Total (including bassinettes)</b>		<b>97</b>

<sup>1</sup> This is a temporary number; beds to be increased to 28 following redevelopment

## Central Health Physician Discipline

Physician Discipline	CNRHC	JPMRHC
Anesthetist	3	4
Dermatology	2	n/a
ENT	Vacant	Vacant
ER Family Medicine	Category A Emergency Room <sup>2</sup>	
Family Medicine <sup>3</sup>	20	10
General Surgery	3	3
Hospitalist	n/a	2
Internal Medicine	5	4
Neurology	1	1
Obstetrics/Gynecology	3	2
Ophthalmology	2	2
Orthopedics	n/a	4
Pathology	2	2
Pediatrics <sup>4</sup>	2	3
Psychiatry	4	2
Radiology	5	3
Urology	1	n/a
<b>Totals</b>	<b>55</b>	<b>49</b>

<sup>2</sup> This is staffed 24/7.

<sup>3</sup> Five funded vacant positions at JPMRHC.

<sup>4</sup> JPMRHC, 2.5 FTE's



## Specific Site Data<sup>5</sup>

Site Information	CNRHC	JPMRHC
Admissions Total (by site)	3938	2780
Outpatient Visits <sup>6</sup>	13,844	25,316
ER Visits (by site) <sup>7</sup>	26,227	23,901
Number of Trauma Transferred Annually to St. John's <sup>8</sup>		18
Number of Orthopedic Trauma Cases (by site)	0	0
Admissions for Spinal Cord Injury	0	0
Number of CT Body Exams	2753	1664
Search & Rescue Transfers		8
Breast Screening	6212	2372
Needle Localizations/Biopsies		
Mammography	49	37
Ultrasound	35	10
Breast Surgeries (breast cancer)	28	24
Overseas Flight Seeking Medical Attention <sup>9</sup>		24

<sup>5</sup> Data captured may be fiscal or calendar year.

<sup>6</sup> Specialists clinics located outside facilities; data unavailable.

<sup>7</sup> Community of Origin Document Attached.

<sup>8</sup> Non trauma transfers included 25 cardiac and 12 general surgeries

<sup>9</sup> Chief complaints allergic reaction, shortness of breath, dyspnea, nausea & vomiting

**Total OR/Minor Procedures by Facility & Specialty<sup>10</sup>**

<b>Cases</b>	<b>CNRHC</b>	<b>JPMRHC</b>
Anesthetist <sup>11</sup>	535	0
Dentist	147	125
Family Practice	14	145
General Surgery	2698	3196
Internal Medicine	1053	273
Obstetrics/Gynecology	792	355
Ophthalmology	424	655
Orthopedics	n/a	553
Otolaryngology	414	n/a
Pediatrics	6	0
Urology	1344	n/a
<b>Total:</b>	<b>7427</b>	<b>5029</b>

**Confirmation of Number of Residents Within 30/60/90 Minutes of Referral Centres by Economic Zone**

<b>Economic Zone</b>	<b>Distance from Referral Site</b>	<b>Population</b>
Kittiwake	Within 60/90 minutes of JPMRHC	46,850
Town of Gander included in above population total		9,930
Exploits	within 30/60/90 minutes of CNRHC	26,450
Town of Grand Falls-Windsor included in above population total		13,740
Emerald	within 60/90 minutes of CNRHC	14,250
Coast of Bays	outside the 90 minutes of CNRHC	7,905
Population Total for Central Health based on 2006 Census		95,455

<sup>10</sup> Source: CIHI Inpatient/Day Surgery Comparison Report by Most Responsible Provider Services Fiscal 2007-2008

<sup>11</sup> Organized pain clinic for Anesthetist at CNRHC.

## General Information

### Wait times for Urgent MRI Referrals from Region

Eastern Health: 14 days

Western Health: 14 days

### MRI Referrals to Corner Brook and St. John's by Specialty or by Physician<sup>12</sup>

Central Health West Identifier #: Corner Brook 190; St. John's 101

Central Health East Identifier #: Corner Brook 145; St. John's 135

### ER-to-ER Transfers<sup>13</sup>

JPMRHC to CNRHC: 150

JPMRHC to St. John's: 153

CNRHC to JPMRHC: 73

CNRHC to St. John's:

### Number & Type of DI Tests Referred for Interpretation

- On average 20% (100/500 General Radiography, 25/125 CT, 25/125 US) on a weekly basis is sent for outsourcing to St. John's Health Sciences Radiologist group from JPMRHC.
- 100% Breast Screening Program at JPMRHC is reported in St. John's. Diagnostic mammography stays in-house.

### Additional/Other Equipment

Additional/other equipment purchases would be the same for both site and included in the tender.

### Current Capital Installation Cost Estimates

The current estimate is \$1.25M for either site.

### Summary of Academics

There is no academic presence in DI at either site. Other academic presence would be comparable.

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<sup>12</sup> Source: PACS; Further details of data request provided at week's end

<sup>13</sup> Source: EHIS; This includes hospital-to-hospital transfers.

## Appendix III:

### Site Visit Interview Schedule

Mr. Robert Woolfrey, Chair, Central Region Board of Trustees  
Ms. Karen McGrath, CEO, Central Region  
Mr. Stephen Jerrett, Sr. Director and Assistant VP – Medical Services

Ms. Donna LeFresne, Director of Nursing, CNRHC  
Dr. Poole, Chief of Radiology, CNRHC  
Ms. Helen Bouzane, Acting Manager, Diagnostic Imaging, CNRHC  
Dr. Boodhun, Neurologist, CNRHC  
Dr. M. Cohen, Chief of Staff, CNRHC

Dr. R. Russell, Orthopedic Surgeon, JPMRHC  
Ms. Sherry Freake, COO, Gander & Area  
Mr. Wayne St. Onge, Regional Director, Diagnostic Imaging  
Dr. Haggie, Chief of Staff, JPMRHC  
Dr. B. Gallagher, President of Medical Staff, JPMRHC  
Dr. Ozoh, Chief of radiology, JPMRHC

## Appendix IV: Review Team Curriculum Vitas

## **CURRICULUM VITAE**

**NAME:**

Charles D. Lo

**HOME ADDRESS:**

100 Greenside Lane  
Hammonds Plains, Nova Scotia  
B4B 2A1

(902) 446-0272

**PLACE OF WORK:**

Department of Diagnostic Imaging  
Capital District Health Authority  
QEII Health Sciences Centre  
Halifax, NS B3H 2Y9

(902) 473-2663 (Office)

(902) 473-5452 (Dept.)

(902) 473-2018 (Fax)

**POSITIONS HELD:**

1983 - 1996

Cardiac Radiologist  
Victoria General Hospital  
1278 Tower Road  
Halifax, NS B3H 2Y9

1996 - 1999

Cardiac Radiologist  
QEII Health Sciences Centre  
1796 Summer Street  
Halifax, NS B3H 3A7

1999 - 2002

Chief, Division of Cardiac Radiology  
New Halifax Infirmary Site  
QEII Health Sciences Centre

Oct. 2002 - June 2003

Associate Head  
CDHA Diagnostic Imaging Department  
QEII Health Sciences Centre

July 2003 - June 2008

Head  
CDHA Diagnostic Imaging Department  
Dalhousie University Department of Radiology  
QEII Health Sciences Centre  
1278 Tower Road  
Halifax, NS B3H 2Y9

**University  
Title**

Professor  
Department of Radiology  
Dalhousie University  
Halifax, NS, Canada

Associate Professor of Medicine  
Dalhousie University

**PRIVILEGES:**

Active Staff, Diagnostic Imaging  
Capital District Health Authority  
QEII Health Sciences Centre  
Halifax, NS, Canada

**EDUCATION:**

**Secondary**

Loyola High School 1964-65  
Montreal, Quebec

Campbellton High School 1965-68

Campbellton, NB  
Student Council President, CHH 1967-68

**University**

St. Francis Xavier University 1968-71  
Antigonish, NS  
Biology Major

Dean's List 1968-71  
St. Francis Xavier University

Bio-Med Society President  
St. Francis Xavier University 1970-71

**Medical School**

Dalhousie University 1971-75  
Halifax, NS

MD 1975

**Internship**

Dalhousie University 1975-76  
Rotating Program  
Halifax, NS

**FAMILY PRACTICE:**

<b>Active Staff</b>	Soldier's Memorial Hospital Campbellton, NB	1976-78
<b>Director of OPD And Emergency Dept.</b>	Soldier's Memorial Hospital Campbellton, NB	1977-78
<b>Courtesy Staff</b>	Hotel Dieu Hospital Campbellton, NB	1976-78

**POSTGRADUATE EDUCATION:**

<b>Residency</b>	Diagnostic Radiology Dalhousie University Halifax, NS	1978-82
	Chief Resident Diagnostic Radiology & Nuclear Medicine	1981-82
	FRCP(C)	1982
<b>Fellowship</b>	Cardiovascular Radiology Victoria General Hospital Halifax, NS Concentration in Invasive Cardiac Imaging & Procedures, including Echocardiography 1 month at Brigham & Women's Hospital Boston, Mass. Killam Scholar	1982-83

**CERTIFICATIONS:**

Medical Doctorate	1975
LMCC	1976
Diplomat of National Board of Medical Examiners	1978
Fellow of RCPSC in Diagnostic Radiology	1982
Diplomat of American Board of Radiology	1983

**MEMBERSHIPS:**

Alpha Omega Alpha Honours Medical Society	1973 (Active)
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Canadian Medical Protective Association	1975 (Active)
Canadian Medical Association	1975 (Active)
Nova Scotia Medical Society	1978 (Active)
Canadian Association of Radiologists	1978 (Active)
Radiological Society of North America	1978 (Active)
Nova Scotia Association of Radiologists	1979 (Active)
Royal College of Physicians & Surgeons of Canada	1982 (Active)
American College of Radiology	1983 - 87

### **ADMINISTRATION AND COMMITTEE WORK;**

<b>Co-Chairman</b>	"Unknown Sessions" of the Nova Scotia Association of Radiologists Annual Meetings held in Halifax, NS	October 1984 1985, 1986
<b>Member</b>	Residency Training Committee Diagnostic Radiology & Nuclear Medicine Dalhousie University	1985 - 1987
<b>Regional Councillor</b>	Radiological Society of North America	1986 - 1990
<b>Member</b>	Fellowship & Manpower Committee Department of Radiology QEII Health Sciences Centre	1986 - 1998
<b>Director &amp; Chairman</b>	Residency Training Committee Diagnostic Radiology & Nuclear Medicine Dalhousie University	1989 - 1995
<b>Member</b>	Internal Review of Rheumatology Residency Program, Dalhousie University	1988
<b>Member</b>	Nominating Committee Victoria General Hosp. Medical Staff	1988 - 1989
<b>Member</b>	Internal Review of Pediatric Cardiology Dalhousie University	1990
<b>Member (Exec) &amp; Sec./Treasurer</b>	N.S. Association of Radiologists	1990 - 1992
<b>Member</b>	Internal Review Committee of Anaesthesia Program, Dalhousie University	1992

<b>Vice-President</b>	Nova Scotia Association of Radiologists	1992 - 1994
<b>Member</b>	Internal Review Committee of Physical Medicine & Rehabilitation Program Dalhousie University	1993
<b>President</b>	Nova Scotia Association of Radiologists	1994 - 1996
<b>Member</b>	Medical Society of Nova Scotia Board of Directors	1995 - 1996
<b>Regional Councillor for Nova Scotia</b>	Canadian Association of Radiologists	1996 - 1998
<b>Member</b>	Royal College of Physicians & Surgeons of Canada Radiology Examination Board	1994 - 1997
<b>Member</b>	Internal Review of Medical Microbiology Program, Dalhousie University	1995
<b>External Reviewer</b>	University of Manitoba Radiology Program	1995
<b>Member</b>	Faculty of Medicine, Search Committee for Radiology Department Headship	1997
<b>Chair</b>	Department of Radiology University Promotion Committee	1998 - 2003
<b>Chief</b>	Division of Cardiac Imaging Capital District Health Authority QEII Health Sciences Centre	1999 - 2002
<b>Chair</b>	Radiation Oncology Internal Survey Dalhousie University	May/June 2001
<b>Associate Head</b>	Department of Diagnostic Imaging Capital District Health Authority QEII Health Sciences Centre	2002 - 2003
<b>CDHA</b>		2003 - 2008
<b>Member</b>	DMAC Quality Committee QEII Clinical Affairs Leadership Committee Quality Initiatives Working Group (Primary Care) Research Policy Performance Planning Committee	

<b>Chair</b>	DMAC	2005 – 2007
<b>Member</b>	DMAC Executive Board of Directors Board Quality Committee Executive Management Committee President/CEO Selection Committee Member, Judging Selection Panel, CH Quality Award	2006 2005
<b>Dalhousie</b>	Member  Clinical Department Heads Committee Joint Department Heads Meeting Residency Training Committee Research Committee Canadian Heads Academic Radiology Nova Scotia Association of Radiologists	2003 - 2008 2003 - 2008 2003 - 2008 2003 - 2008 2003 - 2008 2003 - 2008
<b>Judge</b>	ICR 2004 Resident Award Committee	June 2004
<b>Member</b>	Survey & Search Committee Division of Cardiac Surgery & Neurosurgery	August 2004
<b>Member</b>	Survey & Search Committee Head, IWK Department of Diagnostic Imaging	2005
<b>Chair/Member</b>	Search Committee District Department Chief, Family Practice	2007

**BOOK REVIEWS:**

"Real Time 2-D Doppler Echocardiography" JCAR

"Echocardiography" Arvan, JCAR

"Echocardiography" Feigenbaum, JCAR

**COLLABORATIVE RESEARCH PROJECTS:**

Comparison of Sublingual Nitroglycerin in Aerosol and Tablet Form by Effects on Systemic Hemodynamics and Degree of Coronary Vasodilatation  
RG MacDonald, MA Henderson, RM Miller, CD Lo.

Comparative Analysis of Mitral Valve Disease by Plain Film and Echocardiographic Methods  
D Cheverie, CD Lo, RM Miller

Analysis of Left Ventricular Aneurysms  
D Iles, RM Miller, CD Lo, R Dobson

Pilot Study of Hexabrix 320 in Angiocardiology or PTCA  
M Henderson, RG MacDonald, BM Chandler, MJ Gardner, RM Miller,  
CD Lo, DE Johnstone

Comparative Study of Omnipaque, Isovue and Optiray in Cardiac Cineangiography  
R. Miller, C.D. Lo, R.L. Dobson

Kodak Insight Thoracic Film-Screen Evaluation  
Dr. P. Champagne, Dr. C.D. Lo, Dr. A.D. MacKeen, Mr. Cupid Daniels

Web Based Cardiac Imaging Teaching  
C. Daniels, J. Fraser, R. Miller, C. Lo, R. Dobson

### **VISITING PROFESSORSHIPS:**

April 30 - May 1, 1990	University of Toronto Toronto General Hospital - Cardiac MRI - Cardiac Plain Film Imaging - Resident Sessions
February 28 - March 1, 1991	University of Calgary Foothills Hospital - Cardiac MRI - Coronary Angiography, State of the Art - Cardiac Plain Film Imaging - Resident Sessions
March (2 days) 1992	Memorial University Health Sciences Centre - Resident Sessions
March 30-31, 1993	Memorial University Health Sciences Centre - Resident Sessions
April 20-21, 1994	Memorial University Health Sciences Centre - Resident Sessions
May 9-10, 1995	Memorial University Health Sciences Centre - Resident Sessions
November 20-21, 1996	Queen's University Department of Radiology - Resident Sessions
February 1-2, 2001	Queen's University Department of Radiology - Resident Sessions

## **CONTINUING MEDICAL EDUCATION (Since 1997)**

2000	October (2 days)	Nova Scotia Association of Radiologists Scientific Meeting, Hfx. N.S.
2000	May (5 days)	Cleveland Clinic Cardiac MR Review
1999	October (2 days)	Nova Scotia Association of Radiologists Scientific Meeting, Hfx. N.S.
1999	April (5 days)	Radiology Review Course, Boston, MA, USA
1998	November (4 days)	Radiological Society of North America, Chicago, USA
1998	October (2 days)	Nova Scotia Association of Radiologists Scientific Meeting, Hfx. NS
1997	October (2 days)	Nova Scotia Association of Radiologists Scientific Meeting, Hfx. NS
1997	June (5 days)	Canadian Association of Radiologists, Ottawa, Ontario, Canada
2001	September (4 days)	Imaging Review Course, Toronto
2001	October (2 days)	NSAR Atlantic Radiology Conference, Halifax
2001	November (4 days)	Radiological Society of North America, Chicago, USA
2002	September (3 days)	Canadian Association of Radiologists, Quebec
2002	September (4 days)	Imaging Review Course, Toronto
2002	October (2 days)	NSAR Atlantic Radiology Conference, Halifax
2003	September (4 days)	CAR/NSAR Annual Scientific Meeting, Halifax
2004	May 20-23	SCAR Vancouver, B.C.
2004	June 25-30	ICR/CAR Scientific Meeting, Montreal, Quebec
2003	Nov 30 - Dec 5	RSNA, Chicago, USA
2004	Nov 28 - Dec 3	RSNA, Chicago, USA
2005	March 23 - 25	Thai Radiology Scientific Meeting, Bangkok, Thailand
2005	March 28 - April 1	Stanford's Diagnostic Imaging Update Course, Kauai, Hawaii
2005	May 4-7	Association of University Radiologists, Montreal, Quebec
2005	September 28 - Oct. 2	Canadian Association of Radiologists, Lake Louise, Alberta
2005	October 13-15	Atlantic Radiology Conference, Halifax
2005	November 28 - Dec. 2	RSNA, Chicago, USA
2006	February 10-11	Thai Radiology Scientific Meeting, Bangkok, Thailand
2006	October 12-14	Atlantic Radiology Scientific Meeting, Halifax, NS
2006	Nov/December	RSNA, Chicago, USA
2007	June 24-26	Cdn. Institute's Medical Imaging in Canada 2007, Toronto
2007	June 28 - July 1	Canadian Association of Radiologists, St. John's, NL

## **PAPER PRESENTATIONS:**

"Technetium-HDA Hepatobiliary Imaging" Presented at the Atlantic Provinces Radiological Annual Scientific Meeting, October 1979.

Dr. C.D. Lo

"Plain Film Analysis of Adult Patent Ductus Arteriosus" Presented at

the Department of Radiology Scientific Session, Royal Artillery Park, 1979. Dr. C.D. Lo, R. Miller

"Granulocytic Sarcoma - Report of a Patient Presenting with Esophageal Obstruction" Lo CD, Foyle A. Presented at Atlantic Provinces Radiological Annual Scientific Meeting, October 1980. Dr. C.D. Lo

"Radiographic Analysis of the Course of Legionnaires' Disease" Lo CD, MacKeen AD, Campbell DR, Fraser DB, Marrie T. Presented at the Atlantic Provinces Radiological Annual Scientific Meeting, October 1981. Also presented at the Canadian Association of Radiologists Annual Meeting in Winnipeg, May 1982. Dr. C.D. Lo

"Radiographic and Hemodynamic Correlations in Calcific Aortic Stenosis" Presented at the Canadian Association of Radiologists Annual Meeting held in Vancouver, B.C. June 1984. Dr. C.D. Lo

"CT: Body Imaging" Presented at St. Andrews, NB, CMA, Dalhousie University 1985

"New Advances in Cardiac Imaging" Presented at An International Dialogue on Coronary Disease sponsored by Miles Laboratories, held in Halifax, February 28, 1985. Dr. C.D. Lo

"Radiology of the Mechanical Complications of Ischemic Heart Disease" Presented at Maritime Heart Meeting, April 26, 1989. Dr. C.D. Lo

"Cardiac MRI: Symposium", Presented at CAR Meeting, Quebec City, October 13, 1989. R.M. Miller, S. Iles, C.D. Lo

"Cardiac Chest X-Ray" Presented at NSAR Atlantic Scientific Meeting October 14, 1999, Halifax, N.S. C.D. Lo

***Invited Speaker*** "Radiology of Heart Failure" Presented at the Atlantic Cardiology Workshop, April 2002

***Invited Speaker*** "Cardiac Symposium" Presented at the Canadian Association of Radiologists Annual Meeting, September 2002

"Cardiac Imaging" Presented at NSAR Atlantic Scientific Meeting, October 15, 2004, Halifax, NS

***Invited Speaker*** "Coronary Circulation" Presented at the Annual Thai Radiology Meeting in Bangkok, Thailand, March 25, 2005

Dalhousie CME Presenter "Chest Imaging in Heart Disease", May 25, 2005

***Invited Speaker*** “Coronary Angiogram: Cardiologist’s Perspective” Presented at the CT Workshop, Annual Thai Radiology Meeting, Bangkok, Thailand, February 10-11, 2006

**PUBLICATIONS;**

"Granulocytic Sarcoma - Report of a Patient Presenting with Esophageal Obstruction" Lo CD, Foyle A. American Journal of Clinical Pathology, August 1982

"Radiographic Analysis of the Course of Legionnaires' Disease" Lo CD, MacKeen AD, Campbell DR, Fraser DB, Marrie T. Journal of the Canadian Association of Radiologists June 1983.

## CURRICULUM VITAE

**NAME:** E. Jane Mealey

**ADDRESS:** EMJ Health Care Consulting  
69 Duffus Drive  
Bedford, NS  
B4A 3T9

### CAREER HIGHLIGHTS:

*A dedicated **Health Care Executive leader and consultant** with extensive leadership experience building integrated health and wellness systems for children, youth and their families. Dedicated to the achievement of practice excellence through the development and education of staff, quality management process, enabling targeted research and innovative problem solving, and relationship building with staff, physicians, labour, Board, government and other strategic partners. Demonstrated commitment to family centered care, focused and collaborative professional affiliations, resourcing strong effective teams, and modeling continuous learning.*

### Career Experience

**EMJ Health Care Consulting** **2006-Present**  
**Principal Consultant**

As the Principal Consultant, offer consulting and leadership expertise in a number of areas including: health care leadership, clinical leadership and development, program development, and quality and patient safety. Recent and current projects include: Consultant for the Helipad Development Project for the Pictou County Health Authority, NS (successfully completed December 2007) and Clinical Lead Consultant, for the Interhealth Canada Ltd.(ICL) “Turks and Caicos Islands new Hospitals project” (2006-2010). As a healthcare consultant, I have continued in the role as a surveyor for Accreditation Canada (AC) including serving on AC committees and facilitating AC Patient Safety Education workshops.

**IWK Health Centre, Halifax, NS**  
**Vice-President, Children’s Health** **2003 -**  
**2006**  
**Program Director, Children's Acute & Emergency Care Program** **1997 - 2006**

As a member of the Senior Executive Team, lead strategic initiatives toward an integrated health and wellness system for children, youth and women of the Maritime Provinces. Provide senior leadership for the Children’s Health Program, including peri-operative,



critical care, emergency, and inpatient, ambulatory and community services for the Centre and its referral base in the Atlantic Provinces. Collaborate with the government departments on initiatives such as the air medical transport, oral health, and cardiac services, provincial programs, prevention and promotion initiatives.

Established the strategic direction for the merger of the two children's programs and resulting in enhanced integration of patient care, patient safety and professional development and quality initiatives.

Assumed major leadership role in the Children's site Redevelopment project which will result in the development of a modern inpatient and ambulatory facility to support the needs of children's youth and families and the academic mission of the Health Centre. Co-investigator in a CHSRF funded research study examining issues regarding continuity of care for children and youth within the health care system.

As the Senior Management Lead, facilitated the development of the 2001-2005 Strategic Plan, involving consultation with both external and internal stakeholders, and generating consensus for specific goals and objectives for practice excellence.

Effectively managed a program budget of in excess of \$40 million and more than 650 FTEs within one percent of target.

Worked closely with District Health Authorities to build capacity in the delivery of child and youth health services that supports the concept of care closer to home.

Led the design and implementation of a program-based care structure, including population and service definitions, professional recruitment and transition planning, resource allocation, budgeting, and role and portfolio descriptions. Facilitated team development, including quality management, interdisciplinary care planning and delivery, education and research, policy training and role definitions, and risk management.

Implemented the Centre's quality and risk management approach at the team level. Through the case review process, achieved increased accountability and level of understanding of the contributing factors resulting in concrete changes in multi-disciplinary professional practice. Evaluation of outcome indicators is currently in progress.

Championed the development of a new cross program Web-Based Learning environment to support inter-organizational knowledge sharing and transfer. Program effectively supports new staff orientation, practice education and research, and enhancement of communication and problem solving. Utilization rates continue to increase, effectively meeting educational and development requirements within existing resources.

Provided leadership toward the development, implementation and ongoing work of the Maritime Network for Child and Youth Health to facilitate the development of dynamic, intersectorial relationships with communities, consumers, providers and researchers who play a role in fostering the health and well being of children and youth.

Recruited/co-recruited key medical leadership and practice positions in consultation with medical leadership, including the Chief of Pediatric Emergency Medicine and Pediatric Cardiovascular Surgeons. These high profile situations involved extensive planning and support for affected areas and significant negotiation with Department of Health representatives.

Championed the need for, and co-led the development and implementation of the high profile Heliport Project, dramatically improving the effective and efficient transfer of critically ill patients. This involved a broad community consultative process and building consensus amid widely differing perspectives among community leaders.

Led the senior management and Board component of the Accreditation Process, contributing to the Center's achievement of full accreditation.

Provided key leadership in the Health Centre's response to major crises including IWK/CDHA Pandemic Flu planning, the Swiss Air Disaster, the Kosovo Refugee Crisis, and Strike Management Contingency Planning.

**Capital Health Authority, University Hospital Site  
Senior Director, Patient Care Services**

**July - November 1997**

Initiated the development of a site wide program leadership team and site based professional practice model. Provided on site leadership for all University Hospital site services; ensuring effective linkages within the regional system.

**Capital Health Authority, Edmonton, Alberta  
Patient Care Director, Child Health**

**1995 - 1997**

Responsible for the provision of child health services within the acute care tertiary sector of the region involving 3 sites.

Led the advancement of family centered care philosophy.

Co-led the re-development process that resulted in the newly designed Stollery Children's Health Centre within the University Hospital Site.

**University of Alberta Hospitals**

**1973 - 1995**

**Patient Care Director, Pediatrics/Adult Psychiatry/Long Term Care &  
Vice President, Nursing, Children's Health Centre of Northern Alberta 1993 - 1995**

Co-led the development of a fully integrated Child Health Network for the coordination and delivery of child and youth health services for Edmonton and Northern Alberta.

Negotiated interagency service delivery with five city health centres, establishing a single tertiary component and a network of four primary and secondary community-based sites.

This ultimately led to the reorganization and relocation of professional staff from three unionized groupings and the establishment of the Stollery Children's Health Center.

Negotiated multiple union agreements to facilitate staff transfers between employers without loss of seniority and benefits.

Managed a budget in excess of \$50 million.

<b>Director of Nursing, Pediatrics</b>	<b>1987 - 1993</b>
<b>Nursing Systems Manager (Interim)/Director of Nursing, Critical Care (Interim)</b>	<b>1987</b>
<b>Critical Care Program Instructor/Critical Care Clinical Educator</b>	<b>1981 - 1986</b>
<b>Program Coordinator/ Manager Chronic Respiratory Care</b>	<b>1976 - 1979</b>

**Critical Care Nursing** **1971 - 1976, 1979 - 1981**  
**University of Alberta Hospitals, Edmonton, AB**  
**Saint Joseph's Hospital, Saint John, NB**  
**Ottawa Civic Hospital, Ottawa, ON**  
**Saint John General Hospital, Saint John, NB**

### **Education & Professional Development**

**Master of Education (Administration)**, University of Alberta, 1992  
**Bachelor of Science in Nursing (Post Basic)**, University of Alberta, 1981  
**Nursing Diploma & RN Diploma**, Saint John General Hospital School of Nursing, 1971

### **Professional Affiliations**

Surveyor, Accreditation Canada  
 Director, Ronald MacDonald House, Halifax,  
 Director, Rainbow Haven Charity, Halifax Chronicle Herald  
 Volunteer, Canadian Red Cross (Emergency Response Program)  
 Member, Bluenose Chapter, Canadian College Health Services Executives  
 Member, College of Registered Nurses of Nova Scotia  
 Member, Canadian Nurses Association  
 Member, Accreditation Canada Surveyor Advisory Council  
 Honourary Life Membership, IWK Health Centre Corporation, Awarded September 2006  
 Director, Treasurer, Canadian Association Pediatric Health Centre (CAPHC) Board (2003-2006)  
 Director, Cancer Care Nova Scotia Board (2003-2006)  
 Past-Chair, Maritime Network Child & Youth Health

## **CURRICULUM VITAE:**

**NAME:** Richard. (Rick) Nurse

**ADDRESS:** Crowsnest Consulting  
9 Seafarers Lane  
Whites Lake, NS  
B3T 1W6

### **EDUCATION HIGHLIGHTS**

**Master of Health Sciences - 1981**

University of Toronto

**Bachelor of Arts, Psychology - 1970**

Memorial University of Newfoundland

### **EMPLOYMENT HIGHLIGHTS**

**Sept. 2006 - Present**

**Crowsnest Consulting**

Currently involved in health care and human resources projects in Canada and abroad, including an exciting new hospitals development project in the Turks and Caicos Islands (TCI), a project that was the result of a comprehensive assessment of the future health services needs of the citizens of the TCI.

**Feb. 2006 - Aug. 2006**

**Deputy Minister, Office of Immigration, Nova Scotia**

The Office of Immigration was established in '05 and I served as Deputy Minister during a time of significant change and transition in this portfolio.

**Feb. 2004 - Aug. 2006**

**Commissioner, Nova Scotia Public Service Commission**

The PSC is the Provincial Government's Central Agency with respect to human resources policies and programs. The Commissioner is the Deputy Minister for the Commission and has oversight and responsibility for the Commission's array of HR programs and services, including the Commission's responsibility for assuring fair and consistent application of HR policies all across government departments.

**Jan. 2002 - Jan. 2004**

**Health Consultant and surveyor**

Involved in projects within Canada, Russia and Ireland with a focus on health reform, quality, and on Leadership and Change Management.

**April 1995 - Dec. 2002      President and C.E.O., IWK Health Centre, Halifax, Nova Scotia**

Responsible as a member of the senior management team for implementing the amalgamation of the Izaak Walton Killam Children's Hospital and the Salvation Army Grace Maternity Hospital and for the development of a network of health services for children, women and families through the Maritime Provinces. While at the IWK, led the Health Centre through two strategic planning cycles, surveys by the CCHSE on two occasions with an outcome of full accreditation and no recommendations. Also, led the development of the Corporate Quality and Performance Report Card and the successful implementation of a patient focused Program Based Care model.

**Sept. 1992 - April 1995      President and C.E.O., IWK Children's Hospital, Halifax, Nova Scotia**

Responsible for restructuring the management team and for the development and implementation of a new and comprehensive strategic plan. While in this role the hospital significantly expanded its involvement in ambulatory and outreach services and in mental health services. As a result of these and other initiatives the IWK was well positioned for the next five years of change and evolution.

**January - April 1992      Executive Director (Acting) St. John's Hospital Council**

(Seconded from, but remaining responsible for Janeway Child Health Centre). Responsible for ensuring the completion of a number of planning exercises of major significance to the futures of hospitals located in St. John's. Retained responsibility for overseeing the activities of the senior management group at the Janeway Child Health Centre.

**April 1986 - Aug. 1992      Executive Director, Janeway Child Health Centre**

As Executive Director of the Janeway, I had the opportunity - in cooperation with my management and senior medical staff colleagues - to facilitate the numerous significant change or program developments. (Also served as Chair of Canadian Association of Pediatric Hospitals and as President of the Newfoundland Hospital Association during this time period.)

**April 1984 - April 1986      Associate Executive Director, Janeway Child Health Centre**

Responsible for the day-to-day management of the Health Centre and had lead responsibility for development and implementation of new Strategic Plan for the Centre.

**Nov. 1982 - April 1983      Assistant Executive Director, the General Hospital**

This was very much an extension of learning beyond the completing a Masters in Health Administration. The Executive Director of The General offered the position of Director of Industrial Relations and Personnel with an assurance that every opportunity to see all aspects of the management process would be the result. This proved to be true and, therefore, was a great learning and career experience.

**Sept. 1981-Oct. 1982      Director of Human Resources & Industrial Relations**

**January - June 1981**                      **Administrative Resident, Kitchener-Waterloo Hospital**

**April - June 1990**                      **Administrative Resident, The Hospital for Sick Children**  
During a Residency at the Kitchener-Waterloo Hospital and at the Hospital for Sick Children, I worked closely with Senior Management Staff and most hospital and medical staff committee and was responsible for various research activity.

**June 1977 - Aug. 1979**                      **Administrator, Golden Heights Manor, Bonavista Newfoundland**

**Nov. 1975 - June 1977**                      **Education Coordinator, Newfoundland Hospital and Nursing Home Association**

**Sept. 1970 - Nov. 1975**                      **Instructor and Director of Student Affairs, the Cabot Institute, St. John's, Newfoundland**

## **PUBLICATIONS**

Newfoundland's Win/Win Experience: Selective vs. Across the Board Budget Cuts: R. Nurse, Jane Pardy. Leadership and Health Services, July/August 1993

Students or doctors? The Emergence of collective Bargaining Among Interns and Residents of Ontario: M. Boutilier, R. Nurse, R. Pettapiece, A. Seers, H. Woodinsky. Case Studies in Canadian Health Policy, Canadian Health Association Press

Shifting Responsibility for Homes for Special Care: R. Nurse, P. Purvis. Case Studies in Canadian Health Policy, Canadian Health Association Press

Conquering Fear for Surgery: R. Nurse, R. Deber. Dimensions, March 1982

## **CURRENT AFFILIATIONS:**

Adjunct Professor, School of Health Administration, Dalhousie University  
Member, International Personnel Management Association (IPMA)

## **PREVIOUS POSTS:**

**Chair**                      Canadian Association of Paediatric Hospitals (1990/91)  
**President**                      Newfoundland Hospital and Nursing Home Association Board of Directors (1990/91)  
**Chair**                      St. John's Area Home Care Program (1988/89)  
**Chair**                      Canadian College of Health Services Executives, Eastern Newfoundland Chapter (1984/85)

**Director** Newfoundland and Labrador Association for the Aging (1974/79)

**Board Member**, Canadian Centre for Ethics in Public Affairs (2005-2006)

**Chair**, Neptune Theatre Foundation B (2003-2004)

**Board Member** (Community Representative), College of Physicians and Surgeons of Nova Scotia B (2002-2004)

#### **AWARDS & RECOGNITION:**

**Berns Roth - Book Award**, 1980

**Johnson and Johnson Award**, 1981

Dalhousie University and Bluenose Chapter C.C.H.S.E., **Community Contact Award** 2000

**Honourary Director**, IWK Foundation, 2002

**Life Member**, IWK Health Centre Corporation, 2002