SPOUSAL PERSPECTIVES ON FACTORS INFLUENCING RECRUITMENT AND RETENTION OF RURAL FAMILY PHYSICIANS

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Spousal Perspectives on Factors Influencing Recruitment and Retention of Rural Family Physicians

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A thesis submitted to the School of Graduate Studies in partial fulfillment of the requirements for the degree of Master of Science

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Faculty of Medicine
Memorial University of Newfoundland

October 2004

St. John's, Newfoundland

ABSTRACT

Recruiting and retaining medical personnel to rural communities is a human resource challenge. Studies suggest that the spouse's experiences and perceptions of a rural community are among the most influential factors in a physician's decision to remain in or leave a rural practice.

In this explorative study, thirteen interviews were conducted with spouses of rural physicians to gain a better understanding of spousal concerns and experiences regarding rural living. Specifically, this study describes the factors that both directly and indirectly influence spousal contentment and explores how these factors contribute toward recruitment and retention of physicians to rural practice locations. Participants in this study included the spouses of general practitioners and family physicians practicing and living in rural communities (population 10,000 or less) on the Burin and Bonavista Peninsulas.

The findings indicate physician workload and community integration have the greatest direct influence on spousal contentment, while licensure, remuneration, and physician demand indirectly influence spousal contentment and ultimately practice location decisions. Overall, contentment of both physicians and their spouses was found to be crucial for recruitment and retention therefore policies need to be integrated to serve both parties with their best interest in mind.

ACKNOWLEDGEMENT

I am sincerely grateful for the continuous support, guidance and encouragement of my supervisor and friend, Dr. Maria Mathews whose strong work ethic has deeply touched my life. I extend thank you to members of my thesis committee, Dr. Bill Bavington and Dr. Bill Eaton, for their guidance with this project. I would like to thank the participants for this study who so willingly gave their time and welcomed me into their homes.

Thank you to the Peninsula's Health Care Corporation for their support and assistance with this project. I extend special thanks to Dr. Kevin Beamont, Roy Manual and Janice Sanger for graciously accommodating my information requests. I would like to acknowledge the Canadian Health Services Research Foundation and the Atlantic Regional Training Centre for funding my Masters program.

Finally I would like to thank my parents, Edgar and Beth Mayo, for their continued support and encouragement and for helping me realize and achieve my goals.

TABLE OF CONTENTS

1.0 INTRODUCTION

Attracting and retaining physicians to rural areas is a challenge in many regions of Canada resulting in large variations in geographic distribution and availability of medical services. The uneven distribution of physicians across Canada, particularly in rural and remote communities (Barer and Stoddart, 1991; Commission on the Future of Health Care in Canada, 2002) raises concerns about equity and access to health care. It is perceived that in some areas too few physicians are serving too large a population, which may negatively influence access to services and timely medical care.

Determining the appropriate number of physicians needed to serve a population has been an ongoing challenge due to differences in physician work patterns and the changing medical needs of the population (Pong and Pitblado, 2001). Although the number of physicians relative to the overall population has increased in most provinces in recent years, concerns about the size of the physician workforce and its ability to meet the health needs of the population continue to exist.

A complex mix of personal and professional factors are known to influence physician recruitment and retention. Of these factors, concerns of the spouse and family are very important. Nonetheless, there has been little in depth research exploring the contribution of spousal contentment on physician recruitment and retention. While there have been small steps made towards promoting contentment of physicians and their families in rural practice locations, further research on spousal contentment is needed to better implement physician resource planning and recruitment strategies.

1.1 Objectives of the Study

The goal of this study was to explore the experiences and perspectives of spouses of rural physicians to gain a better understanding of the spouse's concerns and experience with rural living. Based on the premise that contentment leads to retention, this study describes the factors that both directly and indirectly influence spousal contentment and explores how these factors contribute toward recruitment and retention of physicians to rural practice locations.

1.2 Rationale

Previous studies have examined recruitment and retention from the physician's perspective. These studies have consistently found that the physician's spouse plays an essential role in the decision to move to, remain in, or leave a rural practice. However, there have been few studies that describe the experience of rural physicians' spouses and the factors that contribute to or detract from their satisfaction with rural living. By developing a better understanding of these factors, this study aims to identify potential policy implications and inform physician resource planning.

Physician recruitment and retention issues remain an important issue particularly in rural provinces such as Newfoundland and Labrador. This is one of the first studies to use local data to examine this issue. The results of this study will provide an enhanced understanding of the importance of the spouse's experiences on the decision to move to and remain in a rural practice location.

1.3 Terminology

1.3.1 Family Physician

The term family physician refers to both family medicine specialists and general practitioners.

1.3.2 Spouse

The term spouse includes husband, wife and partner regardless of whether a couple is in a legally married, common-law or in homosexual or heterosexual relationship.

1.3.3 Rural Practice Location

Rural is defined as a community with a population of 10,000 or less.

1.3.4 The Eastern Region of Newfoundland and Labrador

Newfoundland and Labrador is composed of six institutional health boards (Appendix A) that are responsible for providing primary care and institutional health services to the residents of the province. The Peninsulas Health Care Corporation (PHCC) provides health services to over 57,000 residents in 161 communities in the Eastern Region (Bonavista Peninsula, Burin Peninsula and Clarenville area). The Eastern Region is composed entirely of rural and remote communities, the largest having approximately 5000 people, that struggle with a variety of health care challenges that include difficulty recruiting and retaining physicians, and an aging population.

2.0 LITERATURE REVIEW

2.1 Introduction

Physician supply is an ongoing and long-standing challenge to countries worldwide. Attracting and retaining physicians to rural areas is a problem resulting in large variations in geographic distribution and availability of medical services (Barer and Stoddart, 1991; Commission on the Future of Health Care in Canada, 2002). It is perceived that in some areas too few physicians are serving too large a population, which may negatively influence access to services and timely medical care (Barer and Stoddart, 1992; Commission on the Future of Health Care in Canada, 2002).

Measuring physician supply requires more than a simple head count (Pong and Piblado, 2002). While physician to population ratios are useful for gaining a general understanding of physician supply they may be misleading since physician supply is more complex and involves a number of factors. Accurate measures of physician supply must account for physician work patterns, physician and patient mobility, physicians practicing beyond the scope of their specialties, and the medical needs of the population (Canadian Labour and Business Centre, 2003). Unfortunately, many of these factors are difficult to measure and, as a result, predicting the current supply and future demand for physicians is complicated and problematic.

2.2 History of Physician Supply in Canada

Understanding physician supply and distribution challenges facing Canada today requires an appreciation of the history of physician supply. In Canada, physician supply has historically been an issue of concern and controversy. In 1964, the Hall Commission (Hall, 1964) projected a need for more physicians to meet the

future health care needs of the population. In response, Canada increased the physician workforce by opening four new medical schools and expanding it's existing12 medical schools. As a result, between 1968 and 1976, the number of Canadian medical graduates increased from 1016 to 1714 per year (Tyrrell, Dauphinee, and Scully, 1999).

Several years later, it was believed that Canada may be heading toward an oversupply of physicians and the Hall report recommended that a physician workforce study be carried out (Hall, 1980). The workforce study (Federal/ Provincial/ Territorial Advisory Committee on Health Manpower, 1984) recommended reducing medical school enrollment to avoid a projected physician surplus.

In 1991, Barer and Stoddart (1991) recommended several strategies to control physician supply, including a reduction in student enrollment in medical schools. As a result, in 1993 undergraduate medical enrollment was reduced by 10% and the total number of Canadian medical school graduates was reduced to 1,516 in 1999 (Ryten, Thurber, and Buske, 1998). Consequently, the physician to population ratio decreased from 1.91 physicians per 100,000 population to 1.83 between 1995 and 1999 (Tyrrell et al., 1999) meaning fewer physicians were available to provide services to the population. Soon after the decrease in enrollment, concerns about Canada's ability to maintain an adequate physician workforce began to re-surface (Ryten et al., 1998). Today, concerns relating to physician supply are still prominent and policy recommendations have shifted once again toward increasing enrollment of medical students.

2.3 Number of Physicians in Canada

Determining the appropriate number of physicians needed to serve a population has been an ongoing challenge due to differences in physician work patterns and the changing health needs of the population. Even though the number of physicians relative to the overall population has increased in most provinces in recent years, concerns about the size of the physician workforce and its ability to meet the health needs of a population continue to exist.

Even though physician supply generally has been on the rise, yearly changes vary by provinces. Between 1996 and 2000, Alberta reported the largest growth in the total number of physicians (12.2%) while Nova Scotia (8.8%), Saskatchewan (6.5%), British Columbia (5.9%) and Manitoba (5.8%) also experienced substantial growth. Ontario, Quebec, New Brunswick and Prince Edward Island had smaller increases while the Yukon (-12.8%) and Northwest Territories / Nunavut (-11.4%) experienced substantial decreases. Physician numbers in Newfoundland and Labrador remained stable (Canadian Labour and Business Centre, 2003; Canadian Institute for Health Information, 2001). However, compared to the national average, Newfoundland and Labrador has a lower number of physicians per 100,000 population; in 2002 there were 189 physicians per 100,000 people in Canada, but only 175 physicians per 100,000 people in Newfoundland and Labrador (Canadian Medical Association 2004).

2.3.1 Urban-Rural Differences in Physician Supply

In addition to provincial variation in physician supply, urban-rural differences within provinces exist. Rural communities have suffered from a shortage of primary

care physicians for many years and have felt the chronic shortage longer and more severely than urban areas (Barer and Stoddart, 1991; Commission on the Future of Health Care in Canada, 2002). Furthermore, rural areas often experience greater difficulty attracting and retaining physicians than urban locations and as a result there can be as much as a fourfold difference in physician-to-patient ratios between urban and rural locations in Canada (Conte, Imershein, and Magill, 1992).

2.4 Factors Contributing to Physician Shortages

Physician shortages in Canada have been attributed to a number of factors in addition to the decrease in medical school enrollment of the early 1990s. These factors include increased training time, increased retirement rate of physicians currently in practice, feminization of the physician workforce, lifestyle changes, and fewer international medical graduates being able to attain a license to practice in Canada (Chan, 2002; Canadian Labour and Business Centre, 2003).

2.4.1 Increased Training Time

On average, medical residents are older than previous generations. The increase in age appears to be related to the increase in length of undergraduate and postgraduate training, which slows the entry of new physicians into the practice pool. In Canada, the practice of accepting students who have completed a minimum of two years of University was replaced with the requirement that all applicants have completed an undergraduate degree. This change in pre-admission training time has increased the length of training time of physicians by at least two years. Furthermore, an increase in the amount of time spent in post-graduate training between 1981 and 2000 has been attributed toward the decline in physician supply (Chan, 2002).

2.4.2 Retirement

With the aging physician population, the number of physicians retiring each year in Canada has almost tripled from 295 in 1981 to 832 in 2000 (Canadian Labour and Business Centre, 2003). Statistics indicate that the number of physicians over the age of 55 will increase from 26% in 1999 to approximately 43% by 2021 (Tyrrell et al., 1999). As a result it is expected that a large number of physicians will retire from the profession. A recent study in Manitoba found a significant shift in physician workload from younger to older Family Physicians. Younger physicians, ranging from 30-49 years of age, were providing 20% fewer visits per year compared to that same age group 12 years ago. Furthermore, physicians ranging from 60-69 years of age increased their workload during the same time period. This intergenerational shift has implications on physician supply since the older generation will be retiring over the next five to fifteen years and their replacements have workloads that are quite different and lower than doctors of the past (Watson, 2003).

2.4.3 Feminization of the Physician Workforce

From 1981 to 2001, the proportion of women in the physician workforce increased from 13% to 30% and has since stabilized (Canadian Labour and Business Centre, 2003). Increasing numbers of women in the physician workforce affect physician supply since female physicians generally practice fewer hours than their female counterparts (Tyrrel et al., 1999; Incitti, Rourke, Rourke, and Kennard, 2003). In addition to differences in activity level and service intensity, national data from the Canadian Medical Association shows that female physicians retire earlier than male physicians. Feminization of the physician workforce is expected to increase and it is

predicted that by 2015, females will make up more than 40% of the workforce (Tyrrell et al., 1999). Therefore changes that feminization have brought to the physician workforce are expected to affect future physician supply.

2.4.4 Lifestyle

Lifestyle preferences of physicians and their families impact the workload and geographic distribution of physicians. Today, more physicians want to work fewer hours in order to pursue a more satisfying and balanced lifestyle, participate in activities outside the work environment, and spend more time with family and friends. As a result, there is concern that the effective strength and workload of the physician workforce is declining (Tyrrell et al., 1999; McKendry, 1999).

Practice location decisions tend to be driven by professional incentives and personal lifestyle factors that strongly favor concentration in urban practice settings (Barer and Stoddart, 1991). Physicians tend to concentrate in areas of larger populations with a greater range of educational, religious, cultural and recreational opportunities (Tyrrell et al., 1999).

2.4.5 International Medical Graduates

Foreign trained physicians represent an important source of physicians across the country (Canadian Labour and Business Centre, 2003). Canada has a history of recruiting international medical graduates (IMGs), a strategy that has been widely successful toward sustaining an adequate level of medical services to areas of need, particularly by rural provinces. Since 1969, approximately 20-30% of Canada's practicing physicians have been graduates of medical schools outside the country (Watanabe, 1987).

In the early 1990s, several provinces adopted policies that restricted IMGs licensing. However, rurally based provinces such as Newfoundland and Labrador, adopted licensing policies that facilitated the entry of IMGs into the medical workforce. As a result, Newfoundland and Labrador has the country's second highest percentage (45%) of practicing international medical graduates (Canadian Medical Association, 2004).

All IMGs who want to practice in Canada must pass the Medical Council of Canada Evaluating Examination (MCCEE). The MCCEE evaluates general medical knowledge compared to graduates of Canadian medical schools. Newfoundland and Labrador permits IMGs who have passed the MCCEE to obtain a provisional license for primary care practice whereas most other provinces require completion of qualifying exams (MCCQE). As a result, anecdotal evidence suggests that IMGs move to rural practice locations based primarily on licensing requirements and not because of personal choice. Recruiting IMGs to rural practice has not been difficult but retaining them once they pass the MCCQE has been a challenge since these physicians leave rural areas once they are qualified to practice elsewhere.

2.4.6 Specialty Mix

Between 1987 and 1992, almost two thirds of all medical graduates entered practice as general practitioners or family physicians. However, in recent years the proportion of Canadian medical school graduates choosing family medicine has gradually declined (Canadian Post-M.D. Education Registry, 2002; Canadian Labour and Business Centre, 2003). Family physicians are the major providers of medical care in rural areas and form a critical part of the rural physician workforce. Therefore

the declining numbers of Canadian graduates entering family medicine has serious implications on overall physician supply, particularly in rural areas.

2.5 Characteristics of Rural Practice Locations

While many aspects of medical practice are universal, differences between urban and rural practice locations exist. These differences may be viewed as either positive or negative, depending on their personal preferences and experiences.

2.5.1 Professional Aspects of Rural Practice Locations

For most rural physicians, professional environment, workload expectations and scope of practice often differ from their urban counterparts. Rural physicians often have autonomous and diverse practices involving a broad scope of practice and wide variety of skills (Hayes, Veitch, Cheers, and Crossland, 1997; Pope, Grams, Whiteside, and Kazanjian, 1998). The ability to personalize medical care is a highly admired characteristic of rural practice that provides an opportunity for high quality physician–patient relationships and continuity of care (Lahaie, 1991).

Medical doctors practicing in rural areas often provide a wider range of services and therefore must be equipped to handle a diverse range of problems. These physicians often operate solo practices with limited resources and limited professional support. They often face heavy after-hours workload, which can lead to high stress environments, burnout and ultimately discontentment (Easterbrook et al., 1999; Costa, Schrop, McCord, and Gillanders, 1996; Parker and Sorensen, 1978; Payne, 1992; Hayes et al., 1997; Pope et al., 1998; Incitti et al., 2003). Furthermore, rural populations tend to be older, poorer, sicker, less educated and often perceived as

having a lower level of health than urban populations (Canadian Institute for Health Information, 2001).

2.5.2 Personal Aspects of Rural Practice Locations

The personal appeal of a small community involves environmental and social elements including the serenity of the natural environment, a sense of security, and family oriented lifestyle and values (Lahaie, 1991; Hayes et al., 1997). Moreover, rural practice settings involve close community relationships that foster integration and contentment (Hayes et al., 1997).

Lifestyle in a rural practice is dependent upon the size of the community and distance from an urban center. Rural and remote communities tend to have fewer educational and extracurricular opportunities, limited job opportunities for spouses, and scarce opportunities for social and cultural interactions (Hayes et al., 1997; Stewart and Bass, 1982; Lahaie, 1991). Furthermore, physicians who practice in rural communities often experience diminished personal time due to heavy workloads.

2.6 Factors that Influence Recruitment and Retention

Over the years, a number of factors have been found to influence a physician's decision to move to, stay in or leave a rural practice location. The settings in which physicians receive their training influence their future practice location (Rabinowitz, Diamond, Markham, and Hazelwood, 1999). A physician's undergraduate and post-graduate rural experience, as well as locum experience are influential in choice of practice location (Kazanjian and Pagliccia, 1996). Therefore physicians with a rural background and practice experience in rural areas are more likely to move to these areas compared to individuals with only urban experiences. Consequently, prolonged

urban-oriented social and cultural experiences of medical school, residencies, attitudes of the specialist medical school faculty contribute to dissatisfaction with rural practice (Easterbrook et al., 1999; Costa et al., 1996).

Professional factors associated with practicing in a rural location include workload, hospital services, professional support, educational opportunities and income potential income (Easterbrook et al., 1999; Costa, 1996; Yang, 2003; Parker and Sorensen, 1978; Payne, 1992). Personal factors associated with practicing in a rural location include physician background, significant other's wishes, children, educational opportunities, spousal employment opportunities, culture, size of community, extracurricular activities and proximity to family and friends (Payne, 1992; Stewart and Bass 1982; Parker and Sorensen, 1978; Bible, 1970). Also, physicians and/or spouses with experience living in a rural location are more likely to choose a rural practice location compared to physicians with only an urban background (Costa, 1996; Stewart and Bass, 1982; Rosenthal et al., 1991; (Easterbrook et al., 1999).

While all of these factors contribute toward practice location decisions, the feelings of the spouse has been identified as being one of the most important influence of all (Kazanjian and Pagliccia, 1996).

2.7 The Influence of the Spouse

Many medical students are already married or in a significant relationship before they finish training. Therefore the influence of the spouse or partner is a very important factor influencing physician recruitment and retention (Holmes and Miller, 1986; Costa, 1996; Crouse, 1995; Kazanjian and Pagliccia, 1996). Taken into context

with many of the diverse factors influencing physicians' decision to move to, stay in, or leave a rural practice location, spousal contentment is a critical component toward successful recruitment and retention (Holmes and Miller, 1986; Costa et al., 1996; Crouse, 1995).

Nonetheless, minimal research has been done to further understand the implications of spousal contentment on recruitment and retention. This thesis addresses this gap by examining the perceptions and experiences of physicians' spouses to gain a better understanding of the factors that influence the decisions to move to and remain in rural communities.

3.0 METHOD

3.1 Data Collection

3.1.1 Qualitative Methodology

The goal of this study was to explore the experiences and concerns of the spouses of rural family physicians to develop a better understanding of factors that contribute to physician recruitment and retention in rural practice settings. Key informant interviews with spouses of rural family physicians were conducted to explore factors that influence spousal contentment and to provide a better understanding of why physicians move to, stay in, or leave rural practice locations. The exploratory nature of this study helps situate the findings of previous quantitative research on rural physician recruitment and retention into a broader social and cultural context. Interviews were chosen over focus groups since large geographic distances separated many of the potential participants. Also, recruiting enough participants to attend several focus groups was potentially problematic since the number of individuals that satisfy the inclusion criteria for this study was relatively small.

3.1.2 Participants

This study involved in-depth interviews with the spouses of family physicians currently practicing in the region served by the Peninsula's Health Care Corporation (PHCC) in the province of Newfoundland and Labrador. The term "spouse" includes husband, wife and partner regardless of whether a couple is in a legally married, common-law or homosexual/heterosexual relationship.

All participants included in the study were residents of a rural community for at least six months and their spouse was currently practicing medicine in the area. Physicians married to other physicians were included in this study. Specialists, residents, locums, spouses of family physicians who practice but did not reside in a rural community and those living outside the jurisdiction of the PHCC were excluded from this study. The total number of participants interviewed was determined by saturation, meaning we continued to interview spouses until no new information was collected.

3.1.3 Recruitment of Participants

A letter (Appendix B) was sent to the chief executive officer of the PHCC to outline the research objectives and to seek the PHCC board's approval and support of the study. The letter requested the PHCC's assistance in gathering contact information of potential participants. Enclosed with the letter was a proposal for the study that was submitted to the PHCC quality council and granted ethics approval.

The PHCC sent a letter to all physicians practicing in the region. The letter described the study and asked physicians to inform the PHCC whether their contact information could be released to me. After a two-week waiting period, the PHCC provided a list of family physicians whose spouses met the inclusion criteria. I then telephoned the spouses of these physicians, described the nature and purpose of the study, and invited them to participate in an interview at a time and location of their convenience. In some cases, interviews were conducted by telephone.

3.1.4 Data Collection Instrument

A brief pre-interview questionnaire (Appendix C) was used to collect demographic information about both the participant and the physician spouse. The questions related to their previous residence, age, children, current employment and education level.

A standardized semi-structured open-ended interview script was used to conduct the interviews (Appendix D). It was pre-tested in a pilot interview with a spouse of a rural physician in another region to ensure the proposed questions were clearly stated and avoided unnecessary language and jargon. After the first interview, the questions were re-evaluated to ensure that relevant information was collected. The data obtained from the pilot interview were not used in the analysis.

Each interview ranged from 45-60 minutes in length and was conducted in either a private room in the local health facility within the community, the home of the participant or by telephone. For telephone interviews, consent was discussed over the phone and consent forms and questionnaire responses were faxed directly to me. Each interview was tape-recorded and transcribed verbatim.

3.1.5 Description of the Interview Questions

The interviews began with general background questions and then moved into specific questions to gain a deeper understanding of the issues raised by participants. Initial interview questions related to the circumstances that lead to the decision to move to a rural practice setting. These questions were followed by further inquiry into the participant's experiences, satisfaction and concerns with rural living including positive and negative aspects as well as opportunities for education and employment.

Specifically, questions relating to the spouse's perspective on how these experiences and concerns contributed to their decision to stay or consider leaving a rural community were asked.

3.2 Data Analysis

3.2.1 Pre-Interview Questionnaire

The responses obtained from the pre-interview questionnaire were compiled and entered into a Microsoft Excel spreadsheet. Frequencies were tabulated to describe the demographic characteristics of the participants.

3.2.2 Grounded Theory

The interview transcripts were analyzed using a grounded theory approach involving the constant comparative method of analysis (Glaser and Strauss, 1967). Grounded theory is a methodology for developing theory that is supported by data that are systematically gathered and analyzed (Strauss and Corbin, 1998). Through this approach a theory evolves during the initial data collection and is elaborated and modified as incoming data are carefully compared with existing data. In this study, responses were compared to identify similarities and differences to further develop understanding of how particular experiences and circumstances contributed to spousal contentment.

3.2.3 Coding the Data

The interview transcripts were independently read and examined for similarities and differences by my supervisor and me. Emerging concepts and themes were identified and a coding template was developed to organize the data into categories that best reflected the themes presented by the data. The transcripts were

entered and coded using NUDI*ST (Non-numerical Unstructured Data – Indexing, Searching and Theorizing). NUDI*ST software is specifically designed to organize and manage of qualitative data. Using NUDI*ST, previously identified categories were used to code each transcript. Once all transcripts were coded, reports were generated and used to organize and develop a theoretical framework to understand the factors that contribute to spousal contentment.

3.2.4 Integrity of the Research

Credibility of qualitative research is a measure of how well or true the depictions of the phenomenon are (Beck, 1994). Participants provided rich data and openly articulated their experiences and concerns with rural living using descriptive examples. Furthermore, credibility of the research was maintained by using a step-by-step coding procedure to analyze the data. This procedure increases reader understanding of how we arrived at the theory from the data.

Validity, the degree to which accurate inferences can be made based on the results of the study (Martella, Nelson, and Martella, 1999), was enhanced by interviewing a diverse group of participants to a point of saturation. After hearing similar responses to particular issues, we were confident that the analysis was inclusive and represented the spouses' experiences and concerns. Finally, to promote the accuracy and consistency of the data, my supervisor and I independently examined the transcripts and met regularly throughout the analysis to discuss the meaning of the responses.

3.2.5 Ethical Considerations

The Human Investigations Committee at Memorial University of Newfoundland granted ethics approval for this project in the Fall of 2003 (Appendix E). All participants signed a consent form (Appendix F) before beginning an interview. The privacy and confidentiality of all participants was protected throughout the study. To ensure anonymity in reports, quotations were altered where necessary and particular caution was taken not to identify a participant through regional location or any other identifying information. Physical security measures were also used to protect the data including locked office, password-protected computer files and study codes to allow for an anonymous response. Only my supervisor and I had access to the interview transcripts and identifiable information.

4.0 RESULTS

4.1 Description of the Sample Population

Thirteen key informant interviews, ranging 45-60 minutes in length, were conducted with spouses of rural family physicians living in the Eastern Region of the province of Newfoundland and Labrador including the Burin and Bonavista Peninsulas and surrounding areas. Of the participants, all but two were females ranging in age from mid-twenties to mid-sixties. The education level of participants ranged from high school diploma to professional degrees.

At the time of the interviews, eight participants were not working. Four participants were unemployed due to limited job opportunities and four were not working by choice (i.e. homemakers, students and retirees). Of the five employed participants, all held positions suited to their educational training. Most of the participants had children or were planning to have children in the near future. The number and ages of children varied from infant to adult.

Five participants and their physician spouses were born and raised in Newfoundland and Labrador. Their physician spouses all graduated from Memorial University's medical school. The remaining eight participants and their physician spouses originated from foreign countries. Their physician spouses graduated from non-Canadian medical schools.

4.2 General Model

In the interviews, we identified a number of factors that influence a spouse's contentment and perception of rural living. These individual factors were organized into two overriding themes: indirect and direct factors. These factors differ in the

relationship to spousal contentment, their influence on recruitment versus retention, and their global versus individualized nature.

Indirect factors do not directly impact spousal contentment but rather provide background to the reasons why a physician moves to a rural community. These factors provide the lens through which spousal contentment is understood. Indirect factors are more likely to influence recruitment (why a physician moves to community) rather than retention (why a physician stays in a community). Indirect factors are global in nature and describe the characteristics of a community or region. This study identified four indirect factors: licensure, community characteristics, remuneration and number of physicians in the community.

In contrast, direct factors have a more immediate impact on contentment and relate to retention rather than recruitment. Direct factors also relate to the individual and/or the physician spouse rather than the community or region.This study identified eight key factors that directly contribute toward spousal contentment with a rural practice location. These factors include: physician workload, previous residence, community integration, family and friends, maturity, cultural differences, children, and employment opportunities.

4.3 Contentment

In this study, contentment refers to overall satisfaction with various aspects of the community including relationships with others in terms of feeling a part of the community. Contentment is a sense of happiness with the lifestyle associated with the practice location, feeling comfortable with surroundings and not feeling bored or isolated. The model (Figure 1) illustrates how direct and indirect factors influence

spousal contentment. Indirect factors are contextual and create an understanding of the direct factors in a way that accurately depicts their true influence on contentment. Indirect factors influence direct factors, which have greatest impact on contentment and ultimately retention. Generally, after taking indirect factors into account, physicians of spouses who are content stay in rural communities while spouses who are not content leave rural communities.

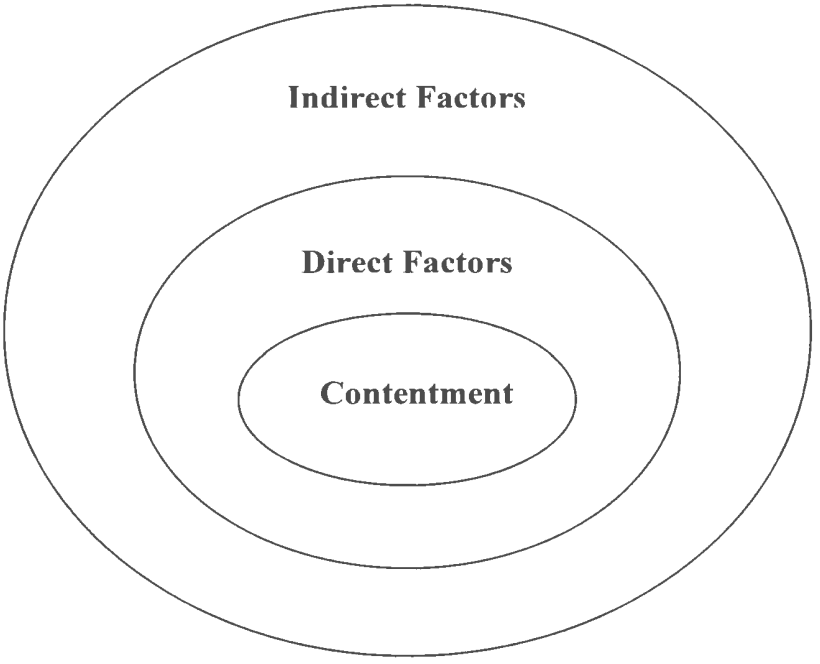

Figure 1. Model illustrating how indirect and direct factors influence contentment

4.4 Indirect Factors

4.4.1 Medical Licensing Requirements

The study revealed that the majority of international medical graduates (IMGs) move to rural areas of the province to acquire necessary training and to fulfil

licensure requirements. For many IMGs, entrance into Canada to practice medicine begins in Newfoundland and Labrador where, compared to some other Canadian provinces, it is easier to obtain a license to practice.

> *To practice in Canada, you have to have a license. To attain a Newfoundland license is easier than other provinces and that is why we came here.*

IMGs move to rural practice locations primarily because of licensing requirements, not personal choice. Practicing in rural Newfoundland is perceived as a stepping-stone for practicing in other Canadian provinces.

> *You will often find that when they (IMGs) come they will use Newfoundland as a stepping stone and nothing on earth is going to persuade them to stay.*

As the quote suggests, licensing requirements will draw physicians to the province but not attract or convince them to stay. Like other contextual factors, licensing is a provincial policy, rather than an individual characteristic.

4.4.2 Community Characteristics

In addition to licensing requirements, positive aspects of the community including sense of security, the natural environment, family values, distance from urban centres, recreational facilities and access to professional and personal education influence choice of practice location.

> *The number one reason for coming here was security. You have peace of mind when you live here. There is no crime and working conditions are much better.*

The natural environment motivates people to move to and stay in a rural area. Traditionally known for it's rugged beauty, Newfoundland and Labrador was frequently referred to as an attractive area to live.

> *I enjoy the outdoor life, the solitude and the natural beauty that we have here including the hikes and the wildlife...it is really quite a powerful reason to stay.*

Furthermore, Newfoundland communities were also described as being socially connected and supportive of a family oriented lifestyle.

> *Because the community is small, it is family oriented and I really respect that aspect of rural living.*

Despite these positive aspects of rural living, several characteristics such as distance from urban centres, limited personal and professional opportunities and limited recreational facilities negatively influence recruitment. The further a community is from a large urban centre the less attractive it is due to limited access to recreational facilities and to educational opportunities.

> *I like the facilities in an urban area such as going to a gym and interacting with others of the same culture - but a rural area lacks our culture. If you want certain things for your children, schools or other things you are only going to get that in an urban area.*

In addition to educational opportunities for children and adults, rural communities offer few continuing medical education opportunities for physicians.

> *With regards to professional development and CME, there are more of these in urban areas and most of them occur on weekends but some*

physicians are unable to attend those because of the distance and because of the on-call schedule. But if you are in an urban area you tend to be able to attend a lot more events and be more integrated into all kinds of programs.

4.4.3 Remuneration

For some, monetary incentives were not important in the decision to move to a rural area. People who move to the province do so for reasons relating to direct factors not money. Moreover, people stay despite poor wages if they are content. For others, remuneration is a disincentive to work in Newfoundland and Labrador. After settling into a rural practice location the existent wage disparity between provinces is an important reason to consider leaving. Remuneration indirectly influences spousal contentment as it places stresses on the family.

We have seriously considered moving mostly over the wage disparity and workload. You just look at it and you say why I am here when I could be making more somewhere else.

Furthermore, high debt load accumulated during medical school was also found to influence physician recruitment and retention. Offers from other provinces and countries including higher salaries and sign-on bonuses were seen as attractive reasons to leave the province. As a result, financial concerns are a driving factor behind the decision to seriously consider moving out of the province. One participant explained that they left Newfoundland for several years due to a high debt load incurred during medical school. Although they were previous residents of the

province and wanted to remain close to family, staying in the province was not a realistic option for them because of their financial situation.

> *The reason we decided to leave was just the debt load. We owed over $100,000 and we were a young married couple and we wanted to have children and we wanted to have a family home and we couldn't afford to do any of that with the student loans...so we thought the only light at the end of the tunnel was to move.*

Data from the interviews showed that leaving a practice location did not mean to urban areas but to the province in general. As a result, wage disparity between provinces was a bigger issue than wage disparity between urban and rural areas of the province.

4.4.4 Number of Physicians in the Community

Professional discontentment with a practice location stems from heavy workloads and after hours call shifts that places a burden on physicians and their families.

> *I think the biggest problem is that there has to be enough doctors in an area. If there are not enough doctors then physicians are not going to stay. They can't stay working 24/7. There has to be more doctors recruited and that will help keep others in the community because they do not have to work continuously and they have somebody to call on if they need help.*

The number of physicians practicing in a community is an indirect factor because that number is determined at a regional level. The number of physicians in an

area affects remuneration and workload, discussed in sections 4.4.3 and 4.5.1, respectively.

All of the indirect factors discussed above contribute to a better understanding of the direct driving factors behind spousal contentment. These direct factors will be discussed in the following section.

4. 5 Direct Factors

4.5.1 Physician Workload

Physician workload is an important influence on spousal contentment and family life in rural practice locations.

> *The reason that the spouse is unhappy is that their partner is working all the time. The spouse is not going to be very happy because they are going to be left at home and going to be lonely and may not have any support. Even if you attain friends and have an outside network, you will still need your spouse to be home too and if they are out working all the time you are not going to want to stay and have that kind of relationship.*

Spouses of physicians would like them to work less and spend more time at home sharing household and parenting responsibilities. As a result, increasing the availability of physicians' personal time contributes positively toward spousal contentment.

> *It wasn't just my idea to have children and I refuse to raise them myself like a single mother because my husband needs to be out on call all the time. When we moved here he worked a lot simply because there were not enough doctors and I finally said to him this is crazy. This can't go on*

because we can't do this. I can't raise these kids by myself and it is not fair to them and it is not fair to you. I don't want to have to put your picture on the refrigerator and say that is daddy.

Although a rural community is a busy work environment for physicians, employment opportunities and activities for spouses to engage in are limited, leaving them feeling bored and alone. Connections through family, friends, children and the workplace are helpful toward promoting community integration and resolving some of the issues of isolation and discontentment. These will be discussed in the following sections.

4.5.2 Previous Residence

Individuals accustomed to rural living are more receptive toward moving to a rural practice setting and are more likely to be happy and feel connected compared to those raised in urban areas.

We don't mind rural areas because that is where we grew up, we prefer it.

Furthermore, individuals who grew up in a rural community are more likely to have family and friends in the area, which facilitates contentment through connections with the community. The influence of family and friends is further discussed in section 4.5.4.

4.5.3 Community Integration

Willingness to try new things and to adapt to the community facilitates contentment. Involvement with members of the community through organized socials and extracurricular activities provides networking opportunities and encourages spousal contentment with rural living.

Community involvement is important because you have an outlet so when your husband comes through the door in the evening you are not saying...oh I didn't do anything today...I am so bored...I hate this place and I want to get out of here.

Furthermore, involvement of physician's spouses and families with the community may increase social awareness and a sense of belonging and connectedness.

There is a doctor who has been here for a couple of years and he brought his wife here last winter but she has no means of transportation and she has two children. She is in the house all day and she doesn't meet anyone and she doesn't know anyone. Therefore if I don't introduce her to anyone she is not going to meet anyone and she is going to be stuck in the house and they are not going to stay. I think there is nothing to connect the spouses right now in terms of pulling them in. A support network would provide someone to talk to, someone to go out with and that type of thing.

4.5.4 Family and Friends

Having family and friends in an area directly influences contentment and retention.

When he came he planned on staying only for a few years but then when we met...I had family here and he became very much a part of my family. I think that had a significant impact on him staying.

Being close to family and friends was a motivator toward staying in a rural area while isolation and distance from family and friends facilitated discontentment and desire to leave.

If you are close to your family and you have a lot of friends in the area then you are going to be a lot more hesitant to leave than if you feel alone.

Many international medical graduates leave behind family and friends in order to pursue their career and as a result often feel personally and professionally isolated which creates discontentment with a practice location. The absence of family and friends is particularly troublesome for spouses.

I am all alone I have nothing to do and I don't know anybody, it does get frustrating but you know I try to do the best that I can to manage and adjust.

4.5.5 Maturity

Maturity as it relates to expectations and experience, influence integration into a new area. Contentment with living in a rural community is often easier to achieve for older spouses who had more reasonable expectations or rural practice compared to younger people who often have unreasonable expectations regarding a rural lifestyle.

It was very difficult for me when we arrived because there is nobody here that is my age. I feel like the youngest married person that lives here...it was difficult for me to talk to anybody or to make friends with anybody so I spent about a month talking to nobody.

4.5.6 Cultural Differences

Differences in culture and preferred social and extracurricular activities create discontentment for people who are unable to do the things they enjoy.

I am one of these really very busy people I like to be out there, I had university I had family and friends, I had my community to volunteer in but here I have nothing. Here I can't do anything.

IMGs are often more reluctant than Newfoundland and Labrador graduates to stay in a rural practice location because of lifestyle and cultural differences. There are a number of interrelated reasons why IMGs leave rural Newfoundland.

It is ethnic, it is religious, it is cultural and they are not very happy here. Many of them have no place to worship here and they can't get the food they want to eat and they want to go to a bigger centre where there are people of their own ethnic culture.

Furthermore, the impact of cultural differences on children creates discontentment with a rural practice location. Many foreign families want their children to have a cultural identity and familiarity with their own cultural background.

We definitely don't want to raise a child away from our cultural background.

4.5.7 Children

Children influence contentment with a rural community. Families, particularly with young children, are more prepared to stay in a rural practice location for a longer period of time than physicians without children. Children's educational opportunities, extracurricular activities and safety are important factors in choosing to stay in a rural practice location.

Before our son reached school age we decided that we needed to find some place to settle down.

However, many foreign families felt that urban areas provide better education and more extracurricular and cultural opportunities.

> *I have always grown up in an urban area, I don't see any advantages for a child here and that is because I have no experience being in a place like this. I would just definitely say I want my child to be raised in an urban area where there are more facilities and more exposure to worldly things than in Newfoundland.*

Furthermore, children facilitate integration into the community. Activities involving children provide opportunities to meet and connect with others.

> *If you are involved with your kids at school that is a way you will end up getting integrated and meet more people. I think being involved with the community and with things involving the kids will get you involved in many different things.*

4.5.8 Employment Opportunities

In this study, spouses who were able to attain employment developed contentment with the rural area, regardless of whether employment is related to previous training.

> *After we moved here I picked up a job and that was probably an influence or factor why we stayed.*

4.6 Tying it all Together

Taken into context with many of the diverse factors influencing physicians' decision to move to, stay in, or leave a rural practice location, spousal contentment is an important component toward successful retention.

Indirect factors identified throughout this study enhance understanding of spousal contentment with respect to physician recruitment and retention. Understanding the dynamic relationships that exist between indirect and direct factors on spousal contentment help situate the findings toward an accurate view of reality. The model illustrates how each of the direct and indirect factors fit together in view of physician recruitment and retention. For example, seeing more patients could increase physician remuneration but this would increase workload, which may in turn lead to burnout and professional dissatisfaction.

The indirect factors are contextual and create a backdrop for understanding of the direct factors in a way that accurately depicts the true relationships between them and their influence on contentment. Generally, after taking indirect factors into account, spouses who are content stay while spouses who are not content leave.

5.0 DISCUSSION

5.1 Discussion of the Themes in Relation to the Literature

Attracting and retaining physicians to rural areas is an ongoing and long-standing challenge in Canada and worldwide. As a result, there is a large amount of literature on the factors that contribute toward physician recruitment and retention. Unfortunately, much of this literature merely identifies spousal influence as being one of the most important recruitment and retention factors but falls short of understanding the dynamic behind spousal influences and practice location decisions. To address this gap in the literature, we explored spouse's experiences with a focus on the factors that contribute to or detract from their satisfaction with rural living.

Like previous studies, we found that financial concerns (Cooper, Heald, Samuels, and Coleman, 1975; Pope et al., 1998), social and environmental characteristics of rural communities (Lahaie, 1991; Rosenthal, Rosenthal, and Lucas, 1992) and previous residence in rural communities (Carter, 1987; Easterbrook et al., 1999; Costa et al, 1996; Stewart and Bass, 1982; Rosenthal et al., 1992) attract physicians to rural practice locations. Issues related to workload are also important to physicians and their spouses. Our study supports earlier findings that the undersupply of physicians and limited professional support result in heavy workloads (Thommasen and Thommasen, 2001; Hayes, 1997; Rosenthal et al., 1992) and limit a physician's family and leisure time (Skipper and Gliebe, 1997; Stewart and Bass, 1982).

Becoming a part of the community is important to spousal contentment and promoting long-term retention in rural areas. Through development of an "identity in

place", involving the medical community and the community at large, physicians and their families become integrated and thus retained in rural communities (Cutchin, 1997). Like other studies we found that professional and volunteer outlets for spouses (Stewart & Bass, 1982), and having children (Yang, 2003; Sempowski, Godwin and Seguin., 2002), family and friends (Hayes et al., 1997; Bible, 1970; Rosenthal et al., 1992) and employment (Cooper et al., 1975) contribute to integration. Furthermore, differences in language, religious beliefs and preferred extracurricular activities were found to create obstacles to successful integration and contribute toward spousal discontentment with a practice location. These finding support other studies that identified culture as an important factor that affects recruitment and retention decisions (Kazanjian and Paglicca, 1996).

Unlike previous studies, we found that licensure polices contributed to recruitment, particularly of international medical graduates. Given Newfoundland and Labrador's unique licensure requirements, it is not surprising that other studies did not report this factor. Previous studies report that limited employment opportunities for spouses discourage retention (Movassaghi and Kindig, 1989; Yang, 2003). In these studies, physician spouses had difficulty finding work appropriate to their skills and training. In support of other studies, we found spousal contentment is dependent on how spouses view their career (Cooper et al., 1975; Holmes and Miller, 1986). Employment was not as important a factor since only individuals living in rural areas were included in this study. Therefore physicians who decided not to move to a rural area due to limited spousal opportunities were not accounted for.

5.2 Components of the Conceptual Framework

From the results of this study, a conceptual framework (Figure 4.1) was developed to understand spousal contentment. The framework explains how two types of factors, indirect and direct, influence spousal contentment and practice location decisions. These factors differ in their relationship to spousal contentment, their influence on recruitment versus retention, and their global versus individualized nature.

From the framework, hypotheses can be made about the impact of individual factors on recruitment and retention. When direct factors become prominent and take precedence over indirect factors then contentment with staying in a rural practice location is likely to override the decision to leave. However, if indirect factors take precedence over direct factors then discontentment with a practice location may lead toward the decision to leave. For example, someone who specifically moves to a practice location because of licensure (indirect factor) is less likely to remain in the area. Whereas someone who moves to an area for reasons relating to family and friends (direct factor) is more likely to stay due to connections with the community. Since the conceptual framework was developed using qualitative data, a follow up to this study incorporating quantitative measurements of the importance of each factor would be useful toward further exploring spousal contentment.

5.3 Policy Implications

There is almost universal agreement among analysts that the uneven distribution of physicians is one of the most difficult of all physician resource policies to solve (Barer and Stoddart, 1991). Financial incentives have been the primary focus

behind past policies regarding physician recruitment and retention, however, research suggests that as a stand-alone policy, financial incentives have limited influence on physician retention (Yang, 2003). To be most effective, financial incentives must be viewed with respect to a number of factors that relate to both personal and professional characteristics of physicians and their families including cost of living, cost of running a practice in a rural location, spousal employment, children's education and trade-offs in terms of personal time and practice expectations (Pope et al., 1998). In addition to strategies involving remuneration, policy makers need to understand key factors that influence spousal contentment to effectively create strategies to increase physician supply in rural and remote areas.

Contentment of both physicians and their spouses is crucial for recruitment and retention. As a result, policies need to be integrated to serve both parties with their best interests in mind. Integration of polices involves understanding the indirect and direct factors identified in this study and using this information to promote contentment of physicians and their families.

While there are a number of factors that directly influence spousal contentment, many of them are personal and as a result it is difficult to implement policies that will influence them. Therefore an understanding of how they collectively influence one another is needed to develop interventions to support long-term retention of rural physicians. For example, while overwork is a contributor toward physician dissatisfaction with a rural practice setting, workload issues also impede spousal contentment because of limitations placed on personal and family time. Therefore further research regarding the influence of workload issues is needed to

foster strategies that improve physician and spousal contentment with rural practice settings. Workload and financial factors must be considered with respect to the characteristics of rural communities. These areas are often sparsely populated and often unable to sustain the desired level of income for multiple physicians. Many rural communities do not have the population base to financially support several physicians in one area, as a result certain aspects of workload particularly after hours call must be shared among too few physicians. Therefore, policies need to be integrated to address issues of professional isolation, workload and remuneration.

Contentment with a practice location is related to previous experience. Therefore increasing early exposure of rural medicine to students may provide a higher proportion of graduates with reasonable expectations regarding rural practice locations. Exposure of medical students to rural medicine during pre-clerkship, clerkship and residency should be evaluated for its effectiveness of recruiting and retaining physicians to these areas. Furthermore, exposing rural students to the opportunities of a medical career may influence more rural students to choose medicine.

International medical graduates have made substantial contributions to Canadian health care and will continue to be an important component of physician supply in the future. The results of this study support the notion that IMGs move to rural practice locations primarily because of available employment opportunities and licensing, not personal choice. Since many IMGs move to rural areas of the province specifically for licensing reasons, the advantages of spousal support strategies for retention remains questionable since many of these families have no intention of

staying in the area. Achieving spousal contentment among this group is complex involving a number of barriers including differences in language, ethnicity and culture. Therefore, if licensing requirements are the primary reason for moving to an area, then spousal support networks may not be a plausible solution since international medical graduates may have limited desire to stay in the area. Further understanding of how spousal contentment impacts retention of international medical graduates is needed.

5.4 Strengths and Limitations

The qualitative nature of this study provides an in depth look into issues influencing both physicians and their families. This study is unique in that it integrates much of the information attained from previous quantitative studies, with regards to future policy directions. A further strength of this study is that it uses local data collected specifically to explore spousal perspectives on recruitment and retention and therefore is most relevant toward directing policy in Newfoundland and Labrador.

The transferability of results could be strengthened by examining experiences of spouses in other rural communities in Newfoundland and Labrador, and in other provinces. The participants of the study included only residents of rural areas and did not include individuals who had left or those who have decided not to move to a rural area. Therefore the study was unable to explore reasons for not moving to a rural area or reasons for moving away from a rural area, which are both important aspects of spousal contentment.

Although this study included only family practice physicians and general practitioners, similar recruitment and retention issues affect specialists as a result, further research in this area is needed and may be beneficial for the development of effective recruitment and retention strategies.

6.0 CONCLUSION

The physician's spouse is highly influential in the decision to move to, remain in, or leave a rural practice location. As a result, this study explored the factors that both directly and indirectly influence spousal contentment and how these factors contribute to recruitment and retention of physicians to rural practice locations.

Thirteen key informant interviews were conducted with spouses of rural family physicians currently practicing in the region served by the Peninsula's Health Care Corporation (PHCC) in the province of Newfoundland and Labrador. All participants included in the study were residents of a rural community for at least six months and their spouse was currently practicing medicine in the area. Specialists, residents, locums, spouses of family physicians who practice but did not reside in a rural community and those living outside the jurisdiction of the PHCC were excluded from this study.

A conceptual framework was developed to understand how various factors influence spousal contentment. The framework includes two types of factors, indirect and direct. Indirect factors do not directly impact spousal contentment but rather provide background to the reasons why a physician moves to a rural community. In contrast, direct factors have a more immediate impact on contentment and relate to retention rather than recruitment. From the framework, hypotheses can be made about the impact of individual factors on recruitment and retention. When direct factors become prominent and take precedence over indirect factors then contentment with staying in a rural practice location is likely to override the decision to leave.

Conversely, when indirect factors take precedence over direct factors then discontentment with a practice location may lead toward the decision to leave.

The results suggest that remuneration is an important element of practice location decisions. However policies that address the other factors contributing toward contentment may also be effective toward overall physician recruitment and retention. Therefore, financial incentives must be viewed with respect to a number of factors that relate to both personal and professional characteristics of physicians and their families.

Increasing early exposure to rural practice for medical students and increasing selection of students from a rural background may provide a higher proportion of graduates with reasonable expectations who are more likely to practice in rural communities. Furthermore, support of initiatives to promote rural medicine among students should be encouraged and evaluated, to foster interest in medicine among rural students.

Our study highlighted the implications that recruiting IMGs to rural practice locations, particularly its impact on retention. IMGs move to rural practice locations primarily because of licensing not personal choice, therefore, encouraging retention of physicians and their spouses, who may have no desire to stay in a practice location, is a policy challenge. Nonetheless, fostering spousal contentment may be beneficial for individuals who have moved to an area for other reasons than licensing. As a result, further understanding of ways to recruit individuals who are attracted to an area for reasons other than licensing is needed. While licensure has been effective for

recruitment, further research is needed to understand the implications of licensure on retention.

Contentment of both physicians and their spouses is crucial for recruitment and retention. As a result, policies need to be integrated to serve both parties with their best interest in mind. Integration of polices involves understanding the indirect and direct factors identified in this study and using this information to promote contentment of physicians and their families. While there are a number of factors that directly influence spousal contentment, many of them are personal and as a result it is difficult to implement policies that will influence them. Therefore an understanding of how they collectively influence one another is needed in order to increase the number of rural physicians, improve satisfaction with rural practice, and develop interventions to support long-term retention of rural physicians. In the future, communities, physicians, medical schools and governments will need to address spousal contentment with respect to recruitment and retention issues to positively meet the health needs of rural populations.

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Appendix A: Map of Research Area


N
W
E
S
Newfoundland
100 0 100 200
Kilometers
St. Anthony
Port Saunders
Harbour Deep
Deer Lake
Flower's Cove
Norris Point
Springdale
Bishop's Falls
Bonavista
Gander
Grand Falls
Windsor
Buchans
Corner Brook
Stephenville
Port aux Basques
Harbour Breton
Grand Bank
Burin
St. Lawrence
Placentia
Whitbourne
Clarenville
St. John's
Mount Pearl
February 2000

ECONOMICS
& STATISTICS


BONAVISTA
CLARENVILLE
GRAND BANK
BURIN
ST. LAWRENCE

Appendix B: Letter to Peninsula's Health Care Corporation

Division of Community Health
Faculty of Medicine
Memorial University of Newfoundland
St. John's, Newfoundland
A1B 3V6

December 2004

Mrs. Glynda Reid
Acting CEO of Peninsula's Health Care Corporation
Peninsula's Health Care Corporation

Dear Mrs. Reid

I am a Masters candidate at the Faculty of Medicine, Memorial University of Newfoundland. I am working on a research study examining the factors affecting recruitment and retention of rural physicians, from the perspective of the spouse or partner. As part of this study, I plan to interview the spouses of family physicians practicing in the region served by the Peninsula's Health Care Corporation. This research project aims to further develop an understanding of spousal influence on recruitment and retention of rural physicians and lead to the development of supportive initiatives to help the transition of physicians and their families into rural areas. Enhanced understanding of spousal influence on physician recruitment and retention will provide policy makers, researchers, health boards, and medical associations with evidence to enhance physician resource planning initiatives and to foster spousal contentment with rural living by accommodating spousal needs and interests.

This past November I was in touch with Mr. Roy Manual concerning this research study that I am planning to conduct in Eastern region of the province. Mr. Manual was in support of this project and suggested that he would consult with the Director of Quality and Risk Management review the proposal.

I am writing to ask for your support and assistance with this valuable research study. I am seeking assistance from the Peninsula's Health Care Corporation to:

I. Inform family physicians of this study by forwarding a memo describing the details of this study
II. Inform spouses or partners of family physicians of this study by forwarding a letter to the spouses of family physicians describing details of their involvement in this study.
III. Seek permission from physicians for the release of their contact information.
IV. Provide a list of the names and home phone numbers of all consenting family physicians, with spouses or significant others, currently practicing in the area served by the Peninsula's Health Care Corporation.
V. Offer input concerning the scope and content of the interview questions and design of the interview script to ensure that information relevant to the needs of the Peninsula's Health Care Corporation is collected.

I have enclosed a copy of the research proposal including an interview script to be used during these interviews. This study is currently undergoing ethics approval by the Human Investigations Committee at Memorial University, is there an approval process through the Peninsula's Health Care Corporation that I should be aware of?

I would be more than happy to present the findings of this study to you as well as provide a summary of the report and a copy of the completed thesis.

Thank you,

Erin Mayo
Division of Community Health, Faculty of Medicine
Memorial University of Newfoundland
St. John's, NL, A1B 3V6
Phone: (709) 777-7101 Fax: (709) 777-7382
Email: erinmayo@nf.sympatico.ca

/ encl.

Appendix C: Pre-interview Questionnaire

Study ID_____

Spousal Perspectives on Factors Affecting Recruitment and Retention of Rural Physicians

Participant Questionnaire

Date of Questionnaire Completion: _____
Month Day Year

Gender: Male Female

Age Range:

- ❑ 0-20
- ❑ 21-30
- ❑ 31-40
- ❑ 41-50
- ❑ 51-60
- ❑ 60+

Birth Place: _____

Highest Level of Education you have completed:

- ❑ Less then high school/ junior high
- ❑ Completed high school
- ❑ Some community college, technical school, or university
- ❑ Completed community college, technical school, or university
- ❑ Post Graduate training (Masters or PhD)
- ❑ Professional Degree (Dentistry, Medicine, Law)
- ❑ Other: _____

Are you currently employed? Yes No

Do you have any children? Yes No

If *YES*:

How many children do you have? _____

What are the age(s) of your child/ children? _____

Birth Place of Partner: _____

Age Range of Partner:

- ❑ 0-20
- ❑ 21-30
- ❑ 31-40
- ❑ 41-50
- ❑ 51-60
- ❑ 60+

Marital Status: _____

Length of Time Together: _____

Employment position of partner:

- ❑ Fee-for-service
- ❑ Salary
- ❑ Other_____

Appendix D: Interview Schedule

Interview Schedule

Participants will be introduced to the interview with the following dialogue:

Thank you for completing the brief questionnaire. As you know, the purpose of this study is to identify and investigate factors that are important for recruitment and retention of rural family physicians from the perspective of the spouse or partner. Previous studies have identified the influence of the spouse or partner as one of the most influential factors affecting recruitment and retention. From this study I hope to gain insight into the experiences of you and your partner after arriving in this rural practice location and the factors that have influenced you and/ or your partner to stay in or to leave your current location of residence.

Examples of Probes and Questions to Facilitate the Interview:

Let me begin by asking you about your current location of residence.
What brought you to (community)?
How long have you lived in (community)?
Where are you originally from?
What factors did you consider when moving to this community?
Probe: Financial
Family and Friends
What factors of rural living attracted you and your partner to reside in this particular rural community?
How does rural living compare with urban living? Particularly, how do you feel about living in this community?
Can you describe for me the characteristics of living in this community that you enjoy and those that you dislike?

I now have a few questions relating to your Partner (rural physician)
Where did your partner attend medical school?
Why do you think your partner choose this practice location? Can you describe for me the influence you feel you had over the decision to move to this rural community?

Often times there are many factors that influence choice of practice location.
What factors would you say were the most influential to you and your partner for choosing (the community)?
Probe: Financial incentives
Family and friends
Did you have any friends or family in the area before you moved here?

Optional
Your response to the questionnaire indicates that you have a child (or children).
What do you feel are the benefits and challenges to raising your child (children) in this community?

Retention of physicians, particularly in rural areas is an issue of concern in Newfoundland.

Have you ever considered moving from this area? Can you please describe for me the circumstances that lead to such consideration (or lack or consideration)?
What has influenced you to stay in this community?
Can you please describe for me the aspects of rural life that you enjoy and the aspects of rural life that you dislike?

Probe:

- Distance from friends and family
- Isolated

What would you say are the benefits and drawbacks of living in a rural community?

Probe:

- Educational Facilities
- Fitness Facilities

Do you feel that your daily activities have been limited by living in this community, if so can you please explain why?

What type of activities or programs would you like to see introduced to your area?

Through this study, key issues concerning recruitment and retention of to physicians to rural practice locations will be explored to provide policy makers, health boards, and medical associations with evidence to enhance physician resource planning initiatives and to foster spousal contentment with rural living by accommodating spousal needs and interests.

What do you think should be done to enhance recruitment and retention of physicians to rural communities?

Probe:

- Support Networks
- Increased job opportunities for spouses
- Better education facilities for children

Appendix E: Ethics Approval Letter

Memorial
University of Newfoundland

Human Investigation Committee
Research and Graduate Studies
Faculty of Medicine
The Health Sciences Centre
November 26, 2003

Reference #03.160

Ms. Erin Mayo
c/o Dr. M. Mathews
Community Health
Faculty of Medicine

Dear Ms. Mayo:

This will acknowledge your correspondence dated November 3, 2003, wherein you clarified issues, provide a revised consent form, interview questions and script and pre-questionnaire for your research study entitled "**Factors affecting recruitment and retention of rural physicians from the perspective of the spouse.**"

The Chairs' of the Human Investigation Committee reviewed your correspondence and granted approval of the revised consent form, interview questions and script and pre-questionnaire as submitted and granted **full approval** of your research study. This will be formally reported to the full Human Investigation Committee at the meeting scheduled for **November 27, 2003**.

Please be advised that the Human Investigation Committee currently operates according to the Good Clinical Practice Guidelines, the Tri-Council Policy Statement and applicable laws and regulations.

Sincerely,

Sharon K. Buehler, PhD
Co-Chair
Human Investigation Committee

Richard S. Neuman, PhD
Co-Chair
Human Investigation Committee

SKB;RSN\jd

C Dr. C. Loomis, Vice-President (Research), MUN
Mr. W. Miller, Director of Planning & Research, HCCSJ

Appendix F: Consent Form

Faculty of Medicine, Memorial University of Newfoundland
St. John's, Newfoundland

Consent to Take Part in Health Research

TITLE: Spousal Perspectives on Factors Affecting Recruitment and Retention of Rural Family Physicians

INVESTIGATOR: Erin Mayo, BSc. 777-7101

You have been asked to take part in a research study. It is up to you to decide whether to be in the study or not. Before you decide, you need to understand what the study is for, what risks you might take and what benefits you might receive. This consent form explains the study.

The researchers will:

- **discuss the study with you**
- **answer your questions**
- **keep confidential any information which could identify you personally**
- **be available during the study to deal with problems and answer questions**

1. Introduction/Background:

Recruitment and retention of physicians to rural communities continues to be a problem for many areas in Newfoundland. Studies have shown that both professional and personal factors strongly influence a physician's decision to stay in or leave a rural practice and that the influence of the spouse is a critical factor for the recruitment and retention of physicians. As a result, there is a need to expand our understanding of the factors that will influence physicians and their families to move to or stay in rural communities as a way of developing effective strategies to address the long standing physician shortages in this province.

2. Purpose of study:

The purpose of this study is to investigate the factors that are important for recruitment and retention of rural family physicians in the region served by the Peninsula's Health Care Corporation located in the Eastern Region of Newfoundland.

3. Description of the study procedures:

This explorative study will use key informant interviews with the spouses of family physicians currently practicing in the region served by the Peninsula's Health Care

Corporation in the province of Newfoundland and Labrador. All questions are optional and you do not have to answer any question you are uncomfortable with.

4. **Length of time:**

This study will require 45-60 minutes of your time.

5. **Possible risks and discomforts:**

Some of the questions asked during this interview will be of a personal nature. All answers will be confidential and will not identify you in any report or presentation. You can ask questions at any time, choose not to answer a question, or stop the interview at any time.

6. **Benefits:**
It cannot be guaranteed that you will benefit from taking part in this study.

7. **Liability statement:**

Signing this form gives us your consent to be in this study. It tells us that you understand the information about the research study. When you sign this form, you do not give up your legal rights. Researchers or agencies involved in this research study still have their legal and professional responsibilities.

8. **Confidentiality:**

Only the investigators of this study may have access to any confidential documents pertaining to your participation in this study. Your name will not be attached to your interview transcript therefore no individual in this study will be able to access "your" information. Furthermore, your name will not appear in any report or article published as a result of this study.

9. **Questions:**

If you have any questions about taking part in this study, you can meet with the principal investigator of this study. That person is:

Erin Mayo, 777-7101

Or you can talk to someone who is not involved with the study at all, but can advise you on your rights as a participant in a research study. This person can be reached through:

Office of the Human Investigation Committee (HIC) at 709-777-6974
Email: hic@mun.ca

Signature Page

Study Title: Spousal Perspectives on Factors Affecting Recruitment and Retention of Rural Family Physicians

Principal Investigator: Erin Mayo, 777-7101

To be filled out and signed by the participant:

Please check as appropriate:

I have read the consent	Yes { }	No { }
I have had the opportunity to ask questions/to discuss this study.	Yes { }	No { }
I have received satisfactory answers to all of my questions.	Yes { }	No { }
I have received enough information about the study.	Yes { }	No { }
I have spoken to Erin Mayo	Yes { }	No { }
I understand that I am free to withdraw from the study.	Yes { }	No { }
I understand that this interview will be tape recorded.	Yes { }	No { }
I understand that it is my choice to be in the study and that I may not benefit	Yes { }	No{ }
I agree to take part in this study.	Yes { }	No{ }

_____ _____

Signature of participant Date

_____ _____

Signature of witness Date

To be signed by the investigator:

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

_____ _____

Signature of investigator Date

Telephone number: _____