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**ADULT REHABILITATION
AND PRIMARY HEALTH
CARE IN ONTARIO**

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FINAL REPORT

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EXECUTIVE SUMMARY

Introduction

Several factors including, an aging population, an increase in the prevalence of chronic diseases, and a shift in the delivery of health care from hospital to the community are placing increased demands on Ontario's primary health care system. Family physicians play a major role in the coordination and provision of primary health care services and, more recently, nurse practitioners have started to play a significant role. Rehabilitation professionals, including occupational therapists and physiotherapists are also key members of the primary health care team and can be an important resource for primary health care physicians and nurse practitioners. In particular, it has been suggested that offering rehabilitation services at the primary health care level could result in several positive outcomes including lower costs than for services offered at hospitals and greater continuity of care for people with disabilities. However, literature indicates that rehabilitation services are underutilized in primary health care settings, particularly in the care of older adults and those with chronic conditions.

Objectives

The objectives of this study examining primary health care and rehabilitation (occupational therapy and physiotherapy) were:

1. To identify the characteristics of adult clinical populations being served by primary health care rehabilitation professionals in Ontario.
2. To describe the models of working relationships (e.g., referral and communication patterns) currently in existence among primary health care physicians, nurse practitioners, and rehabilitation professionals (occupational therapists and physiotherapists) in Ontario.
3. To identify opportunities and challenges related to the provision of adult rehabilitation in Ontario from the perspectives of primary health care physicians, nurse practitioners, and rehabilitation professionals (occupational therapists and physiotherapists).

Methods

PHASE 1

A sample of 13 health care professionals of various backgrounds who work in primary health care settings in Ontario were invited to participate as key informants in Phase 1 of this project. Eight key informants agreed to participate and were interviewed utilizing open-ended questions to obtain perspectives on current processes and issues involved in the provision of adult rehabilitation in primary health care in Ontario. The results of Phase 1 were utilized to help guide the development of questionnaires for Phase 2 of this project.

PHASE 2

Phase 2 involved administering a mailed questionnaire to a stratified random sample of physicians (N=3001), nurse practitioners (N=321), occupational therapists (N=500), and physiotherapists (N=1100) who provide primary health care services to adults in Ontario. A total of 2001 questionnaires were returned for a response rate of 40.7%.

Results

PHASE 1

Key informant interviews were completed with 8 participants. Key informants identified barriers to the provision of rehabilitation in primary health care in three main areas: funding, access, and communication/information. Elements of ideal models of rehabilitation in primary health care were also recommended.

PHASE 2

Practice Settings

- The large majority of primary health care rehabilitation was delivered in private practices/clinics and Community Care Access Centres.
- Rehabilitation professionals rarely worked in the same primary health care settings as physicians and nurse practitioners.

Clinical Populations

- Musculoskeletal (acute and chronic), neurological, and general debility (e.g., geriatrics, dementia) conditions comprised the largest proportion of rehabilitation professionals' caseloads in primary health care settings.

Referral and Communication Patterns

- Primary health care physicians and nurse practitioners most commonly referred patients with neurological and general debility conditions to occupational therapists and patients with acute musculoskeletal, chronic musculoskeletal, and neurological conditions to physiotherapists.
- Physicians and nurse practitioners only referred a portion of the diagnostic conditions that rehabilitation professionals treat.
- Physicians and nurse practitioners cited the cost of private rehabilitation and long waiting times as the most common barriers to referring patients to rehabilitation.
- Written notes were the most common method of communication among rehabilitation professionals, physicians, and nurse practitioners.

Access to Primary Health Care Rehabilitation

Availability

- Physicians and nurse practitioners reported less availability of rehabilitation services in the North compared to other regions in Ontario.
- Over a third of physicians and nurse practitioners did not know if the Arthritis Society Community Rehabilitation Services were available in their community.

Wait Times

- The majority of occupational therapists and physiotherapists reported wait times of less than one week from receipt of referral to when they first see a patient.
- Wait times for physiotherapy were significantly longer in publicly-funded compared to privately-funded practice settings; the North compared to other regions; and for patients with chronic medical, neurological, cardiopulmonary, and mental health conditions compared to musculoskeletal conditions.

Funding

- Rehabilitation professionals worked in a mix of different funding arrangements in both public and private sectors.
- The largest source of payment for physiotherapy services was private insurance (34.9%), followed by OHIP (30.3%).
- The largest source of payment for occupational therapy services was OHIP (45.7%), followed by Motor Vehicle Accident Insurance (33.3%).
- Patients with neurological, cardiopulmonary, chronic medical, and general debility conditions are more likely to receive rehabilitation services in publicly-funded compared to privately-funded primary health care practice settings.

Barriers to Providing Primary Health Care Rehabilitation Services

- Physiotherapists cited physicians' role as "gatekeepers" of the health care system as the most common barrier to providing services.
- Occupational therapists cited the lack of awareness by the public of the scope and/or role of occupational therapy as the most common barrier to providing services.

STRUCTURE OF THE REPORT

This report has five sections. Section one presents the background information, rationale, and objectives of the project. Section two is a review of the relevant literature in the area of primary health care and rehabilitation. Section three outlines the methodology and results for Phase 1 (key informant interviews) of the study. Section four provides an overview of the methods for Phase 2 (survey of primary health care providers) of the study and summarizes the survey results. Section five presents concluding remarks, key implications of the results, and directions for future research.

1.0 OBJECTIVES, BACKGROUND, AND RATIONALE

1.1 Background

This report summarizes the results of a project conducted by the Arthritis Community Research and Evaluation Unit (ACREU) in partnership with the Mental Health and Rehabilitation Reform Branch of the Ministry of Health and Long-Term Care (MOHLTC). The Arthritis Community Research and Evaluation Unit conducts applied health services research concerned with the delivery of care to people with chronic disabling disorders using arthritis as a model. For this project, ACREU worked with Ministry partners to finalize the scope and objectives of the project and to contribute to the primary health care and rehabilitation renewal initiative. Results from this project will be incorporated into broader initiatives aimed at reforming Ontario's primary health care and rehabilitation system.

1.2 Purpose and Objectives

The purpose of this project was to describe the current status of adult rehabilitation across various primary health care settings in Ontario. For the purpose of this project, rehabilitation refers to two regulated health care professions: physiotherapy and occupational therapy. Adult rehabilitation for this study is operationalized to include physical (e.g., musculoskeletal, neurological) and psychosocial (e.g., mental health) rehabilitation.

Primary research objectives were:

1. To identify the characteristics of adult clinical populations being served by primary health care rehabilitation professionals in Ontario.
2. To describe the models of working relationships (e.g., referral and communication patterns) currently in existence among primary health care physicians, nurse practitioners, and rehabilitation professionals (occupational therapists and physiotherapists) in Ontario.
3. To identify opportunities and challenges related to the provision of adult rehabilitation in Ontario from the perspectives of primary health care physicians, nurse practitioners, and rehabilitation professionals (occupational therapists and physiotherapists).

1.3 Defining Primary Health Care

Primary health care refers to the point of first contact that a patient has with the health care system. It is an approach to providing care that emphasizes health promotion and illness prevention, includes diagnosis and treatment, and provides a link to more specialized care (e.g., secondary or tertiary care). Primary health care is intended to be the foundation of the health care system with a sustainable, long-term relationship between the interdisciplinary health care team and the patient (MOHLTC, 2003).

1.4 Rationale

Several factors are placing increased demands on Ontario's primary health care system. These factors include an aging population, an increase in the prevalence of chronic diseases, and a shift in the delivery of health care from hospital to the community. According to the Working Group on Interdisciplinary Primary Care Models (1997), primary care services "should be provided at the right time by the most appropriate provider as determined by patient choice and clinical need"(p.4). In Canada, the family physician plays a major role in the coordination and provision of primary health care services (Primary Care Reform Physician Advisory Group, 1998). Recently, nurse practitioners have also started to play a significant role in the delivery of primary health care services (Working Group on Interdisciplinary Primary Care Models, 1997). In addition to physicians and nurse practitioners, there are a number of functions that can be provided by other health care providers, such as rehabilitation professionals, which may improve the effectiveness and efficiency of primary health care services.

Rehabilitation professionals, such as physiotherapists and occupational therapists are key members of the interdisciplinary health care team and can be an important resource for primary health care physicians and nurse practitioners. Indeed, Eldar (2000) argues that primary health care physicians should work closely with rehabilitation professionals and integrate rehabilitation into their day-to-day work. In particular, it has been suggested that offering rehabilitation services at the primary health care level could result in several positive outcomes including lower costs than for services offered at hospitals or large health care clinics, shorter travel time for patients, and greater continuity of care for people with disabilities.

Despite an emphasis on the potential benefits of interdisciplinary models of service delivery, literature indicates that primary health care physicians underutilize rehabilitation services, particularly in the care of older adults and those with chronic conditions (Chapman et al., 2003; Glazier et al., 1996; Rodriguez & Goldbert, 1993). As such, it is important to explore models of working relationships among primary health care providers, including the patterns of referrals and methods of communication currently in existence among physicians, nurse practitioners, and rehabilitation professionals. It is also important to identify the opportunities and challenges faced by these providers in the provision of rehabilitation across various primary health care settings. Identification of such opportunities and challenges will contribute to a greater understanding of factors that enhance or detract from the delivery of collaborative interdisciplinary primary health care services.

There are several reasons that support the need for further research into the status of adult rehabilitation in primary health care settings in Ontario. First, there is a lack of Canadian literature regarding the status of rehabilitation services in primary health care. Most of the evidence that does exist is British and examines the physiotherapy profession alone. Second, research that has been conducted, suggests that primary health care physicians underutilize the rehabilitation services that currently exist. However, there is not a clear understanding of why primary health care physicians do or do not refer their patients to rehabilitation therapists. In addition, there appears to be a lack of research examining models of working relationships among primary health care nurse practitioners and rehabilitation professionals. Finally, the literature that is available suggests very few patients requiring rehabilitation services enter the

system by means of direct access. Research is needed to examine the potential opportunities and challenges related to direct access to rehabilitation, particularly given the potential resource and cost benefits of such access.

2.0 LITERATURE REVIEW

2.1 Search Strategy

A review of the literature for the years 1980 to 2003 was conducted to examine the status of rehabilitation in primary health care. For the purpose of the review, rehabilitation refers to physiotherapy and occupational therapy. Articles pertaining to the provision of rehabilitation in both physical and mental health domains were included. Criteria for inclusion in the review were papers that provided conceptual or theoretical frameworks, a review of the literature, and research, commentary, or position papers/statements relating to rehabilitation in primary health care. Searches were restricted to English language journals. The following databases were searched for information on rehabilitation in primary health care (* indicates sources in which relevant information was found):

- Medline and Premedline*
- HealthSTAR*
- CINAHL*
- EMBASE
- Wilson Business Abstracts
- Sociological Abstracts

The terms used in the search were:

- Primary care or direct access or private care; and physical therapy/all subheadings or physiotherapy/ all subheadings
- Primary care or direct access or private care; and occupational therapy/all subheadings
- Primary care or direct access or private care; and rehabilitation/all subheadings

The following web sites were also searched for information on rehabilitation in primary health care and primary health care in general (* indicates sources in which relevant information was found):

- www.opa.on.ca (Ontario Physiotherapy Association)*
- www.collegept.org (College of Physiotherapists of Ontario)
- www.apta.org (American Physical Therapy Association)*
- www.caot.org (Canadian Association of Occupational Therapists)*
- www.osot.on.ca (Ontario Society of Occupational Therapists)

- www.coto.org (College of Occupational Therapists of Ontario)
- www.cpsso.on.ca (College of Physicians and Surgeons of Ontario)
- www.chspr.queensu.ca/ipcrc (The Implementation of Primary Care Reform – conference slides)*
- www.oma.org/phealth/pcare/chapter1.htm (Primary Care Reform Physician Advisory Group)*
- www.health.gov.on.ca/english/providers/project/phctf/phctf_mn.html (Ministry of Health and Long-Term Care Primary Health Care Transition Fund Projects 2003)*

2.2 Search Results

The review resulted in 34 articles, published in peer-reviewed journals. Each article was critically appraised to assess the strength of its design and analysis. Three articles were excluded from the review because of serious flaws in their design and/or analysis. Therefore, 31 peer-reviewed articles were used in the review.

Most (80.6%) of the peer-reviewed articles were research reports. Research methods included in descending order of frequency: surveys, randomized controlled trials, and semi-structured interviews. Most (51.6%) of the articles examined the physiotherapy profession and most (67.7%) were written in the United Kingdom. Only three (9.7%) of the peer-reviewed articles were Canadian. All of the Canadian articles were research reports; one dealt with both physiotherapy and occupational therapy, one dealt solely with occupational therapy, and one referred to ‘pulmonary rehabilitation’ without specifying the profession involved. Five relevant Canadian position papers or proposals were also found in professional association websites and archives. These items were used primarily for background information and were given less weight than peer-reviewed work. The main characteristics of the peer-reviewed literature are outlined in Table 1.

Table 1: Characteristics of the Peer-Reviewed Literature Used in the Review

Characteristic	Number (%)
Type of Article	
Research	25 (80.6)
Conceptual Framework	3 (9.7)
Literature Review	2 (6.5)
Commentary (with some literature review)	1 (3.2)
Profession	
Physiotherapy	16 (51.6)
Occupational Therapy	5 (16.1)
Other*	10 (32.3)
Country of Origin	
United Kingdom	21 (67.7)
Western European Countries	4 (12.9)
United States of America	2 (6.5)
Canada	3 (9.7)
Other	1 (3.2)

* Includes the general term ‘rehabilitation’ without specifying the profession or includes both physiotherapy and occupational therapy

2.3 Theoretical Models of Rehabilitation in Primary Health Care

Using the definition of primary health care cited in section 1.3 as a starting point, the literature was searched for definitions and conceptual models of rehabilitation in primary health care. In particular, models that would apply to the rehabilitation of adults in primary health care settings, such as Independent Health Facilities, Community Health Centres, Health Service Organizations, and private practices were examined. Three articles that explicitly examined models of rehabilitation in primary health care were identified.

At the broadest level of analysis available in the literature, Eldar (2000) presented a conceptual model for the integration of institution and community-based rehabilitation in developed countries. He argued an integrated model would help meet the increasing need for rehabilitation in developed nations and ensure that people receive effective, affordable rehabilitation in the setting that is most appropriate for them. To meet these goals, Eldar (2000) suggested each of the separate institutions, community organizations and professional groups that offer rehabilitation services need to modify the way they currently practise. For example, hospitals need to become community-oriented. To do so, they need to begin offering diagnostic and therapeutic services to those outside their walls and need to become involved in activities aimed at disability prevention. Hospitals also need to help educate primary health care teams, patients, and families about the management of disabilities. According to Eldar (2000), primary health care teams also need to change the way they practise. Eldar (2000) argued that primary health care teams need to integrate rehabilitation into their day-to-day work, need to offer rehabilitation services in the primary health care environment, and need to coordinate disability services at the community level. According to Eldar (2000), some of the advantages of offering rehabilitation services at a primary health care level include lower costs than services offered at hospitals or large health care clinics, shorter travel time for patients, and greater continuity of care for people with disabilities.

Gaynord (1996) and Crawford-White (1996) focused more specifically on the primary health care team. They suggested key features of primary health care occupational therapy, which include the following:

- Primary health care occupational therapists are integrated members of the primary health care team. Therefore, they are easily accessible to other members of the team, such as physicians and nurses.
- Primary health care occupational therapy is easily accessible for patients because services are offered close to home or work.
- One-on-one treatments are offered in the community or in the home.
- Group sessions are offered in family physician offices or medical centres.
- Primary health care occupational therapy complements and does not duplicate services that exist in other settings.
- Primary health care occupational therapists are able to treat the majority of patients who require occupational therapy in this setting. However, they are also able to refer patients to special facilities for intensive complex interventions.
- Primary health care occupational therapy focuses on meeting health needs without losing a holistic approach.

- Primary health care occupational therapists develop sustained partnerships with patients with chronic or deteriorating conditions by providing several episodes of treatment over a long period of time.

Crawford-White (1996) also suggested that primary health care occupational therapists tend to be generalists because they are trained to meet the majority of the needs of the local population. However, she argued that being a generalist does not infer a lower level of skill or expertise compared with a specialist. In fact, primary health care occupational therapists require a very high level of skill to meet the diverse health care needs of their patients, and to work in an effective and efficient manner with other members of the primary health care team.

2.4 Other Models of Rehabilitation in Primary Health Care

The remaining peer-reviewed literature does not explicitly define rehabilitation in primary health care. However, authors implicitly adopt three different conceptualizations of this type of service:

1. Rehabilitation services delivered in primary health care settings, such as family physician offices or health centres (versus rehabilitation in a secondary care site).
2. Rehabilitation services as a resource for primary health care physicians.
3. Rehabilitation professionals as first-contact health care providers.

There is the potential for overlap between these models. However, for the purposes of this review, these three groupings are examined separately.

2.5 Rehabilitation Services in Primary Health Care Settings

The literature suggests the provision of outpatient rehabilitation services has evolved rapidly over the past decade (Hensher, 1998). Many of the articles reviewed, particularly from the United Kingdom, examined the recent trend towards shifting rehabilitation services from secondary care locations, such as hospital outpatient departments, to primary health care sites, such as family physician practices and health centres (Bingisser et al., 2001; Grahn et al., 2000; Hackett et al., 1987; Hackett et al., 1993; Hensher, 1998; Jones et al., 2002; O’Cathain et al., 1995; Stanley et al., 2001; Tyrell & Burn, 1996). The services described in these studies most closely resemble the theoretical models outlined in section 2.3. These studies revealed that establishing rehabilitation services in primary health care settings could result in several positive outcomes including:

- Increased levels of satisfaction with service among patients and primary health care physicians (Bignisser et al, 2001; Jones et al, 2002; Tyrell & Burn, 1996)
- Decreased waiting times for services (Hackett et al., 1987; Hackett et al., 1993; Stanley et al., 2001; Tyrell & Burn, 1996)
- Increased cost-effectiveness when compared to hospital-based services (Hackett et al., 1987; Hackett et al., 1993)
- Reduced referral rates to specialists (O’Cathain et al., 1995)

- Improved patient-related outcomes, such as quality of life, exercise tolerance, and health status (Bingisser et al., 2001; Grahn, 2000; Jones et al., 2002; Tyrell & Burn, 1996)

However, O’Cathain et al. (1995) found that shifting hospital-based physiotherapy to primary health care practices increased the use of physiotherapy services 164%. This enhanced demand may represent a previously unmet need for physiotherapy in the community (Hensher, 1998). However, there is currently no evidence that meeting this need will result in reduced use of other health care services in the secondary sector (Hensher, 1998).

Most of the studies that examined rehabilitation in primary health care settings focused on the provision of physiotherapy services. For example, Stanley et al. (2001) established physiotherapist-staffed back pain clinics in five general practices in the United Kingdom for quick access to physiotherapy in ‘urgent’ cases of low back pain. Patients referred by general practitioners to these clinics were assessed and treated by a physiotherapist within 72 hours. The authors estimated that approximately 1.0 to 1.7 full-time equivalent physiotherapists per 100,000 people would be required to sustain this urgent back care clinic throughout the United Kingdom.

Although most of the studies examined services that were offered in a general practice, some did consider alternative models of service delivery in primary health care. For example, Bingisser et al. (2001) developed a pilot “modular” outpatient pulmonary rehabilitation program in primary health care for the treatment of patients with chronic pulmonary diseases. The program included a respirologist to examine patients entering the program, an exercise program supervised by a physiotherapist in a fitness center, and educational programs offered by the local branch of the Swiss Lung Association. Participants in the program achieved improvements in exercise capacity, dyspnea, and overall quality of life similar to those reported in hospital-based pulmonary rehabilitation programs. However, the sample size in this study was small and there was no control group, so results should be interpreted with caution.

The literature suggests rehabilitation services in primary health care are particularly important for the treatment of chronic conditions, such as arthritis, chronic low back pain, and pulmonary disease (Bingisser et al., 2001; Grahn, 2000; Hillman et al., 1996; Jones et al., 2002; Khouzam, 2000). Information regarding the types of clinical populations currently being treated by rehabilitation professionals in primary health care is limited. However, available evidence suggests that most patients are elderly (Tyrell & Burn, 1996) and experience chronic musculoskeletal disorders, such as osteoarthritis and rheumatoid arthritis (Rijken & Dekker, 1998; Tyrell & Burn, 1996).

Our literature search did not provide us with any concrete evidence regarding the number of rehabilitation therapists that are needed in primary health care. However, implicit in much of the peer-reviewed work is a call for an increase in rehabilitation services in primary health care settings. For example, occupational therapy educators in the United Kingdom have expressed concerns that there is a serious lack of mental health services (including those provided by occupational therapists) in primary health care environments, such as general practitioner services, homelessness teams, and voluntary sector initiatives (Craik & Austin, 2000).

2.6 Rehabilitation Services as a Resource for Primary Health Care Physicians

Some of the articles viewed rehabilitation as a resource that primary health care physicians can use to help manage their caseload. However, the literature suggests that primary health care physicians underutilize rehabilitation services, particularly in the care of the elderly and those with chronic conditions (Chapman et al., 2003; Glazier et al., 1996; Rodriguez & Goldberg, 1993). For example, Glazier et al.'s (1996) mail survey of a random sample of family physicians in Ontario suggests that primary care physicians' referral rates to rehabilitation professionals were very low. The authors questioned family physicians about their management of early and late rheumatoid arthritis and compared their answers to guidelines for optimal management developed by a panel of experts. For early rheumatoid arthritis, results revealed only 38.6% of the physicians surveyed would refer to physiotherapy and only 13.6% would refer to occupational therapy. Although reported referral rates were significantly higher for late rheumatoid arthritis, they were still much lower than those recommended by the panel (67.1% for physiotherapy and 44.8% for occupational therapy). The authors concluded that management of rheumatoid arthritis in primary health care could be improved by increasing exposure of physicians to the role of physiotherapy and occupational therapy during training. In fact, a recent report suggests that primary health care professionals have traditionally been educated separately with decreased opportunities to understand each other's roles, contributions to client care, and scopes of practice (The Council of Health Professionals Association, 2001).

It is possible that primary health care physicians do not use rehabilitation services as often as optimal guidelines recommend because they feel it is too difficult for patients to access these services. According to a survey by Roberts et al. (2002), 68% of the general practitioners surveyed felt waiting lists for physiotherapy were too long. Many respondents felt poor access to resources, such as physiotherapy, led to an inappropriate use of pain-killers for the treatment of musculoskeletal conditions.

However, assuming that adequate rehabilitation services exist, one of the potential advantages of increasing referral rates from primary health care physicians is a possible decrease in the number of inappropriate referrals to specialists, such as orthopedic surgeons and rheumatologists (O'Cathain et al., 1995). Primary health care physicians may rely on specialists, such as rheumatologists for subsequent referrals to occupational therapy and physiotherapy (Glazier et al., 1996). According to systematic literature reviews by Robert and Stevens (1997) and Hensher (1998), accessing physiotherapy through a specialist instead of a primary health care physician leads to significant increases in waiting times, greater inconvenience and higher costs for the patient, and higher costs for the health care system in terms of cost per patient. In addition, patients appear to be significantly more satisfied with physiotherapy services if they access these services sooner rather than later, even if early access simply involves receiving advice over the telephone (Taylor, 2002).

Furthermore, a randomized controlled trial by Daker-White et al. (1999), suggests physiotherapists could safely assume some of the routine tasks currently performed by orthopedic specialists. This study compared the effectiveness and the cost effectiveness of specially trained physiotherapists and fellowship junior orthopedic surgeons. The two groups of

professionals performed the same clinical roles, which included assessing new patients who did not obviously require surgery, ordering additional investigations if needed and selecting management options. Study results revealed no significant differences after five months with respect to pain, functional disability, perceived handicap, general health, psychological status, health-related quality of life, or self-efficacy between the two groups. However, patients assessed by physiotherapists were more satisfied with their services than those seen by surgeons. In addition, the physiotherapy group generated significantly lower direct hospital costs than the surgeon group because physiotherapists were less likely to order radiographs and refer patients for orthopedic surgery (Daker-White, 1999).

2.7 Rehabilitation Professionals as First-Contact Health Care Providers

In North America, the term “direct access” refers to the ability to evaluate and/or treat patients without referral from another health care professional, such as a physician (Domholdt & Durchholz, 1992; Jette & Davis, 1991; Snow et al., 2001). When it exists, direct access legislation allows professionals to act as first-contact health care providers. Under Ontario’s Regulated Health Professions Act (1991), physiotherapists and occupational therapists are granted the privilege of direct access. However, there are limitations to their ability to act as first-contact providers.

For example, the Public Hospitals Act (1990) gives Medical Advisory Committees responsibility for admission policies and practice in hospitals. Most hospitals require physician referral for access to the facility and services, including rehabilitation. Therefore, a physician’s referral is usually needed before a physiotherapist or occupational therapist can assess and treat a patient in the hospital. However, according to Christie Brenchley, Executive Director of the Ontario Society of Occupational Therapists, actual practice will vary from hospital to hospital and from unit to unit. For example, some services or units may have a blanket referral in place that allows rehabilitation professionals to assess and/or treat a patient without an individual referral. In other areas, an individual, signed referral from a physician is required. Similarly, direct access in the publicly-funded community sector is shaped by the policies of the Community Care Access Centres (C. Brenchley, personal communication, August 27, 2003).

Increasing numbers of rehabilitation professionals are working in private practice (Sloggett et al., 2003). In the private sector, clients who are covered by the Workplace Safety and Insurance Board (WSIB) and automobile or disability insurance are able to access rehabilitation professionals directly, but in many cases, they are not reimbursed for services unless they have a physician’s referral. Again, this requirement will vary depending on the policies of the third-party payer who is involved (C. Brenchely, personal communication, August 27, 2003).

The literature search did not reveal any Canadian studies examining the extent of direct access practice in this country. However, research in the United States suggests first-contact physiotherapy is an occasional service in states with direct access legislation, rather than a routine mode of practice (Domholdt & Durchholz, 1992; Jette & Davis, 1991). For example, Domholdt and Durchholz (1992) surveyed 250 randomly selected physiotherapists who had practised under both direct access and referral-only situations in North Carolina, Utah, and

Nevada. The authors found that almost half (44.5%) of respondents had seen patients through direct access. Physiotherapists who had assessed and/or treated patients without a referral reported that an average of 10.3% of their caseloads was seen through direct access. The authors concluded that only about 4.6% of all patients seen by physiotherapists in these three states are seen without a referral from a physician. The main reasons physiotherapists listed for not seeing patients without a physician's referral included (in descending order of frequency): private insurance does not reimburse for direct access practice; there simply have not been any patients seen without a referral; and they personally prefer to see patients through referral only.

Although few people currently see rehabilitation therapists without a referral, the limited research that is available suggests the lay public in North America may be willing to consult directly with a physiotherapist if given the option. In a survey of 361 patients being treated by physiotherapists in 25 privately-owned clinics in Indiana, 71.5% of those surveyed reported they would consult directly with a physiotherapist if they experienced the same symptoms again (Durant et al., 1989). Similarly, in a random telephone survey of Florida residents, almost three-quarters (73.4%) of the sample stated they would go directly to a physiotherapist if reimbursed by insurance (Snow et al., 2001).

There is little evidence regarding the effectiveness of rehabilitation therapy as a first-contact service. A small number of comparisons have been made between primary health care physicians and physiotherapists, with varying results. For example, two well-designed randomized-controlled trials compared physiotherapy and family physician-administered corticosteroid injections in the treatment of shoulder pain in adults (Hay et al., 2003; Van der Windt et al., 1998). Van der Windt et al. (1998) found patients with painful stiff shoulder (capsular syndrome) treated with corticosteroid injections were significantly more likely to improve on measures of pain and disability than those treated with physiotherapy. The differences between the two groups were more pronounced at 3, 7 and 13 weeks post-intervention than at 26 and 52 weeks post-intervention. Therefore, the authors concluded that differences between the intervention groups were mainly due to the faster relief of symptoms in the injection group. In contrast, Hay et al. (2003) found no statistical difference in disability at six weeks and six months between the 103 adults who received injections and the 104 patients who attended physiotherapy sessions for acute shoulder pain. However, patients receiving physiotherapy had fewer consultations to their general practitioner during the six-month follow-up period. Researchers concluded that the National Health Service in the United Kingdom should consider shifting the front-line management of shoulder pain from general practitioners to physiotherapists and adding local steroid injection for pain control when needed. Results may have differed in the two trials because Hay et al. (2003) included patients with a wider variety of shoulder problems, and their physiotherapy intervention included some standard physiotherapy treatment approaches not used by Van der Windt et al. (1998), such as ultrasound, home exercise programs, and education about pain management.

Mitchell and Lissovy (1997) investigated concerns that direct access physiotherapy could lead to overutilization of services and higher costs. Using paid claims data from a private insurer, Blue Cross-Blue Shield of Maryland, they compared resource use and costs for direct access physical medicine procedures (provided by physiotherapists, chiropractors, or physicians) versus those that involved a physician referral. Their results revealed direct access claims required fewer

visits and were much (137%) less expensive than those that involved a physician referral. They concluded that concerns that direct access can lead to overutilization of services or higher health care costs are unwarranted.

2.8 Summary of the Literature Review

There is almost no Canadian evidence regarding the role of rehabilitation services in primary health care. Most of the evidence that does exist is British and examines the physiotherapy profession alone. The literature suggests an ideal model of rehabilitation in primary health care would include the following characteristics:

- Rehabilitation professionals would be integrated members of the primary health care team, working closely and on a regular basis with family physicians and other team members.
- Rehabilitation services would be offered in primary health care sites, such as health centres or family physician offices.
- Rehabilitation services could be offered in the home or workplace.
- Rehabilitation services would focus on helping people with chronic conditions manage their disabilities over a long period of time.
- Rehabilitation professionals could refer patients to specialized programs in secondary care sites if needed.
- The primary health care team and the secondary care team would work together closely to ensure continuity of care for people with disabilities.

There is a limited amount of research examining services in primary health care settings that closely resemble the ideal model. According to this literature, patients who receive these kinds of services are mainly elderly and experience chronic musculoskeletal conditions. Potential positive outcomes of offering rehabilitation services in primary health care settings include:

- High levels of satisfaction with services among patients and professionals
- Decreased waiting time for rehabilitation services
- Cost-effectiveness compared to services offered in secondary care sites
- A reduction in the amount of inappropriate referrals to specialists
- Improved patient-related outcomes such as quality of life

However, the literature suggests that offering rehabilitation services in primary health care could increase utilization rates for these services. In addition, no information exists regarding the amount of rehabilitation services that are actually needed in primary health care settings.

In the literature, two other conceptualizations of rehabilitation in primary health care were identified: rehabilitation services as a resource for primary care physicians and rehabilitation professionals as first-contact health care providers.

The research suggests primary health care physicians underutilize the rehabilitation services that currently exist (in various settings). Possible reasons for underutilizing rehabilitation services cited in the literature include: physicians feel their patients will have trouble accessing services

or will have to wait too long, and physicians do not know enough about the role of rehabilitation therapists.

The remaining literature examines rehabilitation therapists as first-contact health care providers. The limited research that is available suggests very few patients requiring rehabilitation services do so without a physician's referral. However, direct access to rehabilitation professionals may be more cost-effective than access through a physician. In addition, most laypeople appear willing to see rehabilitation therapists without a physician's referral if given the option. In the private sector, most third party payers do not reimburse patients for rehabilitation services without a physician's referral. Research suggests this may pose a barrier for people willing to use therapists as first-contact providers.

3.0 PHASE 1: KEY INFORMANT INTERVIEWS

Phase 1 of this study involved interviewing key informants to obtain perspectives on current processes and issues involved in the provision of adult rehabilitation in primary health care in Ontario. Key informant interviews serve as an investigation technique for gathering a variety of data in a short time frame and help to define a broad spectrum of views on a topic. In particular, the key informant interviews were used to help guide sampling strategies and the development of the questionnaire for Phase 2 of this study.

3.1 Sample

A sample of 13 individuals who were known experts and in a position to inform our study about primary health care and rehabilitation were invited to participate as key informants. An attempt was made to select key informants to represent the four target professions that this study surveyed: physicians (MD), nurse practitioners (NP), occupational therapists (OT), and physiotherapists (PT). An attempt was also made to represent various practice sectors (e.g., publicly-funded vs. privately-funded practice) and geographic variations across the province. Prospective key informants were primarily identified through our contacts with senior policy analysts at the Ministry of Health and Long-Term Care (MOHLTC), professional associations and/or colleges (e.g., The College of Physiotherapists of Ontario), and academic organizations (e.g., The University of Toronto). Appendix A summarizes the characteristics of the key informant sample according to profession, geographic location, and whether or not an interview was completed.

3.2 Procedure

Potential participants were initially contacted by telephone or electronic mail to confirm interest in receiving information about the study. Those individuals who expressed an interest in involvement in the study were sent an information letter and consent form that described the purpose of the study and the nature of the request for their involvement. The letter informed potential participants that a research associate would contact them by telephone to answer any

questions they may have about the study and to request their participation. Prior to each interview, the interviewer emphasized the confidential nature of the interview. The interviews were held at a time and location that was convenient for the participant. All interviews were carried out by research associates with backgrounds in rehabilitation.

The key informant interviews were guided by the research objectives. An interview guide comprised of specific open-ended questions was derived from three sources: 1) peer-reviewed literature addressing the role of rehabilitation in primary health care; 2) professional association and/or college position papers/statements pertaining to rehabilitation in primary health care; and 3) recent MOHLTC reports and/or various reports (e.g., Health Canada) pertaining to primary health care reform.

The interviews followed a semi-structured format. The following questions/topics were addressed with each key informant:

1. Please describe your experiences with primary health care and rehabilitation.
2. What does primary health care mean to you?
3. What role do you see for rehabilitation and primary health care (e.g., opportunities, benefits, populations)?
4. In your experience, what are the challenges to the effective provision of rehabilitation in primary health care?
5. Please describe the models of current working relationships among primary health care providers (this question also focused on key informants' perceptions of "ideal models").

3.3 Analysis

Field note data from the key informant interviews were categorized to identify models of working relationships among primary health care providers and perspectives on the barriers and opportunities faced by providers in the delivery of primary health care rehabilitation to adults.

3.4 Results

Key informant interviews were completed with 8 consenting participants. Reasons for non-participation included lack of time to participate in a one-hour interview (n=1), lack of provision of an honorarium (n=1), and non-response to the request for participation (n=3). The following summarizes the results of the key informant interviews.

Characteristics of Key Informants

The majority of key informants provided direct patient care and had at least five years of clinical experience. All key informants were involved in activities related to education (e.g., teaching/lecturing at universities, pursuing graduate studies). The majority of key informants were also involved with various committees (e.g., professional associations/colleges) and

had experience in management, leadership, and consulting positions.

Elements of Primary Care

Key informants were asked to describe what they perceived as the key elements of primary health care. The majority of key informants identified the following elements:

- First contact/direct access
- Collaborative and interdisciplinary
- Patient/client-centered
- Focus on disease prevention, education, health promotion/determinants of health
- Community-outreach and community development approach
- Publicly-funded

Role for Rehabilitation

Key informants were asked to describe what they perceived as the advantages of having rehabilitation professionals on primary health care teams and which populations they believed were best-served by rehabilitation professionals in primary health care settings.

Advantages:

- Focus on disease prevention, health promotion, and wellness/lifestyle management
- Free-up physicians' time to focus on patients' acute care needs
- Build long-term relationships with patients with chronic illness
- Focus on interventions at the level of activity/participation and environment (e.g., vocational and leisure issues; assistive devices/technology; advocacy related to health, employment, social, and transportation systems/services)
- Provide early intervention, which results in better functional outcomes (e.g., less time off work for patients with musculoskeletal conditions)

Populations:

- Older adults (e.g., well-elderly, aging with existing conditions)
- Chronic disability/illness (e.g., musculoskeletal, neurological, cardiopulmonary, mental health)

Barriers to Providing Rehabilitation in Primary Health Care Settings

Several barriers to providing rehabilitation in primary health care settings were also identified by key informants. Barriers were categorized into three main categories: funding, access, and communication/information.

Funding:

- Fee for service compensation models limit collaborative, interdisciplinary practice
- Insurance-based funding models for primary health care rehabilitation do not meet the needs of lower income and elderly populations

- Publicly-funded models for primary health care rehabilitation are inadequate

Access:

- Physicians are perceived as the “gatekeepers” of the health care system
- Complex needs of patients discharged earlier from acute care are not being met by primary health care settings in which rehabilitation occurs
- There is a lack of publicly-funded rehabilitation services available in the community and those that exist are often condition specific (e.g., The Arthritis Society Consultation and Rehabilitation Service)
- Physicians will not refer patients to rehabilitation professionals if access is an issue (e.g., long waiting lists, patients who are housebound or on a limited income)

Communication and Information:

- Physicians and nurse practitioners lack awareness of scope of practice and benefits of rehabilitation (occupational therapy and physical therapy)
- Physicians do not focus on functional issues (e.g., lack skills for functional assessment), therefore may not recognize the need for referral to rehabilitation
- The medical paradigm/medical discourse persists in primary health care, which limits patients’ understandings of other options available to them
- There is a lack of evidence demonstrating the effectiveness of rehabilitation in primary health care
- There is a lack of awareness by the public of direct access to rehabilitation, the role of rehabilitation, and where to access rehabilitation
- There is a lack of communication between physicians and rehabilitation professionals (e.g., consult notes)

Elements of Ideal Model

Key informants were also asked to recommend elements of ideal models of rehabilitation in primary health care. The main recommendations were as follows:

- Primary health care teams should be collaborative and interdisciplinary with rehabilitation providers as integrated members of the team
- Fee for service compensation models need to be removed to increase opportunities for collaborative, interdisciplinary working relationships among primary health care providers
- Alternate compensation models for primary health care providers should be mandated (e.g., salaried vs. fee for service)
- Primary health care needs to move away from the physician as “gatekeeper” model (e.g., the primary coordinator of care does not necessarily have to be a physician)
- Primary health care should embrace principles of health promotion/social determinants of health and community development
- Primary health care rehabilitation services should focus on addressing the needs of vulnerable populations (e.g., elderly, low income, chronic disability/disease)

- Primary health care rehabilitation should be provided along a continuum (e.g., from level of direct intervention to social policy level where involved in facilitating change through advocacy)

4.0 Phase 2: Survey of Adult Rehabilitation and Primary Health Care in Ontario

The primary purpose of Phase 2 of this project was to describe the status of adult rehabilitation in various primary health care settings in Ontario. Also of interest were models of working relationships (i.e., referral and communication patterns) among primary health care providers and providers' perceptions of barriers to the provision of adult rehabilitation. A cross-sectional survey design was utilized.

4.1 Sampling

The target population consisted of all physicians, nurse practitioners, occupational therapists, and physiotherapists who currently provide primary health care services to adults or older adults in Ontario. Because a comprehensive index of all primary health care settings does not exist, a number of approaches was used to construct the sample with the aim of obtaining representation across practice settings and geographic regions. First, in order to identify the range of primary health care settings in which the target populations practise, a framework of the various settings was constructed. This framework was based on an existing model presented by Dr. David McCutcheon at a recent conference entitled, "The Implementation of Primary Care Reform" (November, 2003).

The model presented by Dr. McCutcheon summarized features of ten primary health care settings including group size, number of patients, funding models, after-hours access, and enhanced information technology. The following primary health care settings were highlighted in McCutcheon's model:

- Fee for Service
- Family Health Groups
- Family Health Networks
- Primary Care Networks
- Northern Group Funding Plans
- Community Sponsored Contracts
- Health Service Organizations
- Family Health Teams*
- Community Health Centres
- Group Health Centres

* Note: Family Health Teams (FHT) were in the planning stage at the time of this study (MOHLTC, personal communication, January, 2004). As such, the following section refers to nine instead of ten settings.

McCutcheon's model also included information on whether the various settings employed physicians, nurse practitioners, pharmacists, and other practitioners. According to McCutcheon's model, all nine of the settings employed physicians, six employed nurse practitioners (Family Health Networks, Primary Care Networks, Health Service Organizations, Community Health Centres, and Group Health Centres), none employed pharmacists, and three employed other practitioners (Health Service Organizations, Community Health Centres, and Group Health Centres). Although rehabilitation professionals were not explicitly identified in McCutcheon's model, they may have been subsumed under the "other practitioner" heading. As such, it was necessary to modify the model to include the primary health care settings in which rehabilitation professionals practise. Modifications were made based on the key informant interviews and consultation with the professional colleges for occupational therapists and physiotherapists. Findings from the interviews and consultations resulted in the addition of the following four settings to the framework:

- The Arthritis Society Consultation and Rehabilitation Services
- Community Care Access Centres
- Private Practices or Clinics (OHIP and non-OHIP)
- Hospital Outpatient Departments

An attempt was also made to estimate the size (e.g., number of sites, number of practitioners) of each of these settings; however, this information was not always available and was beyond the scope of this project. Appendix B contains the modified framework. The modified framework illustrates the range of primary health care settings in which the target populations for this study practise and the estimated size of the settings (where available).

The framework was utilized to guide the sampling. An attempt was made to construct the sample to obtain representation from the various practice settings. In the case of nurse practitioners, occupational therapists, and physiotherapists the most accessible and accurate method to obtain a representative sample was to request mailing lists from each of the profession's colleges based on specific criteria. Appendix C outlines the selection criteria and sampling processes for these three groups, as well as for physicians.

A stratified random sample proportional to the number of physicians, occupational therapists, and physiotherapists in the 16 District Health Council (DCH) Regions (Appendix D) was selected from the target sample to ensure representation across Ontario. It was not necessary to generate a random sample for nurse practitioners because the target sample was small (N=321) relative to the other groups and 100% of this sample was surveyed.

The sample size for occupational therapists and physiotherapists was calculated based on obtaining an estimated response rate of approximately 40%. The sample size for physicians was calculated based on obtaining an estimated response rate of 20%. This resulted in final sample sizes of 3000 for physicians, 500 for occupational therapists, and 1100 for physiotherapists.

4.2 Questionnaire Development

The results of the key informant interviews were utilized to help guide the development of the questionnaire for Phase 2. It should be noted that both our review of the literature and our discussions with the MOHLTC revealed no suitable questionnaire available for the purpose of this project. Key themes from the key informant interviews and the literature review were used to help construct the questionnaire. Based on the key informant interviews and our discussions with the MOHLTC, it was decided that two separate versions of the questionnaire were required: one version for physicians and nurse practitioners and one version for occupational therapists and physiotherapists. Both versions of the questionnaire were pilot tested with five consenting key informants. Key informants provided feedback pertaining to clarity, relevance, and format of the questionnaires. The feedback was compiled and minor revisions were made to the questionnaires. There were no significant discrepancies among the five key informants' recommended revisions.

4.3 Instrument

The questionnaires developed for Phase 2 of this project are in Appendix E (Physician and Nurse Practitioner Version) and Appendix F (Occupational Therapist and Physiotherapist Version).

The Physician and Nurse Practitioner Version of the questionnaire includes questions in the following areas:

- Frequency of referrals by diagnostic groups
- Availability of rehabilitation services
- Barriers to referring patients to rehabilitation
- Frequency of communication with rehabilitation professionals
- Practice setting and professional affiliation

The Occupational Therapist and Physiotherapist Version of the questionnaire includes questions in the following areas:

- Percentage of caseload by diagnostic group
- Sources of referrals
- Hours of availability of rehabilitation services
- Length of waiting time for patients
- Frequency of communication with physicians and nurse practitioners
- Components of primary health care
- Barriers to providing rehabilitation in primary health care
- Practice setting and professional affiliation

4.4 Procedure

A total of 4921 questionnaires, information letters, and prepaid mail return envelopes were mailed to potential participants in waves of 500 to 1000 per day from March 2 to March 10, 2004. Return of a completed questionnaire was taken as informed consent. There was no identifying

information on the questionnaire other than an identification number that was used to track the response rate. The final cut-off date for returned questionnaires was May 31, 2004.

4.5 Analysis

The data from the questionnaires were entered into a database (Access for Windows 2000). To ensure high quality data, a process of double data entry for 20% of the database was undertaken. This process involved entering raw data on two occasions and comparing differences in data files. Differences were then reconciled with the source data. Descriptive statistics were used to summarize results from the questionnaires and to address the study objectives. Cross-tabulations were also calculated between specific variables such as availability of rehabilitation services in the community and the seven Ontario Ministry of Health Planning Regions (e.g., Southwest, Central South, Central West, Central East, Toronto, East, and North). Adjustment for non-response was made in the analysis so that the level of non-response would not compromise the generalizability of the results. This involved weighting the sample to adjust for variance in the distribution of responses from the 16 DHC regions for which the sample was stratified. Statistical Analysis Systems (SAS), Version 8.2 was used for all analyses. This report contains the data for the weighted sample. The data for the unweighted sample are available upon request.

4.6 Response Rate

A total of 2075 questionnaires were returned, of which 74 were marked “returned to sender” and 376 were not completed because respondents indicated that they did not meet the eligibility criteria. The 2001 respondents (combined eligible and ineligible respondents) thus represent a response rate of 40.7% (2001/4992). Table 2 summarizes the response rate according to each profession.

Table 2: Breakdown of Survey Response by Profession

Profession	Total sent (N=4922)	Total returned eligible (N=1625)	Total returned <u>not</u> eligible* (N=376)	Total returned to sender (N=74)	Response rate (40.7%)
Physicians	3001**	735	283	13	33.9%
Nurse Practitioners	321	138	31	1	52.6%
Occupational Therapists	500	178	23	21	40.2%
Physiotherapists	1100	574	39	39	55.7%

* main reasons for “not eligible” include retired (mostly physicians), no longer provide direct patient care (e.g., working in management position)

** 1 case added to physician sample after random selection

4.7 Survey Results

4.7.1 Physicians

Employment Setting

Table 3 shows the percentage of physicians employed in various primary health care settings. The majority of physicians surveyed work in private practices and Ontario Family Health Network practices.

Table 3: Physicians' Employment Settings within the Community

Employment Setting	Percentage* (%)
Private Practice (e.g., fee for service, solo or group practice)	58.8
Ontario Family Health Network (FHN, FHG, PCN)	22.9
Health Service Organization	3.1
Community Health Centre	4.3
Northern Group Funding Plan/Community Sponsored Contract	2.0
Other (e.g., university student health clinics and military bases)	8.6

*Percentages do not total 100% because of missing data

Referral to Rehabilitation

Referral to Occupational Therapists

Figure 1 illustrates the frequency with which physicians refer patients with different conditions to occupational therapists. Physicians appear to most commonly refer patients with neurological (e.g., stroke, brain injury) and general debility (e.g., geriatrics, dementia) conditions to occupational therapists, with almost half of physicians referring some (25-74%) of their patients with these conditions.

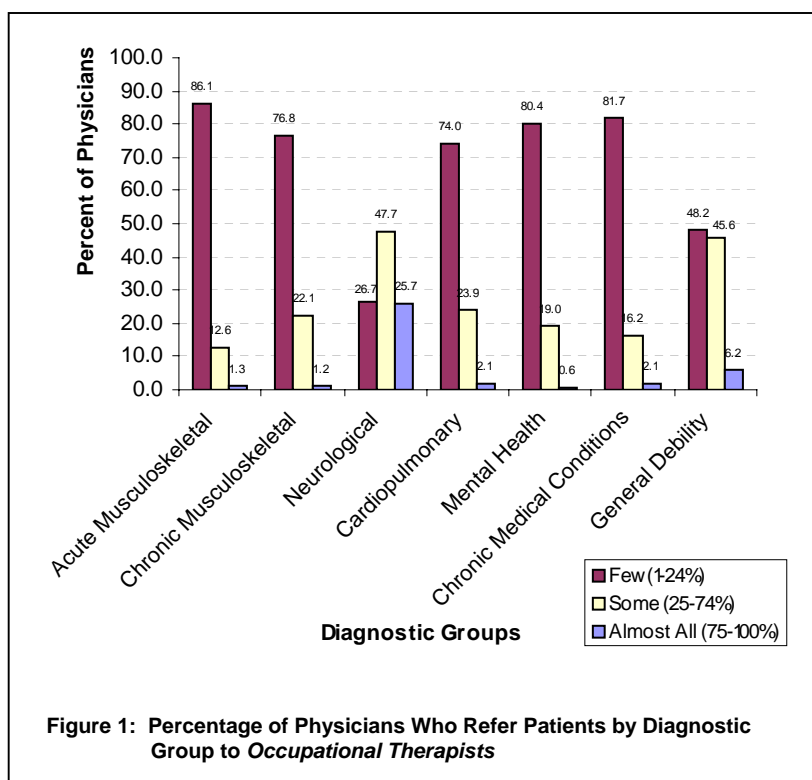
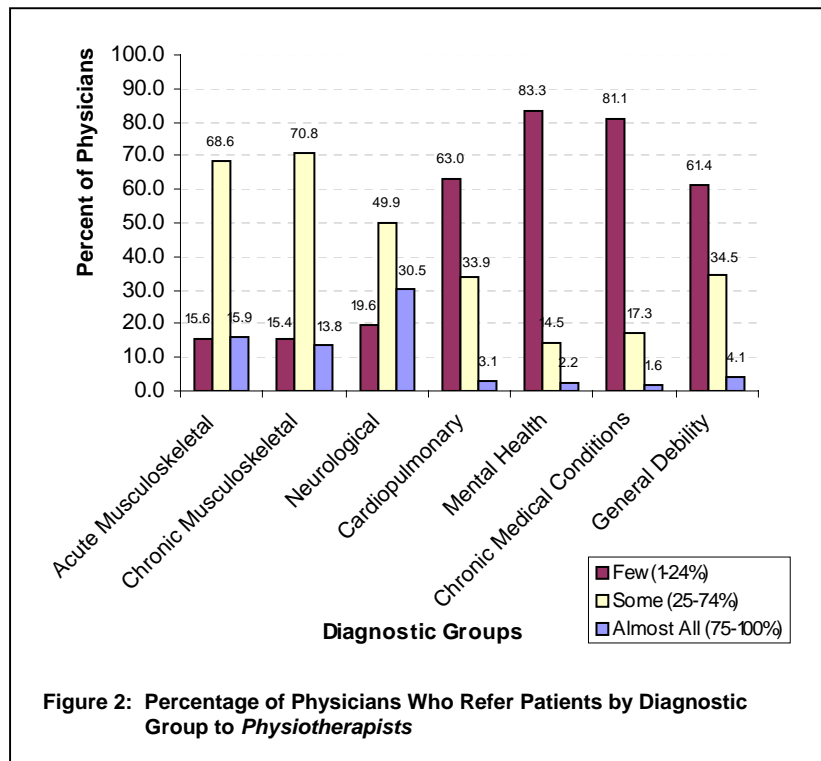


Figure 1: Percentage of Physicians Who Refer Patients by Diagnostic Group to Occupational Therapists

Note: The figure only shows data for respondents who indicated that they refer at least a few of their patients to occupational therapists. Data for physicians who responded that they 'never' refer patients to occupational therapists are not presented in this figure.

Referral to Physiotherapists

Figure 2 illustrates the frequency with which physicians refer patients with different conditions to physiotherapists. Physicians appear to most commonly refer patients with acute musculoskeletal (e.g., soft tissue injuries, fractures), chronic musculoskeletal (e.g., arthritis, low back pain) and neurological conditions to physiotherapists. Approximately 70.0% of physicians reported referring some (25-74%) of their patients with acute and chronic musculoskeletal conditions and approximately one-third reported referring almost all (75%+) of their patients with neurological conditions to physiotherapists.



Note: The figure only shows data for respondents who indicated that they refer at least a few of their patients to physiotherapists. Data for physicians who responded that they 'never' refer patients to physiotherapists are not presented in this figure.

Comparison by Ontario Ministry of Health Planning Regions

Referrals to *occupational therapists* were examined in relation to the Ontario Ministry of Health planning regions. Differences by region were only found for physicians who referred patients with:

- *Neurological conditions*: higher in the Central East, North, and Central West regions compared to the Toronto region
- *Mental health conditions*: higher in the Toronto region compared to the East and South West regions

Referrals to *physiotherapists* were examined in relation to the Ontario Ministry of Health planning regions. Differences by region were found only for physicians who referred patients with *cardiopulmonary conditions* to physiotherapists, which was higher in the East compared to the Toronto region.

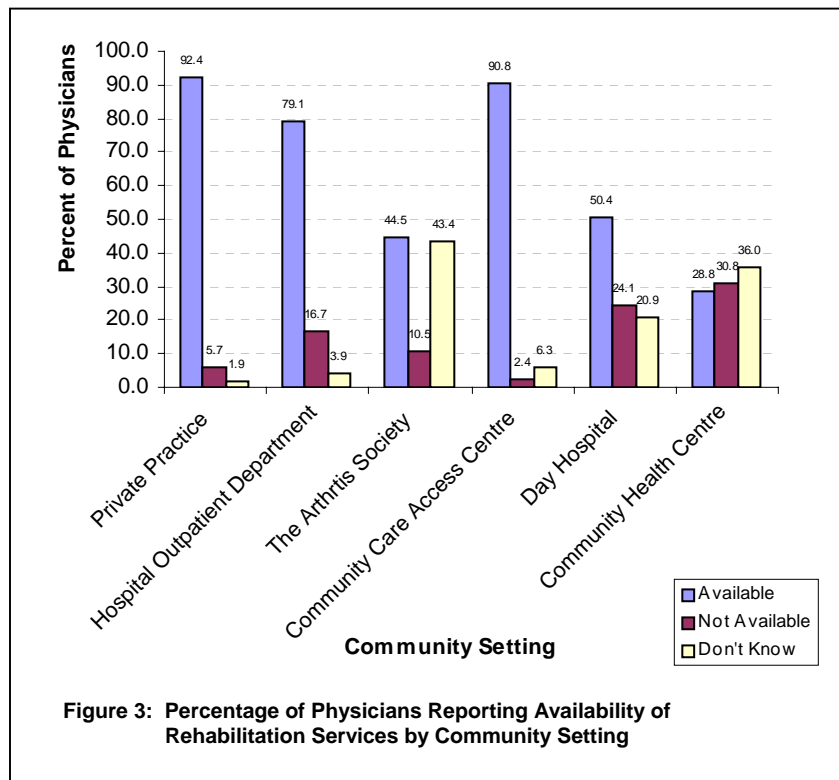
Detailed data on differences in referrals to rehabilitation (occupational therapists and physiotherapists) by planning regions are found in Appendix G [Table 1]

Comparison by Physicians' Employment Settings

Referrals to rehabilitation (occupational therapists and physiotherapists) were also examined in relation to physicians' employment settings (e.g., private practice vs. Ontario Family Health Network); however, no significant differences were found.

Availability of Rehabilitation

The large majority of physicians reported that the following rehabilitation services were available in their community: private practices/clinics (92.4%), Community Care Access Centres (90.8%) and hospital outpatient departments (79.1%). A third (30.8%) of physicians reported that rehabilitation services were not available in Community Health Centres. It is interesting to note that 43.4% of physicians did not know whether the Arthritis Society Consultation and Rehabilitation Services were available in their community [Figure 3].



Note: Percentages do not total 100% because of missing data.

Comparison by Ontario Ministry of Health Planning Regions

Physicians' reports of available rehabilitation services in their community were examined in relation to the Ontario Ministry of Health planning regions. Differences by region were found for physicians who reported the availability of rehabilitation professionals in:

- *Private practices/clinics and day hospitals*: higher in all regions compared to the North region
- *Hospital outpatient departments*: higher in the North and South West regions compared to Toronto, Central South, and East regions
- *Arthritis Society Consultation and Rehabilitation Services*: higher in the South West and Toronto regions compared to the Central East and North regions

Detailed data on differences for the availability of rehabilitation services by planning regions are provided in Appendix G [Table 2].

Comparison by Physicians’ Employment Settings

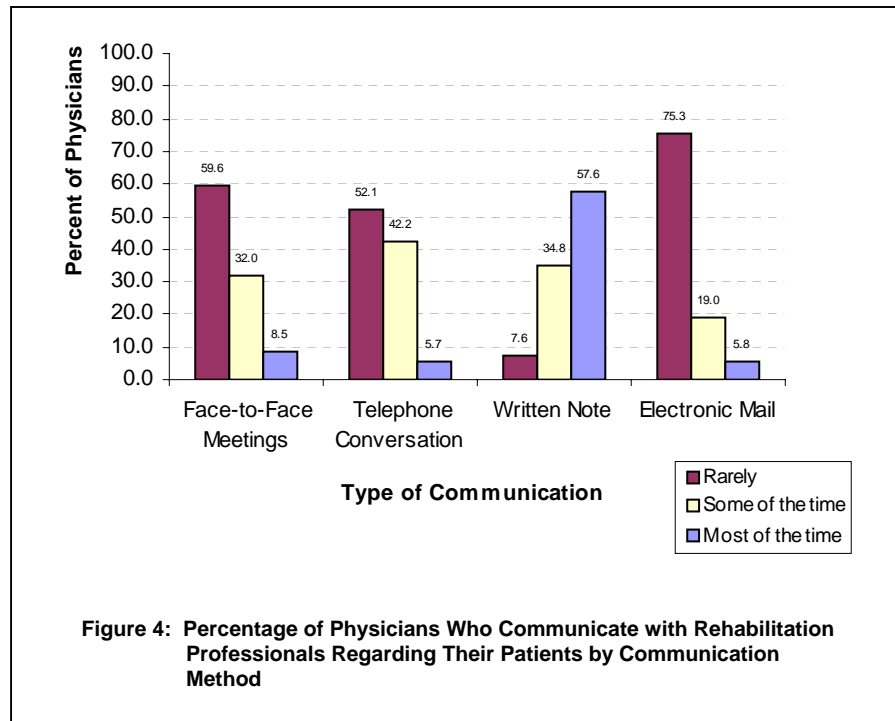
Physicians’ reports of available rehabilitation services were also examined in relation to physicians’ employment settings. Differences by employment settings were only found for physicians reporting the availability of rehabilitation professionals in:

- *Day hospitals*: higher in Ontario Family Health Network practices compared to private practices
- *Community Health Centres*: higher in Community Health Centres compared to Ontario Family Health Network practices and private practices

Detailed data on the differences for the availability of rehabilitation services by physicians’ employment settings are provided in Appendix G [Table 3].

Communication with Rehabilitation Professionals

Figure 4 shows the frequency with which physicians communicate with rehabilitation professionals regarding their patients. More than half (57.6%) of physicians reported using written notes most of the time and approximately 42.0% reported using the telephone some of the time to communicate with rehabilitation professionals regarding their patients. Face-to-face communication and electronic mail were less common methods of communication.



Note: The figure only shows data for respondents who have indicated that they do communicate, (even if rarely) with rehabilitation professionals. Data for physicians who have responded that they ‘never’ communicate with occupational therapists and physiotherapists are not presented in this figure.

Barriers to Referring Patients to Rehabilitation

The large majority (92.6%) of physicians identified at least one barrier to referring patients to rehabilitation services. The most common barriers reported by physicians were related to the cost of private rehabilitation (85.6%) and unacceptably long waiting times for rehabilitation (64.0%). Approximately 25.3% of physicians reported that it was difficult to locate available rehabilitation services in their community. Only a small percentage of physicians cited that they were not satisfied with the rehabilitation services that their patients had received (9.8%) and that there were no rehabilitation services in close proximity to their patients (6.4%).

Respondents were also given the opportunity to provide written comments on other barriers to referring patients to rehabilitation. The majority of comments were related to issues surrounding access to and the quality of publicly-funded rehabilitation services. For example, with regard to access, one physician commented:

“As a physician I can appreciate the effectiveness of PT/OT over meds in many situations – it saddens me the lack of availability of publicly-funded PT/OT and the horrendous waits for the few locations that offer it.”

With regard to quality, another respondent stated:

“The quality of ‘public’ OHIP/physiotherapy is not up to the standard that physiotherapists are able because of low OHIP per patient.”

4.7.2 Nurse Practitioners

Employment Setting

Table 4 shows the percentage of nurse practitioners employed in various primary health care practice settings. The majority of nurse practitioners surveyed work in Community Health Centres and other settings, which included military bases, public health clinics/centres (e.g., sexual health clinics, mental health centres, family health clinics), and nursing stations.

Table 4: Nurse Practitioners' Employment Settings within the Community

Employment Setting	Percentage* (%)
Private Practice (e.g., fee for service, solo or group practice)	13.9
Ontario Family Health Network (FHN, FHG, PCN)	6.3
Health Service Organization	4.6
Community Health Centre	41.9
Northern Group Funding Plan/Community Sponsored Contract	2.3
Other (e.g., military bases, public health clinics/centres, and nursing stations)	31.0

*Percentages do not total 100% because of missing data.

Referral to Rehabilitation

Referral to Occupational Therapists

Figure 5 shows the frequency with which nurse practitioners refer patients with different diagnostic conditions to occupational therapists. Nurse practitioners appear to most commonly refer patients with neurological (e.g., stroke, brain injury) and general debility (e.g., geriatrics, dementia) conditions to occupational therapists. Greater than a third of nurse practitioners reported referring some (25-74%) of their patients with mental health (e.g., anxiety, depression), general debility (e.g., geriatrics, dementia),

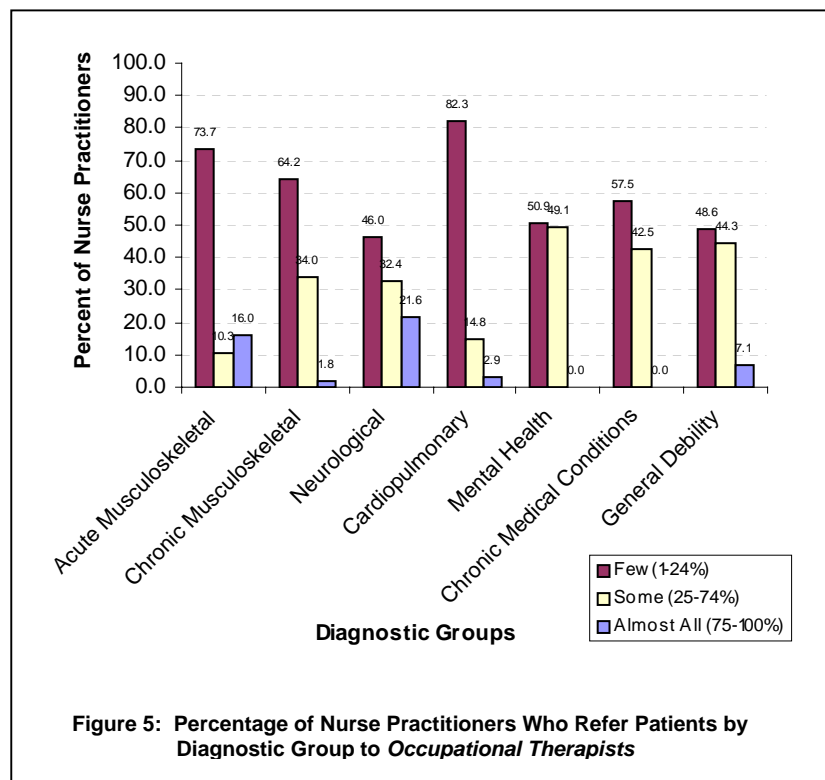


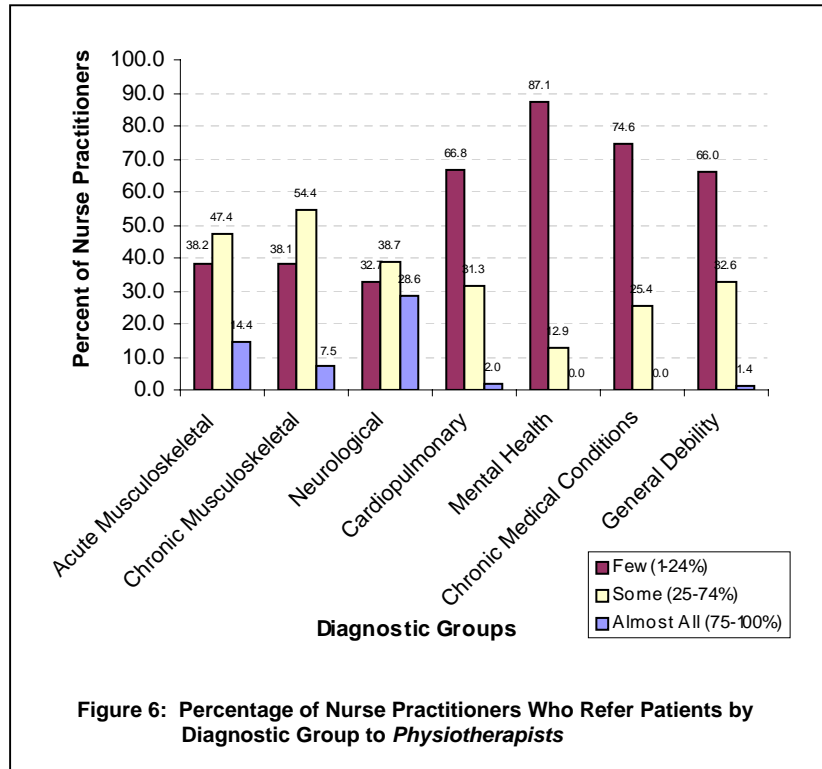
Figure 5: Percentage of Nurse Practitioners Who Refer Patients by Diagnostic Group to Occupational Therapists

Note: The figure only shows data for respondents who indicated that they refer at least a few of their patients to occupational therapists. Data for nurse practitioners who responded that they 'never' refer patients to occupational therapists are not presented in this figure.

chronic medical (e.g., diabetes), chronic musculoskeletal (e.g. arthritis), and neurological conditions to occupational therapists.

Referral to Physiotherapists

Figure 6 shows the frequency with which nurse practitioners refer patients with different diagnostic conditions to physiotherapists. Nurse practitioners appear to most commonly refer patients with acute musculoskeletal (e.g., sports injuries, fractures) and chronic musculoskeletal conditions to physiotherapists, with approximately one-half of nurse practitioners referring some (25-74%) of their patients with these conditions.



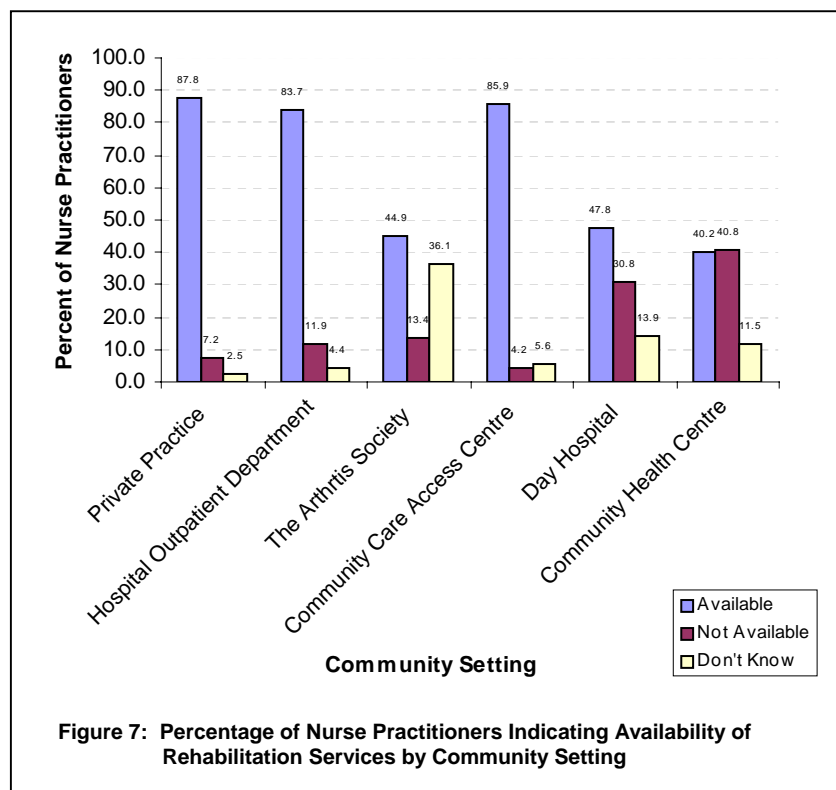
Note: The figure only shows data for the respondents who indicated that they refer at least a few of their patients to physiotherapists. Data for nurse practitioners who responded that they 'never' refer patients to physiotherapists are not presented in this figure.

Comparison by the Ontario Ministry of Health Planning Regions and Nurse Practitioners' Employment Settings

Nurse practitioners' referrals to rehabilitation (occupational and physiotherapy) were also examined in relation to the Ontario Ministry of Health planning regions and nurse practitioners' employment settings within the community; however no significant differences were found.

Availability of Rehabilitation

The large majority of nurse practitioners reported that the following rehabilitation services were available in their community: private practices/clinics (87.8%), Community Care Access Centres (85.9%), and hospital outpatient departments (83.7%). Similar to physicians, greater than one-third (36.1%) of nurse practitioners did not know if the Arthritis Society Consultation and Rehabilitation Services were available in their community [Figure 7].



Note: Percentages do not total 100% because of missing data.

Comparison by Ministry of Health Planning Regions

Nurse practitioners' reports of available rehabilitation services in their community were examined in relation to the Ontario Ministry of Health planning regions. Differences by region were found for nurse practitioners who reported the availability of rehabilitation professions in five of the six settings:

- *Private practices/clinics*: higher in the Central South, East, and South West regions compared to the North region
- *Hospital outpatient departments* and *Day hospitals*: higher in the East compared to the South West region
- *Arthritis Society Consultation and Rehabilitation Services*: higher in the South West compared to the North region
- *Community Care Access Centres*: higher in the East compared to the North region

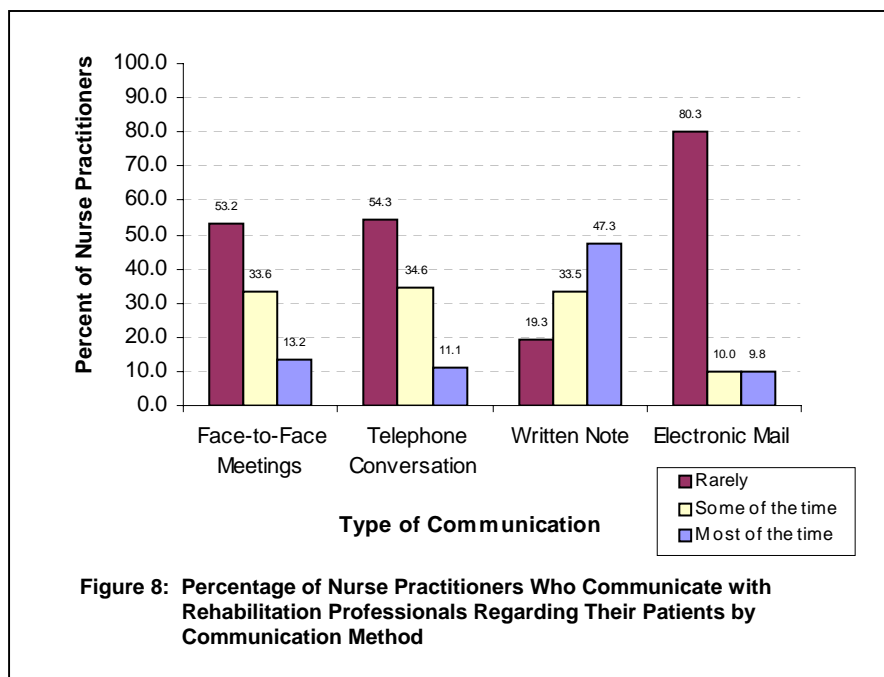
Detailed data on differences for the availability of rehabilitation services by planning regions are provided in Appendix G [Table 4].

Comparison by Nurse Practitioners' Employment Settings

Availability of rehabilitation services was also examined in relation to nurse practitioners' employment settings; however no significant differences were found.

Communication with Rehabilitation Professionals

Figure 8 shows the frequency with which nurse practitioners communicate with rehabilitation professionals regarding their patients. Approximately 47.0% of nurse practitioners reported using written notes most of the time to communicate with rehabilitation professionals. Approximately one-third of nurse practitioners also reported using the telephone or face-to-face meetings some of the time. Electronic mail was the least common method of communication.



Note: The figure only shows data for respondents who have indicated that they do communicate, (even if rarely) with rehabilitation professionals. Data for nurse practitioners who responded that they 'never' communicate with occupational therapists and physiotherapists are not presented in this figure.

Barriers to Referring Patients to Rehabilitation

The large majority (86.8%) of nurse practitioners identified at least one barrier to referring their patients to rehabilitation services. The most common barriers were related to the cost of private rehabilitation (78.6%) and unacceptably long waiting times for rehabilitation (59.7%). Approximately 18.6% of nurse practitioners reported that it was difficult to locate available rehabilitation services in their community and 14.0% reported that there were no rehabilitation services in close proximity to their patients. Only 6.7% reported that they were not satisfied with the rehabilitation services that their patients had received.

Respondents were also given the opportunity to provide written comments on other barriers to referring patients to rehabilitation. The majority of comments were related to issues surrounding access to rehabilitation services. In particular, several nurse practitioners commented that they were not able to refer directly to rehabilitation professionals. One respondent remarked:

“Most PTs in my area require a physician’s name for the referral...this adds time to the visit, decreases my credibility and creates extra paperwork, in addition the report/consultation letter provided back is addressed to the physicians and he/she does not know the patient”.

Several respondents also commented on the lack of access to rehabilitation for individuals who are housebound, homeless, refugees, or elderly, as well as for those individuals who are on fixed incomes or have chronic conditions. For example, one nurse practitioner commented:

“[The] inability to access OT/PT services is an enormous gap in my population which is homeless, under-housed, low income people. It exemplifies two-tier health care.”

4.7.3 Occupational Therapists

Employment Setting

Table 5 shows the percentage of occupational therapists employed in various primary health care practice settings. Most of the occupational therapists surveyed work in private practices/clinics and Community Care Access Centres.

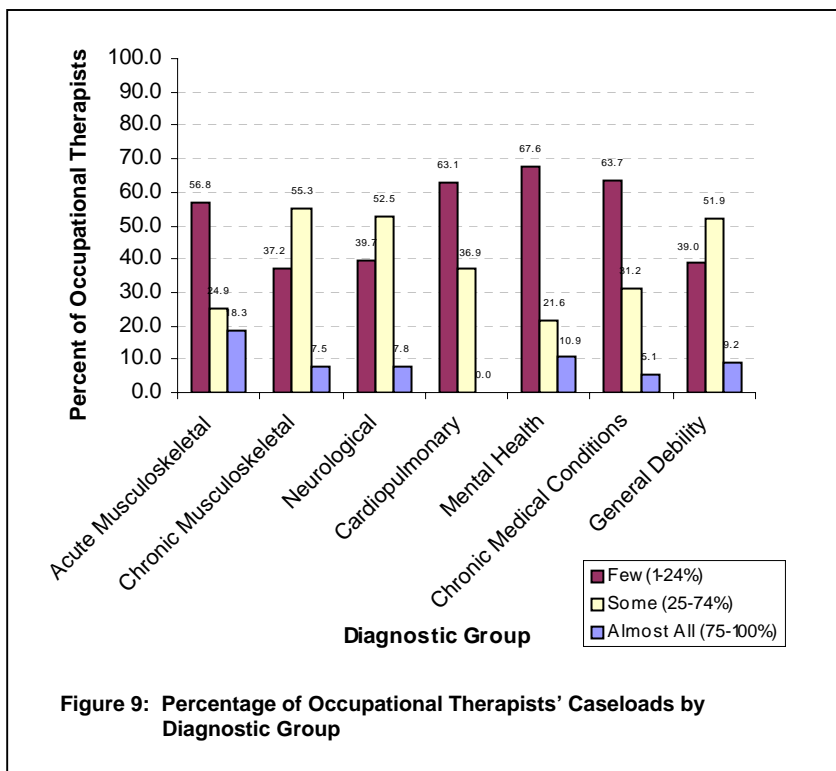
Table 5: Occupational Therapists' Employment Settings within the Community

Employment Setting	Percentage (%)
Private Practice/Clinic	48.0
Hospital Outpatient Department	5.0
The Arthritis Society Consultation and Rehabilitation Service	2.7
Community Care Access Centre (CCAC) or contracted to CCAC	36.3
Community Health Centre	0.0
Other (e.g., mental health clinics/agencies)	8.1

Of the 48.0% of occupational therapists who reported working in private practices/clinics, most (87.6%) of the settings are privately-funded, 7.8% are publicly-funded, and 4.6% are a mix of both private and public funding. Of the 5.0% of occupational therapists working in hospital outpatient departments, most (68.0%) of the settings are publicly-funded, 22.2% are privately-funded, and 9.8% are a mix of both private and public funding.

Caseload Composition

Figure 9 illustrates that patients with chronic musculoskeletal (e.g., arthritis) and neurological (e.g., stroke, brain injury) conditions comprised the largest proportion of occupational therapists' caseloads. More than half of the occupational therapists reported that chronic musculoskeletal, neurological, and general debility conditions comprised



Note: The figure only shows data for respondents who indicated that their practice includes at least a few of these diagnostic groups. Data for occupational therapists who responded that 'none' of their practice includes these diagnostic groups are not presented in this figure.

some (25-74%) of their caseload. Patients with cardiopulmonary and chronic medical conditions (e.g., diabetes) comprised some (25-74%) of more than a third of occupational therapists' caseloads.

Comparison by Funding Method

Caseload composition was examined in relation to funding method. Funding method was determined by collapsing employment settings, shown in Appendix G [Table 5], into those that are publicly-funded, privately-funded, and a mix of both private and public funding.

Differences were found for the proportion of occupational therapists whose caseloads were comprised of patients with neurological, general debility, cardiopulmonary, and chronic medical conditions. Occupational therapists were more likely to see patients with these diagnostic conditions in publicly-funded compared to privately-funded employment settings (Table 6).

Table 6: Comparison of Occupational Therapists' Caseloads by Funding Method in their Employment Settings

Diagnostic Group	Type of Funding	
	Public (%)	Private (%)
Neurological	89.8	71.3
General Debility	89.2	31.1
Cardiopulmonary	78.5	32.6
Chronic Medical Condition	75.5	35.2

Comparison by Ontario Ministry of Health Planning Regions

Caseload composition was also examined in relation to the Ontario Ministry of Health planning regions; however, no significant differences were found.

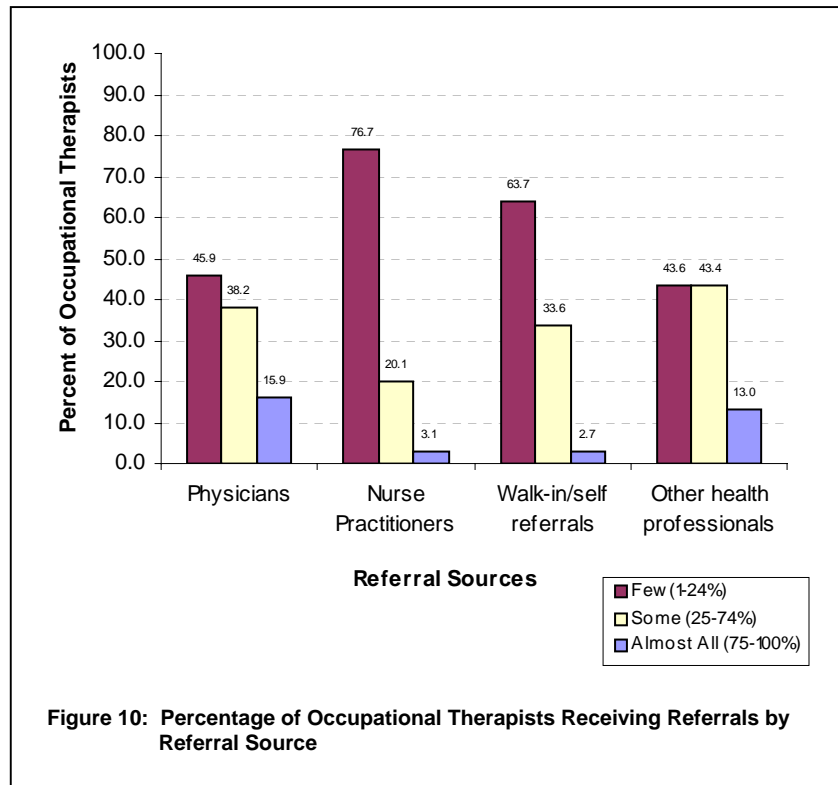
Referral Sources

Figure 10 shows that occupational therapists received the largest proportion of their referrals from physicians and other health care professionals (e.g., social workers, physiotherapists, case managers). More than a third of occupational therapists received some (25-74%) of their referrals from walk-ins, physicians, and other health care professionals. Other sources of referral reported by occupational therapists included lawyers, insurance companies, Workplace Safety and Insurance Board, Veteran's Affairs Canada, and community mental health associations.

Availability of Occupational Therapy Services

Almost all (90.1%) respondents reported that occupational therapy services were available in their place of employment during weekday, daytime hours. Over a third reported that services

were available evenings after 5 p.m. (38.3%) and on weekends (33.5%). Very few (10.1%) respondents reported the availability of services 24 hours/7 days per week.



Note: The figure only shows data for respondents who indicated that they receive at least a few of their referrals from these sources. Data for occupational therapists who responded that they receive 'none' of their referrals from these sources are not presented in this figure.

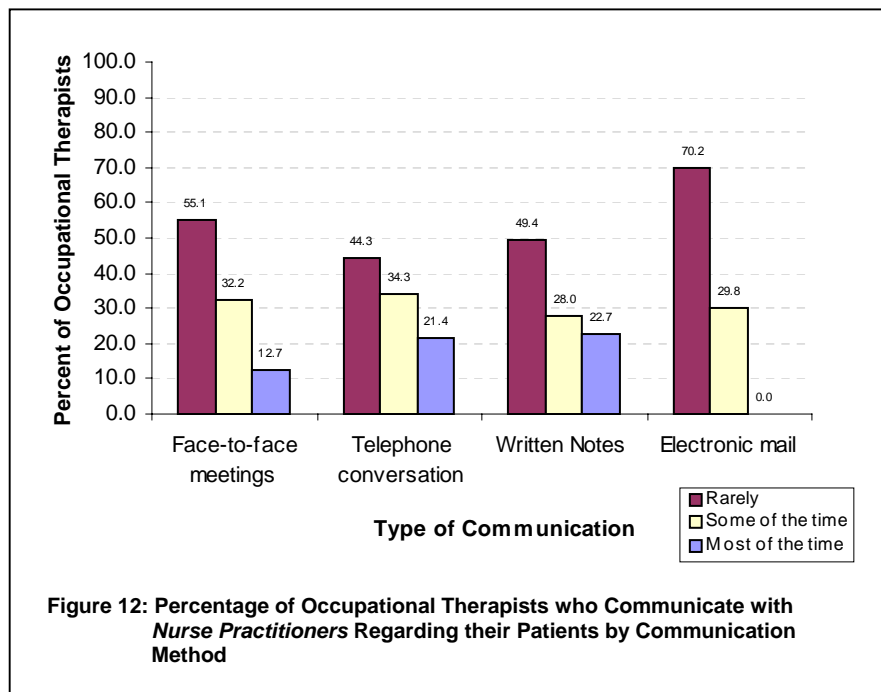
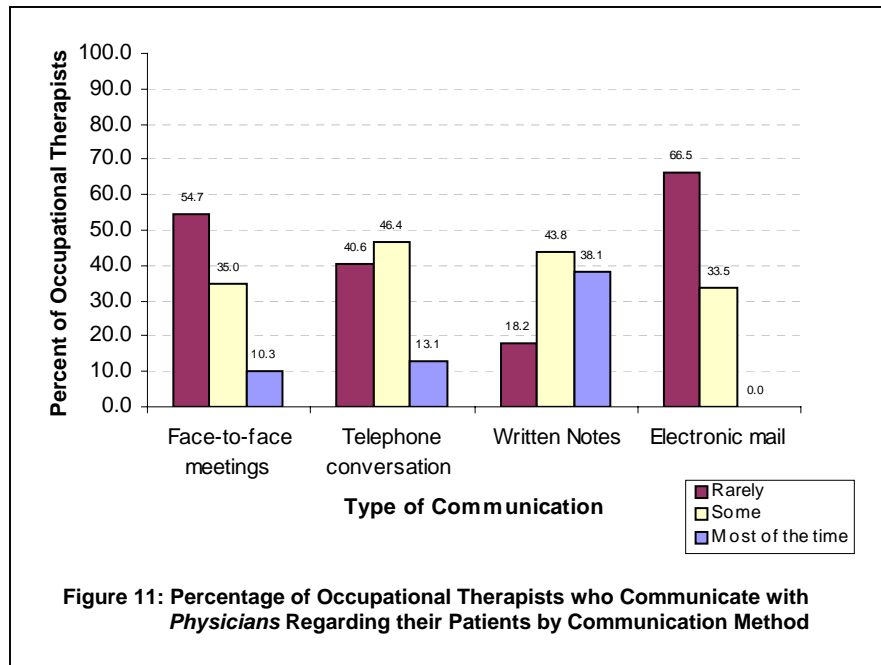
Wait Times for Occupational Therapy Services

The majority (60.1%) of occupational therapists reported average wait times of one week or less from receipt of referral to when they first see a patient, of which 10.9% have wait times of two days or less. Approximately 33.0% reported wait times between one week and one month. The remaining 6.7% reported average wait times of greater than one month.

Wait times were examined in relation to occupational therapists' caseload compositions and the Ontario Ministry of Health planning regions. Wait times could not be examined in relation to funding method because of small sample sizes in some cells. There were no significant differences found between wait times and occupational therapists' caseload compositions. However, the percentage of occupational therapists who reported *wait times of three to seven days* was higher in the Central South (78.9%) region compared to the Central West (29.1%) region.

Communication with Physicians and Nurse Practitioners

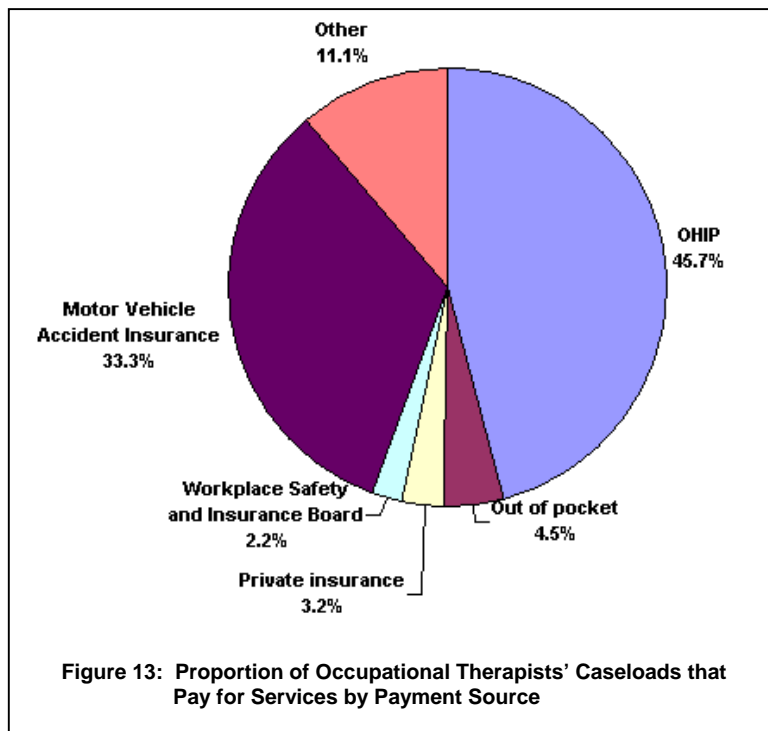
The two figures below show the frequency with which occupational therapists communicate with physicians (Figure 11) and nurse practitioners (Figure 12) and the communication methods that they use. Occupational therapists were most likely to use written notes and the telephone to communicate with both physicians and nurse practitioners. Face-to-face communication and electronic mail were less common methods of communication.



Note: The above figures only show data for respondents who have indicated that they do communicate, (even if rarely) with physicians/nurse practitioners. Data for occupational therapists who responded that they 'never' communicate with physicians/nurse practitioners are not presented in these figures.

Payment Sources

Figure 13 shows the proportion of occupational therapists' caseloads that pay for services according to various payment sources. Respondents estimated that the largest proportion of their caseload is covered for services under OHIP (45.7%). Motor vehicle accident insurance was the next largest source of payment (33.3%), while out of pocket, private insurance, and Workplace Safety and Insurance Board accounted for approximately 10.0%. The remaining 11.0% included other sources of payment such as Veteran's Affairs Canada, law firms, and employers.



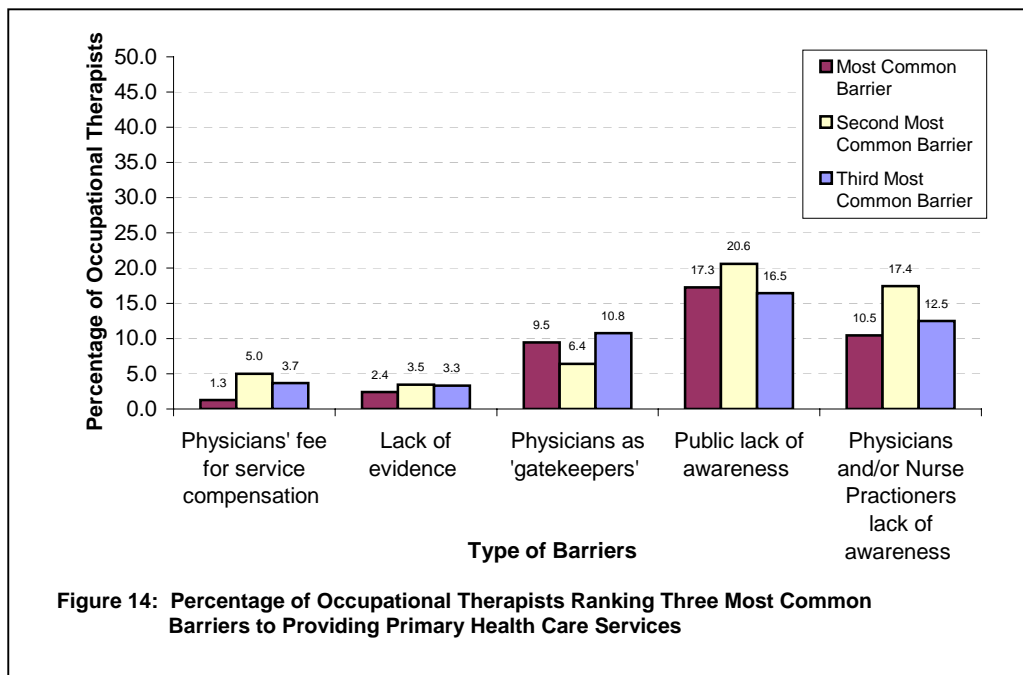
Components of Primary Health Care

The questionnaire asked respondents to identify which components of primary health care were present in their practice. The large majority (86.4%) of occupational therapists reported that they provide linkages or referrals to specialized services or programs for their patients. A large proportion of occupational therapists also reported that they work as part of an interdisciplinary, collaborative team (75.3%) and that they emphasize disease prevention and health promotion in their practice (72.7%). However, just over one-half (53.1%) of occupational therapists reported they were the first point of contact with the health care system for their patients.

Barriers to Providing Rehabilitation in Primary Health Care

The majority (69.9%) of occupational therapists identified at least one barrier to providing rehabilitation in primary health care settings. Respondents were also asked to rank the three most common barriers (from a list) that they experienced to providing primary health care.

Figure 14 shows that overall, the most common barrier was related to *public* lack of awareness of the scope of practice and/or role of rehabilitation, with the largest proportion of occupational therapists ranking this barrier as either first, second, or third. *Physicians' and/or nurse practitioners' lack of awareness of the scope of practice and/or role of rehabilitation* was also ranked as a common barrier. Very few occupational therapists identified physicians' fee for service compensation or lack of evidence demonstrating the effectiveness of rehabilitation in primary health care as barriers.



Note: The figure only shows data for respondents who indicated experiencing three barriers (ranked as 1, 2, and 3) to providing primary health care services. Data for occupational therapists who responded that they do not experience any barriers are not presented in this figure.

Respondents were also given the opportunity to provide written comments on any other barriers to providing primary health care that they experienced. Approximately 30.0% of occupational therapists provided written comments on additional barriers. The majority of comments were related to issues surrounding the lack of available funding sources, both public and private (e.g., extended insurance) for primary health care occupational therapy services. Several respondents also commented on constraints imposed by Community Care Access Centres (CCACs) under current models of “managed competition”. For example, one occupational therapist commented:

“outsourcing therapy [rehabilitation] services to the lowest bidder on 4 year contracts [i.e., managed competition] erodes consistent care for clients and reduces the attractiveness of the area of work – decreased morale, increased turnover.”

Another respondent stated:

“...provincial government direction towards divestment of staff out of CCACs (as staff members) has resulted in an unstable work environment. Community therapists are leaving the community. CCACs are using therapy service cut backs to cover budget restraints.”

4.7.4 Physiotherapists

Employment Setting

Table 7 shows the percentage of physiotherapists employed in various primary health care practice settings. The large majority of physiotherapists surveyed work in private practices/clinics.

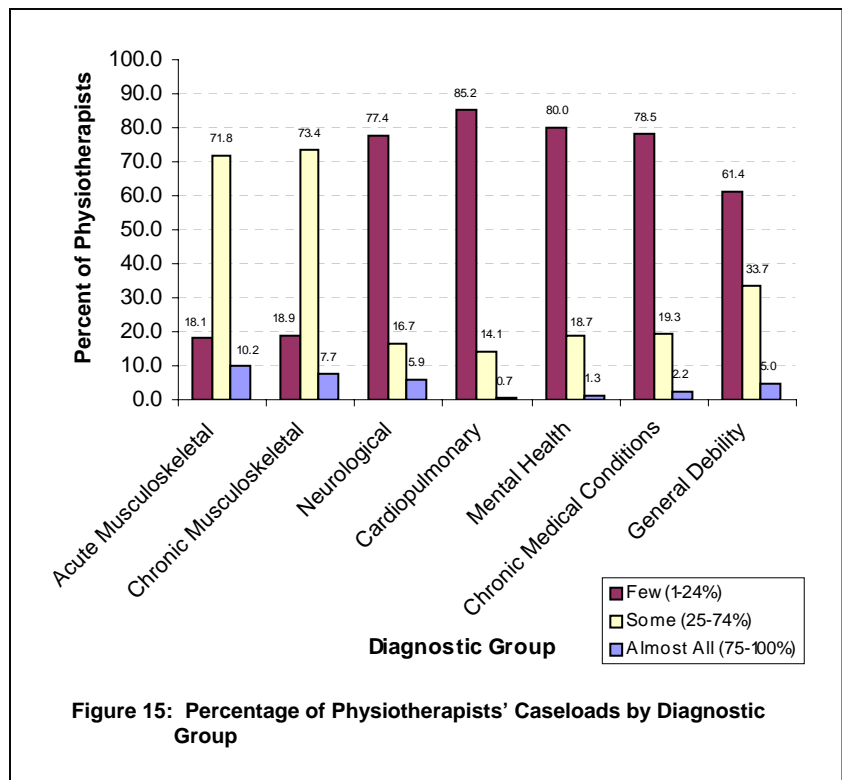
Table 7: Physiotherapists' Employment Settings within the Community

Employment Setting	Percentage (%)
Private Practice/Clinic	74.0
Hospital Outpatient Department	5.1
The Arthritis Society Consultation and Rehabilitation Service	1.4
Community Care Access Centre (CCAC) or contracted to CCAC	16.5
Community Health Centre	0.6
Other (e.g., nursing homes)	2.5

Of the physiotherapists (74.0%) who reported working in private practices/clinics, 84.5% are privately-funded settings, 10.0% are publicly-funded settings, and 5.5% are a mix of both private and public funding. Of the 5.1% of physiotherapists working in hospital outpatient departments, most (72.2%) are publicly-funded, 13.2% are privately-funded, and 14.6% are a mix of both private and public funding.

Caseload Composition

Figure 15 shows that patients with chronic (e.g., arthritis) and acute (e.g., soft tissue injuries, fractures) musculoskeletal conditions comprised the largest percentage of physiotherapists' caseloads. More than three-quarters reported that chronic (73.4%) and acute (71.8%) musculoskeletal conditions comprised some (25-74%) of their caseload. Approximately 34.0% reported that patients with general debility (e.g., geriatrics, dementia) comprised some (25-74%) of their caseload.



Note: The figure only shows data for respondents who indicated that their practice includes at least a few of these diagnostic groups. Data for physiotherapists who responded that 'none' of their practice includes these diagnostic groups are not presented in this figure.

Comparison by Funding Method

Caseload composition was examined in relation to funding method. Funding method was determined by collapsing the employment settings, shown in Appendix G [Table 5], into those that are publicly-funded, privately-funded, and a mix of both private and public funding.

Differences were found for the proportion of physiotherapists whose caseloads were comprised of patients with neurological, general debility, cardiopulmonary, chronic medical, and mental health conditions. Physiotherapists working in a publicly-funded setting were more likely to have caseloads comprised of these diagnostic conditions compared to those in a privately-funded practice setting (Table 8).

Table 8: Comparison of Physiotherapists' Caseloads by Funding Method in their Employment Settings

Diagnostic Group	Type of Funding	
	Public (%)	Private (%)
Neurological	77.8	40.8
General Debility	71.5	19.6
Cardiopulmonary	63.5	9.6
Chronic Medical Conditions	55.8	15.0
Mental Health	29.0	9.8

Comparison by the Ontario Ministry of Health Planning Regions

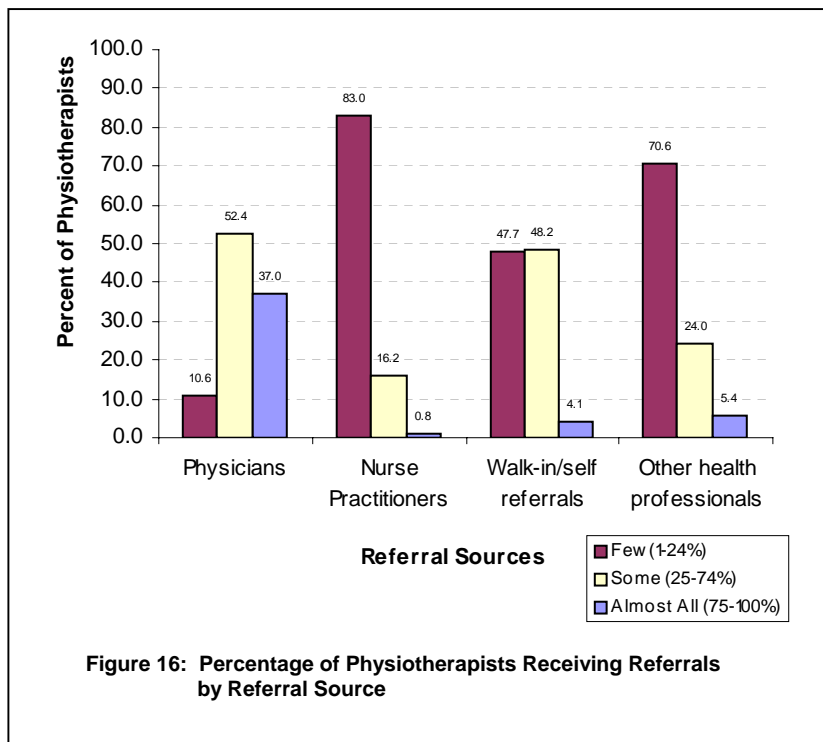
Caseload composition was also examined in relation to the Ontario Ministry of Health planning regions. Significant differences were found by region for physiotherapists whose caseloads were comprised of patients with:

- *Cardiopulmonary conditions*: higher in the North region compared to the Toronto, East, and South West regions
- *Chronic medical conditions*: higher in the North region compared to the Central West, Toronto, East, and South West regions
- *General debility*: higher in the North compared to the Central East region

Detailed data on differences for caseload composition by planning regions are provided in Appendix G [Table 6].

Referral Sources

Figure 16 shows that physiotherapists received the largest proportions of their referrals from physicians and walk-ins/self referrals. Approximately one-half of physiotherapists received some (25-74%) of their referrals from these two sources. Less than one-quarter of physiotherapists received some (25-74%) of their referrals from nurse practitioners and other health care professionals (e.g., social workers, physiotherapists, case managers). Other sources of referral reported by physiotherapists included lawyers, insurance, Workplace Safety and Insurance Board, employers, and personal trainers/fitness clubs.



Note: The figure only shows data for respondents who indicated that they receive at least a few of their referrals from these sources. Data for physiotherapists who responded that they receive 'none' of their referrals from these sources are not presented in this figure.

Availability of Physiotherapy Services

Almost all (97.7%) respondents reported that physiotherapy services were available in their place of employment during weekday, daytime hours. Over one-half (58.4%) of physiotherapists reported that services were available evenings after 5 p.m. and 18.4% reported that services were available on weekends. Very few (2.5%) respondents reported the availability of services 24 hours/7 days per week.

Wait Times for Physiotherapy Services

The large majority (84.4%) of physiotherapists reported average wait times of seven days or less from receipt of referral to when they first see a patient, of which nearly one-half (45.6%) have wait times of two days or less. Approximately 12.0% reported average wait times between one week to one month. The remaining 3.3% reported average wait times of greater than one month.

Comparison by Funding Method

Wait times were examined in relation to funding method, the Ontario Ministry of Health planning regions, and caseload composition. Although wait times are generally not so long,

differences exist between publicly- and privately-funded physiotherapists' practice settings. The percentage of physiotherapists who reported:

- *Short wait times (less than 2 days):* higher in privately-funded compared to publicly-funded practice settings
- *Longer wait times (between a week to a month):* higher in publicly-funded compared to privately-funded practice settings (Table 9)

Table 9: Comparison of Wait times for Physiotherapy Services by Funding Method

Wait Times from Referral to First Patient Contact	Type of Funding in Physiotherapists' Practice Settings	
	Public (%)	Private (%)
Less than 2 days	15.9	57.0
Between one week to one month	25.6	5.5

Comparison by the Ontario Ministry of Health Planning Regions

Wait times also varied when examined across planning regions. The percentage of physiotherapists who reported:

- *Short wait times:* higher in the Toronto, Central East, and Central West regions compared to the North region
- *Longer wait times:* higher in the North region compared to the South West, Toronto, and Central West regions

Detailed data on differences for wait times by planning regions are provided in Appendix G [Table 7].

Comparison by Diagnostic Groups

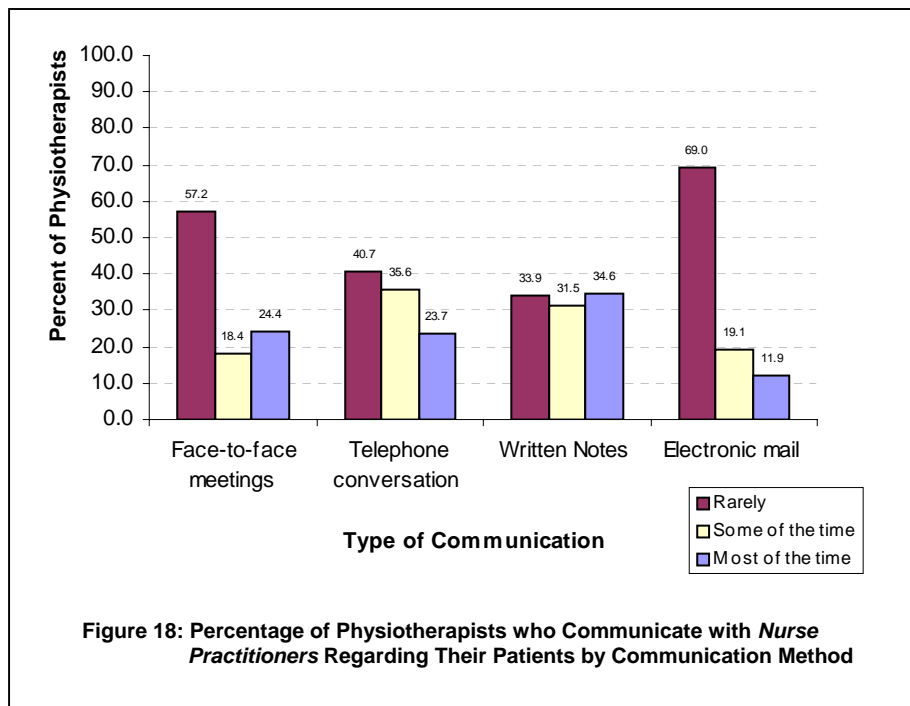
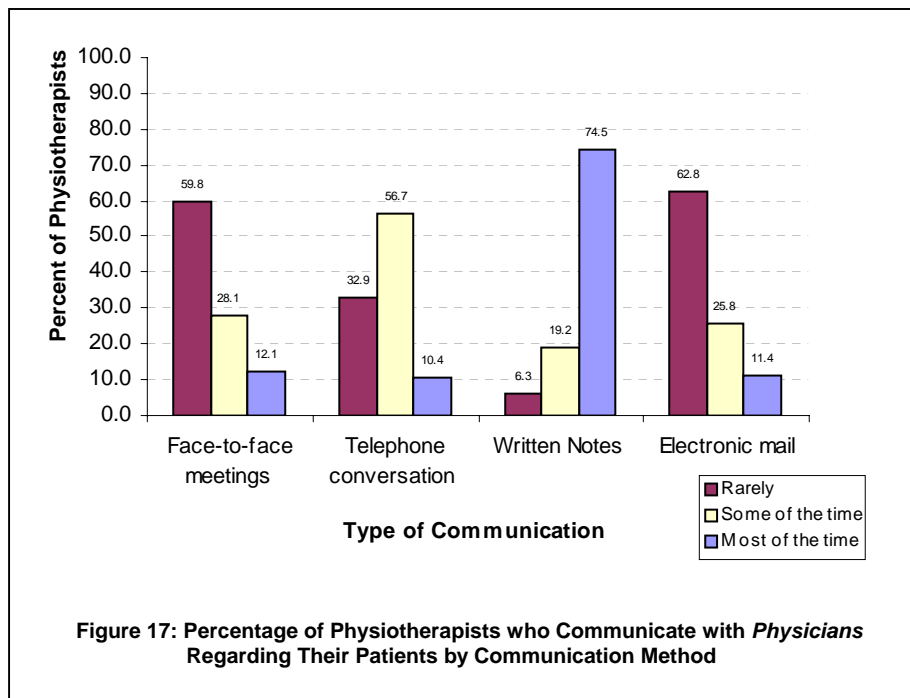
With regard to caseload composition, the percentage of physiotherapists who reported:

- *Short wait times:* higher for patients with acute and chronic musculoskeletal conditions (AMSK and CMSK) compared to other diagnostic conditions (i.e., chronic medical (CMC), neurological (NLC), mental health (MHC), and/or cardiopulmonary (CPC))
- *Longer wait times:* higher for patients with CPC and CMC compared to AMSK

Detailed data on differences for wait times by diagnostic groups are provided in Appendix G [Table 8].

Communication with Physicians and Nurse Practitioners

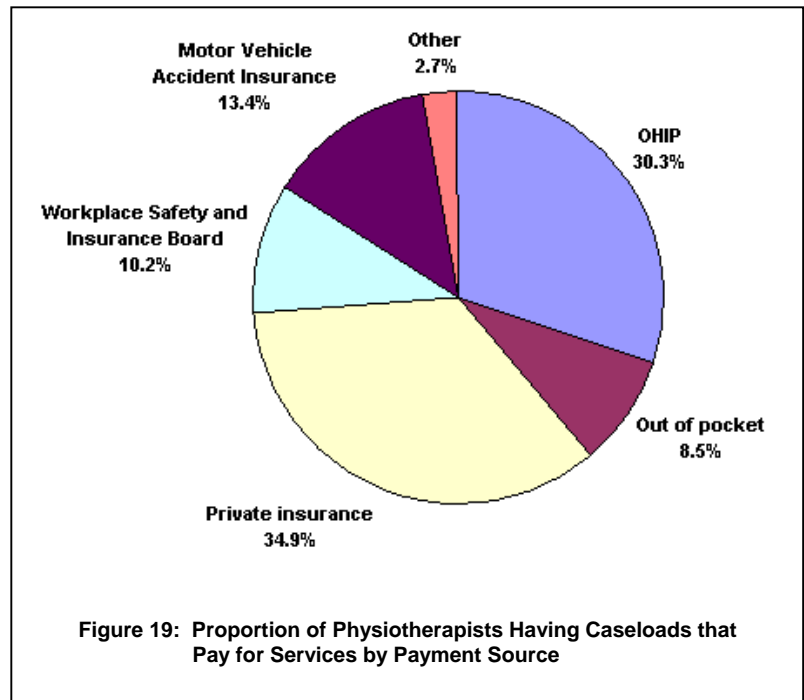
The two figures below show the frequency with which physiotherapists communicate with physicians (Figure 17) and nurse practitioners (Figure 18) and the communication methods that they use. Physiotherapists were most likely to use written notes and the telephone to communicate with both physicians and nurse practitioners. Face-to-face communication and electronic mail were less common methods of communication.



Note: The above figures only show data for respondents who have indicated that they do communicate, (even if rarely) with physicians/nurse practitioners. Data for physiotherapists who have responded that they 'never' communicate with physicians/nurse practitioners are not presented in these figures.

Payment Sources

Figure 19 shows the proportion of physiotherapists' caseloads that pay for services according to various payment sources. Respondents estimated that the largest percentage of their caseload is covered for services under private insurance (34.9%). OHIP was the next largest source of payment (30.3%), while Motor Vehicle Accident, Workplace Safety and Insurance Board, and out of pocket accounted for smaller proportions. The remaining 2.7% included other sources of payment, such as employers and Veteran's Affairs Canada.



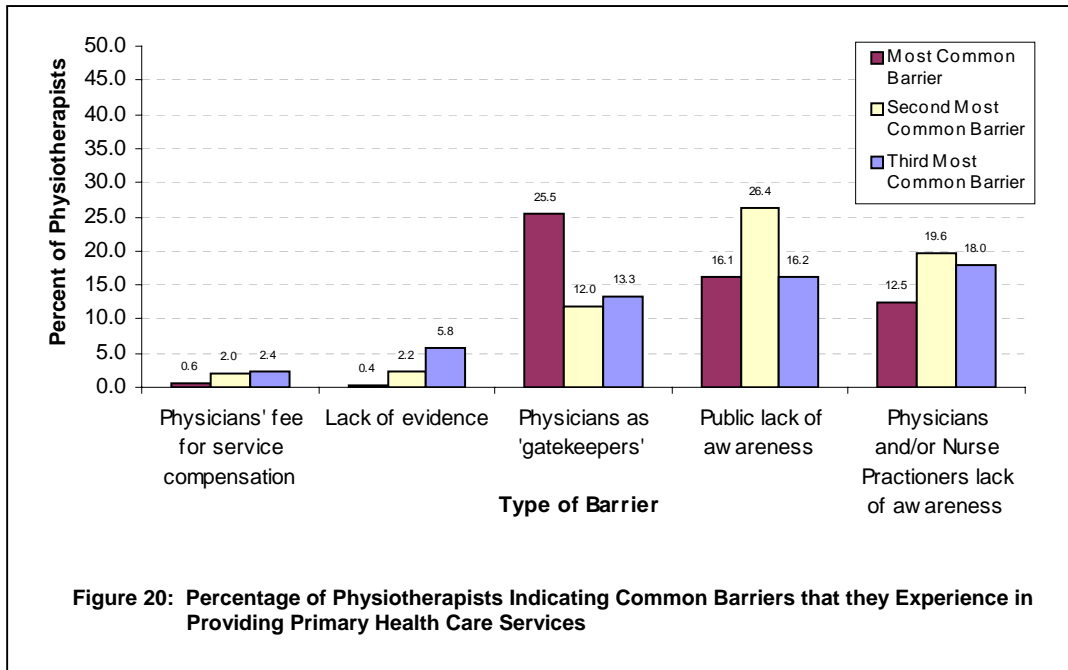
Components of Primary Health Care

The questionnaire asked respondents to identify which components of primary health care were present in their practice. The large majority (80.9%) of physiotherapists reported they were the first point of contact with the health care system for their patients. The large majority of physiotherapists also reported that they emphasize disease prevention and health promotion in their practice (78.3%), and that they provide linkages/referrals to specialized services or programs for their patients (76.3%). However, fewer physiotherapists indicated that they were part of an interdisciplinary, collaborative team (57.4%).

Barriers to Providing Rehabilitation in Primary Health Care

The majority (74.1%) of physiotherapists identified at least one barrier to providing rehabilitation in primary health care settings. Respondents were also asked to rank the three most common barriers (from a list) that they experienced to providing primary health care.

Figure 20 shows that the most common barrier was related to the perception that physicians are the “gatekeepers” of the health care system. The second and third most commonly reported barriers were related to *public* lack of awareness and *physicians’ and/or nurse practitioners’* lack of awareness of the scope of practice and/or role of rehabilitation. Very few physiotherapists identified physicians’ fee for service compensation or lack of evidence demonstrating the effectiveness of rehabilitation in primary health care as barriers.



Note: The figure only shows data for respondents who indicated experiencing three barriers (ranked as 1, 2, and 3) in providing primary health care services. Data for physiotherapists who responded that they do not experience any barriers are not presented in this figure.

Respondents were also given the opportunity to provide written comments on any other barriers to providing primary health care that they experienced. Approximately 23.0% of physiotherapists provided written comments on additional barriers. The majority of comments were related to issues surrounding access to rehabilitation services. For instance, one physiotherapist commented:

“another major barrier to providing rehab in the community is that many people do not have the funds or private benefits to attend private clinics. The low number of OHIP covered facilities, reduction in hospital physiotherapy services and waiting lists that exceed 3 months is a complete disservice to the general public. Most conditions have considerably worsened by the time people can be treated in the OHIP system. OHIP and WSIB fees need to be harmonized to an appropriate level (on par with private clinic fees) to ensure appropriate services can be provided and access is not denied to physiotherapy.”

5.0 DISCUSSION

The purpose of this study was to provide a preliminary description of the status of adult rehabilitation (occupational therapy and physiotherapy) in primary health care in Ontario. Findings present a snapshot of the adult clinical populations being served by rehabilitation professionals; the communication and referral patterns among physicians, nurse practitioners, and rehabilitation professionals; the approximate waiting times and payment sources for rehabilitation services; and the barriers to providing rehabilitation services.

This study found that primary health care rehabilitation includes a variety of clinical populations, practice settings, and payment sources. In addition, this study raises important issues for future research on access to primary health care rehabilitation in Ontario. In particular, findings on access to rehabilitation suggest that waiting times and availability differ by geographic region, diagnostic condition, and funding method. The remainder of this section summarizes and discusses key findings, identifies strengths and limitations of the study, and offers directions for future research.

5.1 Clinical Populations

Results from this study indicate that patients with musculoskeletal, neurological, and general debility (e.g., geriatrics, dementia) conditions comprise the largest proportion of rehabilitation professionals' caseloads in primary health care settings in Ontario. Although these clinical populations comprise the large majority of rehabilitation services, it is important to note that other populations seen by rehabilitation professionals in primary health care settings include individuals with cardiopulmonary, mental health, and chronic medical (e.g., diabetes, asthma) conditions.

5.2 Practice Settings

The large majority of primary health care rehabilitation in Ontario is delivered in private practice/clinic and CCAC settings. In contrast, most primary health care nurse practitioners work in Community Health Centres (CHCs), nursing stations and public health clinics, and the large majority of primary health care physicians work in private practice and Ontario Family Health Network settings. These findings lend support to the framework of primary health care practice settings in Appendix B, which shows that rehabilitation professionals rarely work in the same setting as physicians and nurse practitioners. One of the few primary health care settings in which rehabilitation professionals work together with physicians and nurse practitioners is CHCs. However, it is important to note that there are a limited number of rehabilitation professionals employed by CHCs in Ontario. In fact, only 6.4 full-time equivalent (FTE) physiotherapists (R. Dimopoulos, personal communication, June 16, 2004) and 2.5 FTE occupational therapists (J. Shin, personal communication, June 18, 2004) are currently employed by the 54 CHCs in Ontario.

The lack of rehabilitation professionals working in CHCs in Ontario is significant, particularly because one of the priority groups served by these Centres is vulnerable populations. According to the Association of Ontario Health Centres, vulnerable populations served by CHCs include members of linguistic or cultural groups, individuals who live in remote under-served communities, individuals with low incomes, individuals who are homeless, and the elderly. Unfortunately, the scope of this project did not allow for the collection of specific information on the rehabilitation needs of vulnerable populations. However, research in the United States suggests that there are important sociodemographic inequalities in the use of primary health care rehabilitation services for vulnerable groups such as the elderly and racial minorities (Mayer-Oakes et al., 1992). Further research is needed to examine the extent of inequalities in the use of primary health care rehabilitation for vulnerable populations in Ontario.

5.3 Referral and Communication Patterns

This study found that primary health care physicians are one of the largest sources of referral for rehabilitation professionals. However, physicians and nurse practitioners are only referring a portion of the diagnostic conditions that rehabilitation professionals treat. For example, although patients with chronic musculoskeletal conditions such as arthritis comprised the largest proportion of occupational therapists' caseloads in this study, only 22% of physicians and 34% of nurse practitioners indicated that they referred some of their patients with these conditions to occupational therapists.

Previous research has also documented low rates of referral to rehabilitation for individuals with arthritis (Glazier et al., 1996; Power et al., 2003). One potential reason for low rates of referral is a lack of awareness of the scope of practice of rehabilitation professionals. Occupational therapists and physiotherapists in this study identified physicians' and nurse practitioners' lack of awareness of the scope of practice and/or role of rehabilitation professionals as one of the most common barriers. Another reason for low rates of referral is primary health care physicians reliance on specialists such as rheumatologists for subsequent referrals to rehabilitation (Glazier et al.). However, research suggests that accessing rehabilitation services through specialists instead of primary health care physicians may lead to significant increases in waiting times for patients and higher costs for the health care system (Robert and Stevens, 1997).

This project focused on providing information on the type and frequency of referrals physicians and nurse practitioners make to rehabilitation professionals and on barriers to referring patients to rehabilitation. Further research is required to examine how factors such as the timeliness and appropriateness of referrals to rehabilitation impact on patient outcomes, waiting times, and health care costs.

The most common method of communication reported by all participants in this study was the use of written notes. However, qualitative comments from physicians, in particular, suggest the need for better communication. For example, several physicians provided written comments on the lack of communication from rehabilitation professionals regarding patient progress. Results also demonstrate limited face-to-face communication between primary health care physicians and nurse practitioners and rehabilitation professionals. This is not surprising given the previously mentioned lack of primary health care settings in which rehabilitation professionals

work together with physicians and nurse practitioners. Although this project provided information on the frequency and type of communication among primary health care practitioners, it did not address how such information is used to enhance the care a patient receives. Future research should explore methods of communication that facilitate collaborative, interdisciplinary practice among primary health care providers.

5.4 Access to Primary Health Care Rehabilitation

This study provides preliminary information on three factors that influence access to primary health care rehabilitation: availability, wait times, and funding.

Availability

This study found significant variability in the availability of rehabilitation services across regions in Ontario. In particular, physicians and nurse practitioners reported less availability of the Arthritis Society Consultation and Rehabilitation Services and private practices/clinics in the North compared to other regions. Furthermore, a significant number of physicians and nurse practitioners did not know if the Arthritis Society Consultation and Rehabilitation Services were available in their community. This is an important finding given that patients with chronic musculoskeletal conditions such as arthritis comprise one of the largest proportions of occupational therapists' and physiotherapists' caseloads, and that 91 clinics in Ontario provide services through the Arthritis Society Consultation and Rehabilitation Service (C. Sweetland, personal communication, June 11, 2004). These results raise concerns about the availability of primary health care rehabilitation in Northern Ontario communities and the lack of awareness of the Arthritis Society Consultation and Rehabilitation Services.

Wait Times

The majority of occupational therapists and physiotherapists reported wait times of less than one week from receipt of referral to when they first see a patient. However, when waiting times were examined in relation to three factors - funding method, planning region, and diagnostic group - significant differences were found, particularly for physiotherapists. Specifically, wait times for physiotherapy were significantly longer in publicly-funded compared to privately-funded practice settings; the North compared to other regions; and for patients with chronic medical, neurological, cardiopulmonary, and mental health conditions compared to acute musculoskeletal conditions. In addition, physicians and nurse practitioners cited wait times as the second most common barrier to referring patients to rehabilitation, which highlights the importance of interpreting findings on wait times in relation to the above three factors.

Funding

One impact of recent health care reforms and restructuring initiatives is the increasing proportion of costs of rehabilitation being transferred to patients and private insurers (Williams et al., 2004). This shift toward private funding was evident for the physiotherapists in this study, who reported that the largest proportion of their caseload was covered for services by private insurance. Interestingly, this study also found differences in the method of funding (i.e. privately-funded vs.

publicly-funded settings) for the diagnostic groups seen by rehabilitation professionals. Findings demonstrate that patients with neurological, cardiopulmonary, chronic medical, and general debility conditions are more likely to receive rehabilitation services in publicly-funded compared to privately-funded practice settings.

It is also important to note that the recent delisting of community-based physiotherapy from OHIP this year will further shift the proportion of costs to private insurers and patients. Anticipated outcomes of this shift include reduced access to needed physiotherapy for vulnerable populations and for the clinical populations identified in this study who were more likely to receive rehabilitation services in publicly-funded settings. Furthermore, according to the Canadian Physiotherapy Association (2004), delisting of physiotherapy services in British Columbia in 2002 resulted in increased waiting times within public sector institutions, a 28% decrease in the number of patients accessing community-based care, and reports of patients ending treatment prematurely due to cost constraints. In the case of occupational therapists, the shift toward private funding will also have a detrimental effect on access to services. Because there is minimal private insurance coverage for occupational therapy services compared to physiotherapy services (3.2% compared to 34.9% in this study), it is anticipated that there will be even fewer avenues to access primary health care occupational therapy services in the future.

5.5 Study Limitations

One of the limitations of this study was the variability in non-response for some of the regions for which the sample was stratified. However, weighting the sample helped limit the degree to which non-response would compromise the generalizability of the results. Another limitation was the lack of more specific data on wait times in this study. In particular, the occupational therapist and physiotherapist questionnaire did not ask respondents to differentiate wait times between acute and non-acute conditions. A final limitation was the lack of differentiation between occupational therapy and physiotherapy services on the physician and nurse practitioner version of the study questionnaire. For instance, the questionnaire did not ask respondents to distinguish between the two professions for questions related to availability of services, communication methods, and barriers to referral. Despite these limitations, this study provides one of the first overviews of the status of adult rehabilitation and primary health care across the province of Ontario. It also provides preliminary data upon which to build future projects examining the provision of rehabilitation in primary health care.

5.6 Future Developments

One of the key future developments arising from this project is the need to explore best practices in the delivery of primary health care rehabilitation services for specific types of arthritis and for early and late disease presentations. In particular, further research is needed to determine how primary health care rehabilitation services are best delivered across the prevention, management, and maintenance continuum.

The basis for this future development arises from the following findings identified in the literature and the present study:

- arthritis and related conditions represent one of the most frequent types of chronic conditions in Canada and are a leading cause of pain and physical disability and use of health care services
- recent findings from *Arthritis and Related Conditions: An ICES Practice Atlas, 2nd Edition* highlight the growing need for arthritis care in Ontario and existing gaps in care in the province
- results from the present study indicate that chronic musculoskeletal conditions such as arthritis are one of the largest diagnostic groups seen by rehabilitation professionals in primary health care settings
- results from the present study and previous Ontario-based research suggest underutilization of rehabilitation in primary health care for individuals with chronic musculoskeletal conditions such as arthritis
- results from the present study suggest that primary health care physicians and nurse practitioners in Ontario lack an awareness of available rehabilitation services for persons with arthritis, such as the Arthritis Society Consultation and Rehabilitation Services

Proposed methods for this future project include a comprehensive literature review focusing on two main areas:

- best practices in the delivery of primary health care rehabilitation services (interventions) to adults with arthritis
- best practice models of rehabilitation care delivery (how care is delivered across the continuum) for adults with arthritis

Key informant interviews and focus groups will then be conducted with two groups:

- primary health care professionals who provide care to adults with arthritis
- persons with arthritis who receive primary health care services

Results from the review of the literature and the interviews and focus groups will be integrated and analyzed with the aim of developing a comprehensive model for the delivery of primary health care services to adults with arthritis in Ontario.

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APPENDIX A

Characteristics of the Key Informant Sample

Profession	Location	Interview Completed	Comments
MD	Hamilton	NO	refused (no time)
NP	Toronto	NO	did not return calls/e-mails
NP	Ottawa	NO	did not return calls/e-mails
OT	Toronto	YES	
OT	Toronto	YES	
MD	North Bay	NO	refused (wanted an honorarium)
PT	London	YES	
PT	Toronto	YES	
MD	Kingston	YES	
PT	Toronto	YES	
NP	Toronto	YES	
NP	North Bay	NO	did not return calls/e-mails
MD	Kinmount	YES	

MD=physician, NP=nurse practitioner, OT=occupational therapist, PT=physiotherapist

APPENDIX B
Primary Health Care Sector Chart

	Fee for Service/ Private Practice (OHIP & non-OHIP for OT/PT)	Family Health Groups	Family Health Networks	Primary Care Networks	Northern Group Funding Plans	Community Sponsored Contracts	Health Service Organizations	Family Health Teams*	Hospital Outpatient Departments	Arthritis Society Consultation and Rehabilitation Services	Home Visiting/Community Agencies	Community Care Access Centres	Group Health Centres	Community Health Centres
Practitioners														
Physicians	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y
Nurse Practitioners	Y	N	Y	Y	planned	planned	Y	Y	Y	N	Y	Y	Y	Y
Physiotherapists	Y	N	N	N	N	N	N	?	Y	Y	Y	Y	?	Y
Occupational Therapists	Y	N	N	N	N	N	N	?	Y	Y	Y	Y	?	Y
Number of sites in each sector														
	unknown	144	17	12	13	24	49	150	unknown	91	unknown	43	1	54

* according to the MOHLTC, Family Health Teams are in the process of being developed

Adapted from: Ontario Strategies for Primary Care Reform (D. McCutcheon, Nov., 2003)

APPENDIX C

Selection Criteria and Sampling Process

Nurse Practitioners

The College of Nurses of Ontario's (CNO) most recent membership statistics (CNO, 2002) were obtained to assist with determining the characteristics of the target population and the sampling procedure. According to the CNO, there are approximately 519 Extended Class Registered Nurses (RNs) registered in Ontario. The Extended Class is available to RNs who have demonstrated their competence as primary health care nurse practitioners. Currently, acute care nurse practitioners are not included in the Extended Class. Selection criteria for the target population (based on available variables in the CNO database) were specified as follows:

- Extended Class RNs employed in nursing in Ontario (in either full-time, part-time, casual or not specified)
- employed in community (e.g., public/community health, home care/visiting care) or other (e.g., physicians' office) practice sectors.

These criteria resulted in an eligible sample of 321 nurse practitioners.

Occupational Therapists

According to the College of Occupational Therapists of Ontario (COTO), there are approximately 3757 registered occupational therapists in Ontario (COTO, 2003). Selection criteria for the target sample (based on variables available in the COTO Annual Registration Renewal Form (COTO, 2003) were specified as follows:

- direct client care or health promotion/organizational consultation
- primary or secondary place of employment
- community agency or community clinic or private/corporate system (insurance companies or private referrals)
- adult or geriatric caseload.

These criteria resulted in an eligible sample of 1102 occupational therapists.

Physiotherapists

According to the College of Physiotherapists of Ontario (CPO), there are approximately 6140 registered physiotherapists in Ontario (S. Tooze, personal communication, February, 2004). Selection criteria for the target sample (based on variables available in the CPO Annual Registration Form (CPO, 2003) were specified as follows:

- direct patient care or consultation
- primary or secondary place of employment
- employment settings: arthritis society, community care access centre/home care program, community health centre, consulting firm/agency or home visiting agency; or private practice/clinic (OHIP or non-OHIP clinic)
- all ages or adult or geriatric caseload.

These criteria resulted in an eligible sample of 1306 physiotherapists. It should be noted that the CPO was only able to provide addresses for physiotherapists' primary places of employment because of limitation in their database (i.e., addresses for secondary or tertiary places of employment could not be provided). As such, the number of eligible physiotherapists is likely underestimated.

Physicians

In the case of physicians, the Ontario College of Family Physicians (OCFP) could not provide a mailing list based on specific selection criteria. In addition, at the time of this study the Ontario Family Health Network did not have a policy in place to release the names and/or addresses of physicians working at Family Health Groups, Family Health Networks or Primary Care Networks. As such, it was not possible to specify specific selection criteria for practice setting as with the nurse practitioner, occupational therapist, and physiotherapist samples. A senior policy analyst at the MOHLTC contacted the OCFP to obtain a mailing list for the purpose of research. The OCFP will only release mailing lists in the case of health emergencies or if the request is from a government agency. The mailing list provided by the OCFP consisted of names and employment addresses for 6617 family physicians in Ontario.

APPENDIX D

List of Ontario District Health Council Regions

NORTH

1. Algoma-Cochrane-Manitoulin-Sudbury DHC

- Algoma
- Cochrane
- Greater Sudbury
- Manitoulin
- Sudbury

2. Northern Shores DHC

- Muskoka
- Nipissing
- Parry Sound
- Timiskaming

3. Northwestern Ontario DHC

- Kenora
- Rainy River
- Thunder Bay

CENTRAL EAST

4. Durham-Haliburton-Kawartha-Pine Ridge DHC

- Durham
- Haliburton
- Northumberland
- Peterborough
- Kawartha Lakes

5. Simcoe-York DHC

- Simcoe County
- York Region

CENTRAL SOUTH

6. Grand River DHC

- Brant
- Haldimand-Norfolk

7. Hamilton DHC

- Hamilton

8. Niagara DHC

- Niagara

CENTRAL WEST

9. Halton-Peel DHC

- Halton
- Peel

10. Waterloo Region-Wellington-Dufferin DHC

- Dufferin
- Waterloo
- Wellington

EAST

11. Champlain DHC

- Ottawa
- Prescott-Russell
- Renfrew
- Stormont-Dundas-Glengarry

12. Southeastern DHC

- Frontenac
- Hastings
- Lanark
- Leeds-Grenville
- Lennox-Addington
- Prince Edward

SOUTH WEST

13. Essex-Kent-Lambton DHC

- Essex
- Chatham-Kent
- Lambton

14. Grey-Bruce-Huron-Perth DHC

- Bruce
- Grey
- Huron
- Perth

15. Thames Valley DHC

- Elgin
- Middlesex
- Oxford

TORONTO

16. Toronto DHC

- Toronto

From: ICES RESEARCH ATLAS – PROOFING CHECKLIST Planning Regions, DHCs, and Counties
Sources: Statistics Canada, Association of Municipalities of Ontario; jppc.org; cehip.org; health.gov.ca; DHC sites;
county/municipal sites
Current as of: December 2003 (Knowledge Transfer)

APPENDIX E

Physician and Nurse Practitioner Questionnaire

Survey of Adult Rehabilitation and Primary Health Care in Ontario

Principal Investigator, Cheryl Cott, PT, PhD, University Health Network, Toronto Western Hospital Research Unit

In partnership with the Mental Health and Rehabilitation Reform Branch, Ministry of Health and Long-Term Care

This survey is designed for Physicians and Nurse Practitioners who practise in primary health care with adults or older adults in community settings in Ontario. We are interested in your experiences with rehabilitation services/providers in the areas of occupational therapy (OT) and physiotherapy (PT).

Do you currently provide primary health care services as a Physician or Nurse Practitioner to adults (age 18-65) or older adults (over age 65)? (Please check YES or NO)

YES (please complete this survey and return it to us in the prepaid envelope provided OR fax it to us at 416-603-6288)

NO (please return the uncompleted survey to us in the prepaid envelope provided OR fax it to us at 416-603-6288)

Please do not remove the identification number on this survey. It will be used solely to monitor returns. Your contact information will NOT be entered into the survey database, used in the analysis, or shared with any organization.

If you have any questions, please feel free to contact Rachel Devitt, OT Reg. (Ont), MSc, Research Associate, at:

ACREU Research Unit
Toronto Western Hospital
399 Bathurst Street – MP10-316
Toronto ON M5T 2S8

Phone: 416-603-5800 ext. 3174
Toll free: 1-866-827-6183
Fax: 416-603-6288



University Health Network

Toronto General Hospital Toronto Western Hospital Princess Margaret Hospital

1. What is your professional affiliation? <i>(Please check one category)</i>	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse Practitioner
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2. The following diagnostic groups are commonly seen by rehabilitation professionals (OT/PT). In your practice, please indicate what percentage of your patients you refer to rehabilitation for each of the following diagnostic groups. For this question, please *respond separately* for OT and PT.
(Please check one box for each category)

	Occupational Therapists					Physiotherapists				
	none 0%	few 1-24%	some 25-49%	most 50-74%	almost all 75-100%	none 0%	few 1-24%	some 25-49%	most 50-74%	almost all 75-100%
a. Acute Musculoskeletal (e.g., soft tissue injuries, sports injuries, fractures)	a.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Chronic Musculoskeletal (e.g., arthritis, low back pain, chronic soft tissue problems, osteoporosis)	b.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Neurological (e.g., stroke, brain injury, neurodegenerative disease)	c.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Cardiopulmonary (e.g., heart disease, pulmonary disease)	d.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Mental Health (e.g., anxiety, depression)	e.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Chronic Medical Conditions (e.g., diabetes, asthma)	f.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. General Debility (e.g., geriatrics, dementia)	g.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Rehabilitation professionals (OT/PT) practise in a variety of public and private settings in the community. Please specify which of the following settings are available in your community. *(Please check one box for each category)*

a. Private Practice/Clinic	a. <input type="checkbox"/> available <input type="checkbox"/> not available <input type="checkbox"/> don't know
b. Hospital Outpatient Department	b. <input type="checkbox"/> available <input type="checkbox"/> not available <input type="checkbox"/> don't know
c. The Arthritis Society Consultation and Rehabilitation Service	c. <input type="checkbox"/> available <input type="checkbox"/> not available <input type="checkbox"/> don't know
d. Community Care Access Centre (CCAC)	d. <input type="checkbox"/> available <input type="checkbox"/> not available <input type="checkbox"/> don't know
e. Day Hospital	e. <input type="checkbox"/> available <input type="checkbox"/> not available <input type="checkbox"/> don't know
f. Community Health Centre (CHC)	f. <input type="checkbox"/> available <input type="checkbox"/> not available <input type="checkbox"/> don't know
g. Other (e.g., mental health agency) (please specify) _____	

4. We are interested in the communication you have with rehabilitation professionals (OT/PT) regarding your patients. Please indicate approximately how frequently you communicate with rehabilitation professionals according to each of the following methods. (Please check one box for each category)					
	never	rarely	some of the time	most of the time	always
a. Face-to-face meeting (e.g., one-on-one meeting, team meeting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Telephone conversation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Written note (e.g., consult note, letter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Electronic mail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<p>5. Potential barriers to referring patients to rehabilitation (OT/PT) services have been identified by practitioners in primary health care settings. Please indicate which of the following barriers you have experienced in your practice. (Please check all that apply)</p>	<p>a. <input type="checkbox"/> I have not experienced any barriers</p> <p>b. <input type="checkbox"/> Waiting times for rehabilitation (OT/PT) are unacceptably long</p> <p>c. <input type="checkbox"/> It is difficult to locate available rehabilitation (OT/PT) services in the community</p> <p>d. <input type="checkbox"/> There are no rehabilitation (OT/PT) services in close proximity for my patients</p> <p>e. <input type="checkbox"/> I am not satisfied with rehabilitation (OT/PT) services my patients have received</p> <p>f. <input type="checkbox"/> The cost of private rehabilitation (OT/PT) is a deterrent for my patients</p> <p>g. <input type="checkbox"/> Other (please specify) _____</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>6. Which of the following categories best describes the setting/site where you work? (Please check one category)</p>	<p>a. <input type="checkbox"/> Private Practice (e.g., fee for service, solo or group practice)</p> <p>b. <input type="checkbox"/> Ontario Family Health Network (FHN, FHG, PCN)</p> <p>c. <input type="checkbox"/> Health Service Organization</p> <p>d. <input type="checkbox"/> Community Health Centre (CHC)</p> <p>e. <input type="checkbox"/> Northern Group Funding Plan/Community Sponsored Contract</p> <p>f. <input type="checkbox"/> Other (please specify) _____</p>
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We are interested in any additional comments or thoughts you might have about topics covered in this survey.

Thank you very much for taking the time to complete this survey!

APPENDIX F

Occupational Therapist and Physiotherapist Questionnaire

Survey of Adult Rehabilitation and Primary Health Care in Ontario

Principal Investigator, Cheryl Cott, PT, PhD, University Health Network, Toronto Western Hospital Research Unit

In partnership with the Mental Health and Rehabilitation Reform Branch, Ministry of Health and Long-Term Care

This survey is designed for Occupational Therapists (OT) and Physiotherapists (PT) who currently provide privately-funded and/or publicly-funded services to adults or older adults in community settings in Ontario.

Do you currently provide occupational therapy or physiotherapy services (primary or secondary place of employment) to adults (age 18-65) or older adults (over age 65) in a community setting (e.g., clinic, agency, home, etc.)? (Please check YES or NO)

YES (please complete this survey and return it to us in the prepaid envelope provided OR fax it to us at 416-603-6288)

NO (please return the uncompleted survey to us in the prepaid envelope provided OR fax it to us at 416-603-6288)

Please do not remove the identification number on this survey. It will be used solely to monitor returns. Your contact information will NOT be entered into the survey database, used in the analysis, or shared with any organization.

If you have any questions, please feel free to contact Rachel Devitt, OT Reg. (Ont.), MSc, Research Associate, at:

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Fax: 416-603-6288



University Health Network

Toronto General Hospital | Toronto Western Hospital | Princess Margaret Hospital

1. Which of the following categories best describes the <u>community</u> setting where you work? (Please check one, even if you work in more than one community setting AND base your responses to the remaining questions on the community setting you have indicated)	a. <input type="checkbox"/> Private Practice/Clinic (please specify) _____ <input type="checkbox"/> publicly-funded <input type="checkbox"/> privately-funded b. <input type="checkbox"/> Hospital Outpatient Department (please specify) _____ <input type="checkbox"/> publicly-funded <input type="checkbox"/> privately-funded c. <input type="checkbox"/> The Arthritis Society Consultation and Rehabilitation Service d. <input type="checkbox"/> Community Care Access Centre (CCAC) or contracted to CCAC e. <input type="checkbox"/> Community Health Centre (CHC) f. <input type="checkbox"/> Other (please specify) _____
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2. The following diagnostic groups are commonly seen by rehabilitation professionals (OT/PT). Please indicate what percentage of your practice includes each of these groups. (Please check one box for each category)					
	none 0%	few 1-24%	some 25-49%	most 50-74%	almost all 75-100%
a. Acute Musculoskeletal (e.g., soft tissue injuries, sports injuries, fractures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Chronic Musculoskeletal (e.g., arthritis, low back pain, chronic soft tissue problems, osteoporosis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Neurological (e.g., stroke, brain injury, neurodegenerative disease)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Cardiopulmonary (e.g., heart disease, pulmonary disease)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Mental Health (e.g., anxiety, depression)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Chronic Medical Conditions (e.g., diabetes, asthma)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. General Debility (e.g., geriatrics, dementia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Rehabilitation professionals (OT/PT) have various sources of referrals. In your practice, please indicate what percentage of referrals you receive from the following sources. (Please check one box for each category)					
	none 0%	few 1-24%	some 25-49%	most 50-74%	almost all 75-100%
a. Physicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Nurse practitioners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Walk-in/self referrals (e.g., client/patient, family member)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Other health professionals (e.g., OT, PT, social work, registered nurse, case manager)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Other (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please return completed survey in prepaid envelope provided OR fax back to 416-603-6288

4. What hours are rehabilitation services available at your place of employment/in your practice? (Please check all that apply)	a. <input type="checkbox"/> 24 hours/7 days per week b. <input type="checkbox"/> Weekdays (i.e., Monday to Friday, daytime hours) c. <input type="checkbox"/> Weekends (Saturday and/or Sunday) d. <input type="checkbox"/> Evenings (i.e., after 5pm)
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5. What is the approximate wait time (in days) from when you receive a referral to when you first see a client/patient?	_____ (days)
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6. We are interested in the communication you typically have with physicians and nurse practitioners regarding your clients/patients. Please indicate how frequently you communicate with physicians and nurse practitioners through each of the following methods. For this question, please respond separately for physicians and nurse practitioners. (Please check one box for each category)

	Physicians					Nurse Practitioners				
	never	rarely	some of the time	most of the time	always	never	rarely	some of the time	most of the time	always
a. Face-to-face meeting (e.g., one-on-one, team meeting)	a. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Telephone conversation	b. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Written note (e.g., consult note, letter)	c. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Electronic mail	d. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Please indicate the approximate percentage of your total client/patient caseload that pay for your services according to each of following payment sources. (If 0% please write 0%)

a. OHIP	a. _____ %
b. Out of pocket	b. _____ %
c. Private insurance (e.g., extended coverage)	c. _____ %
d. Workplace Safety and Insurance Board	d. _____ %
e. Motor Vehicle Accident Insurance	e. _____ %
f. Other (please specify) _____	f. _____ %
Total = 100%	

8. What is your professional affiliation? <i>(Please check one)</i>	<input type="checkbox"/> Occupational Therapist <input type="checkbox"/> Physiotherapist
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9. The following are considered key components of primary health care. Please identify which of these components of primary health care are present in your practice. (Please check all that apply)	
a. <input type="checkbox"/> My clients/patients first point of contact with the health care system is with me—▶ <i>(Please check one)</i> <input type="checkbox"/> never <input type="checkbox"/> sometimes <input type="checkbox"/> all or most of the time	
b. <input type="checkbox"/> I am part of an interdisciplinary, collaborative team	
c. <input type="checkbox"/> I emphasize disease prevention, health promotion and involvement of the community in my practice	
d. <input type="checkbox"/> I provide linkages/referrals to specialized services or programs for my clients/patients	

10. Barriers to providing rehabilitation in primary health care settings have been reported by practitioners in primary health care settings. Have you experienced any barriers to providing rehabilitation in primary health care settings?	<input type="checkbox"/> YES <i>(Please proceed to question 11)</i> <input type="checkbox"/> NO <i>(Thank you very much for taking the time to complete this survey. Please see the bottom of this page if you are interested in sharing any additional comments)</i>
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11. Please rank the 3 most common barriers (from the following list) to providing primary health care that you have experienced. <u>Assign 3 Ranks</u> 1 = most common barrier 2 = second most common barrier 3 = third most common barrier	a. ___ Physicians' fee for service compensation limits interdisciplinary, collaborative practice b. ___ There is a lack of evidence demonstrating effectiveness of rehabilitation (OT/PT) in primary health care c. ___ Physicians are perceived as “gatekeepers” of the health care system d. ___ Public lack awareness of scope of practice and/or role of rehabilitation (OT/PT) e. ___ Physicians and/or nurse practitioners lack awareness of scope of practice and/or role of rehabilitation (OT/PT) f. ___ Other (please specify)_____
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We are interested in any additional comments or thoughts you might have about topics covered in this survey.

Thank you very much for taking the time to complete this survey!

APPENDIX G

Comparisons by Ministry of Health Planning Regions, Funding Method, Practice Settings, and/or Diagnostic Groups

Table 1: Comparison of Physicians' Referrals of Patients in Diagnostic Groups to Rehabilitation Professionals by the Ontario Ministry of Health Planning Regions

Rehabilitation Professionals	Diagnostic Group	Planning Regions						
		North (%)	Central East (%)	Central South (%)	Central West (%)	East (%)	South West (%)	Toronto (%)
Occupational Therapists	Neurological Conditions	90.5	91.0	--*	88.9	--	--	75.8
	Mental Health Conditions	--	--	--	--	20.1	18.5	35.2
Physiotherapists	Cardiopulmonary Conditions	--	--	--	--	75.7	--	60.0

*Note: The table only shows the percentage of physicians who refer patients by diagnostic groups to rehabilitation professionals that differed significantly by planning regions.

Table 2: Comparison of Physicians' Reports of Available Rehabilitation Services by the Ontario Ministry of Health Planning Regions

Community Rehabilitation Setting	Planning Regions						
	North (%)	Central East (%)	Central South (%)	Central West (%)	East (%)	South West (%)	Toronto (%)
Private Practice/Clinic	67.7	94.6	87.4	97.9	94.0	94.2	95.9
Day Hospital	11.5	46.9	60.1	49.4	58.9	49.7	56.1
Hospital Outpatient Department	92.4	--*	70.6	--	70.2	90.8	76.6
The Arthritis Society Consultation and Rehabilitation Service	32.4	34.7	--	--	--	55.3	50.3

*Note: The table only shows the percentage of physicians who report available rehabilitation services in the community that differed significantly by planning regions.

Table 3: Comparison of Physicians' Reports of Available Rehabilitation Services by Physicians' Practice Setting

Community Rehabilitation Setting	Physicians' Practice Setting		
	Private Practice (%)	Ontario Family Health Network (%)	Community Health Centre (%)
Day Hospital	45.3	60.3	--*
Community Health Centre	23.5	31.4	65.4

*Note: The table only shows the percentage of physicians who report available rehabilitation services in the community that differed significantly by physicians' practice settings.

Table 4: Comparison of Nurse Practitioners' Reports of Available Rehabilitation Services by the Ontario Ministry of Health Planning Regions

Community Rehabilitation Setting	Planning Regions						
	North (%)	Central East (%)	Central South (%)	Central West (%)	East (%)	South West (%)	Toronto (%)
Private Practice/Clinic	64.8	--	94.6	--	94.0	96.1	--
Hospital Outpatient Department	--*	--	--	--	97.3	66.5	--
Day Hospital	--	--	--	--	72.8	34.2	--
The Arthritis Society Consultation and Rehabilitation Service	31.8	--	--	--	--	69.9	--
Community Care Access Centre	66.3	--	--	--	94.0	--	--

*Note: The table only shows the percentage of nurse practitioners who report available rehabilitation services in the community that differed significantly by planning regions.

Table 5: Breakdown of Employment Setting by Public and/or Private Funding

Publicly-funded (PB)	Privately-funded (PV)	Both Publicly- and Privately-funded
<ul style="list-style-type: none"> • PB Private Practice/Clinic • PB Hospital Outpatient Department • The Arthritis Society Consultation and Rehabilitation Service • Community Care Access Centre or contracted to CCAC • Community Health Centre 	<ul style="list-style-type: none"> • PV Private Practice/Clinic • PV Hospital Outpatient Department 	<ul style="list-style-type: none"> • PB and PV Private Practice/Clinic • PB and PV Hospital Outpatient Department

Table 6: Comparison of Physiotherapists' Caseload Composition by the Ontario Ministry of Health Planning Regions

Diagnostic Group	Planning Regions						
	North (%)	Central East (%)	Central South (%)	Central West (%)	East (%)	South West (%)	Toronto (%)
Cardiopulmonary Conditions	47.5	--*	--	--	21.5	21.2	23.9
Chronic Medical Conditions	51.6	--	--	25.3	23.3	17.9	23.9
General Debility	56.4	31.0	--	--	--	--	--

*Note: The table only shows the percentage of physiotherapists' whose caseload composition differed significantly by planning regions.

Table 7: Comparison of Wait Times for Physiotherapy Services by the Ontario Ministry of Health Planning Regions

Wait Times from referral to first time seeing patients	Planning Regions						
	North (%)	Central East (%)	Central South (%)	Central West (%)	East (%)	South West (%)	Toronto (%)
Less than two days	23.1	49.0	--*	46.5	--	--	49.5
Between one week to one month	37.2	--	--	8.4	--	13.2	9.2

*Note: The table only shows the percentage of physiotherapists whose wait times differed significantly by planning regions.

Table 8: Comparison of Wait Times for Physiotherapy Services by Diagnostic Conditions

Wait Times from referral to first time seeing patients	Diagnostic Condition					
	AMSK (%)	CMSK (%)	NLC (%)	CM (%)	MH (%)	CP (%)
Less than two days	44.2	--*	34.3	29.8	26.7	26.6
	--	43.2	--	29.8	26.7	26.6
Between one week to one month	7.5	--	--	15.5	--	15.4

*Note: The table only shows the percentage of physiotherapists whose wait times differed significantly by diagnostic conditions