

Availability and Access to Rehabilitation Services Along Ontario's Continuum of Care

~ Final Report ~

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“Every report prepared for the foundation has the same guidelines: start with one page of main messages; follow that with 1 three-page executive summary; present your findings in no more than 25 pages of writing, in language a bright, educated, but not research-trained person would understand.”

(http://www.chsrf.ca/other_documents/annual_reports/2005/helping_e.php)

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List of Terms and Definitions

Availability & Access: We have operationally defined availability as the extent to which rehabilitation providers or services exists, or are present, in the environment. Access, on the other hand, was defined as the extent to which individuals could overcome barriers to contact or approach a rehabilitation provider.

Community-Based Rehabilitation: In this report, community-based rehabilitation settings include publicly and privately funded settings where rehabilitation can be accessed by community dwelling individuals. Included are private clinics, Designated Physiotherapy Clinics (formerly known as Schedule 5 Physiotherapy Clinics), Community Care Access Centres, Community Health Centres, Hospital Outpatient Rehabilitation Departments and The Arthritis Society Consultation and Rehabilitation Services.

Community Care Access Centres (CCACs): CCACs provide in-home health care services (including occupational therapy and physiotherapy) and access to long-term placement within communities throughout the Province of Ontario. All services provided by Community Care Access Centres are funded by the Ministry of Health and Long-Term Care. Anyone can refer a client to a CCAC, such as the client themselves, a family member, caregiver, friend, physician or other health care professional.

Community Health Centres (CHC): Community Health Centres are delivered through publicly funded (MOH-LTC), community governed, not for profit organizations that provide primary health care, health promotion and community development services, using multidisciplinary teams of health providers. These teams sometimes include occupational therapists and physiotherapists. Services are designed to meet the specific needs of the community surrounding the CHC. In many communities, CHCs provide their programs and services for people with difficulties accessing the full range of primary health-care services.

Designated Physiotherapy Clinics: Formerly known as Schedule 5 OHIP Physiotherapy Clinics, these clinics are funded by the Ontario Ministry of Health and Long-Term Care through the Ontario Health Insurance Program (OHIP). In order to be eligible for this service, one must meet at least one of the following conditions: 1) be either under the age of 20 or aged 65 and over; 2) a resident of a long-term care home at any age; 3) requiring physiotherapy services in home or after being hospitalized at any age, or, 4) a participant of the Ontario Disability Support Program, receiving Family Benefits and Ontario Works at any age.

Hospital Outpatient Rehabilitation Departments: Many hospitals offer outpatient occupational therapy and/or physiotherapy services. These services are usually funded through the hospital's global budget. However a few clinics throughout Ontario hospitals exist as for-profit business entities or have contracted services to external providers. Wait Lists and Wait Times for Community-Based Rehabilitation in Ontario.

Occupational Therapy (OT): Occupational Therapists (OTs) are health professionals who help people or groups of people of all ages assume or reassume the skills they need for the job of living. OTs work with clients to help identify barriers to meaningful occupations (self care, work and leisure). While enabling clients to change these barriers, occupational therapists fulfill the roles of therapist, educator, counselor, case manager, resource developer, policy analyst and advocate⁴.

Physiotherapy or Physical Therapy (PT): Physiotherapists (PTs) are first contact, autonomous, client-focused health professionals trained to: improve and maintain functional independence and physical performance; prevent and manage pain, physical impairments, disabilities and limits to participation; and promote fitness, health and wellness.

Private Funding: Private funding is derived purely from private sources and are not regulated by the provincial government. Some examples are private third party insurance such as casualty or extended health coverage and out-of-pocket payments directly from the client or their family. In some cases programs are funded through private sources, but the fee structure is regulated in some way by the provincial government. Examples are the Workplace Safety & Insurance Board (WSIB) and the Motor Vehicle Accident (MVA) insurance.

Public Funding: Public sources of funding are finances derived purely from federal, provincial or municipal governments. In Ontario, public sources for funding rehabilitation services include (but are not limited to) global budgets provided to hospitals and institutions, Community Care Access Centres (CCAC), and direct funding from the Ministry of Health and Long-Term Care.

Rehabilitation: Rehabilitation is a goal-oriented process that enables individuals with impairment, activity limitations and participation restrictions to identify and reach their optimal physical, mental and/or social functional level through client-focused partnership with family, providers and the community. Rehabilitation focuses on abilities and aims to facilitate independence and social integration.

Wait List: The number of people waiting for community-based rehabilitation services.

Wait Time: Wait time refers to the length of time between when a patient is enrolled on a waiting list and when the service is received. There are divergent opinions as to the precise moment at which an individual begins “waiting” for services, however in general, wait time refers to the time between first contact with a provider and the time of assessment

1.0 Main Messages

Key Message #1 (Health Human Resources): Rehabilitation health human resources continues to emerge as a critical health policy issue across the provincial and territorial landscapes. In Ontario, there are approximately 4000 occupational therapists (OTs) and 5500 physical therapists (PTs). These absolute numbers translate into approximately 3.2 OTs per 10,000 population, and 4.4 PTs per 10,000 population. These aggregated estimates vary widely, but consistently, across Local Health Integration Networks (LHIN). For instance, Toronto Central LHIN has the highest health human resource ratio of provider to population (5.8 OTs and 7.7 PTs per 10,000 population), and the Central West LHIN has the lowest ratio (1.4 OTs and 2.5 PTs per 10,000 population). In comparisons with other provincial jurisdictions, the health human resource ratio of PTs to population in Ontario appears to be decreasing and not keeping pace with overall population growth. A factor that complicates the interpretation of the health human resource ratio is that the ideal or optimal ratio of rehabilitation provider to population is unknown.

Key Message #2 (Health Care Restructuring): There have been a series of important restructuring events in the Province of Ontario ranging from the implementation of the recommendation from the Health Services Restructuring Commission (established in the mid-1990s) to the more recent implementation of Family Health Teams. These reforms appear to have had varying effect on rehabilitation services. In particular, there has been a trend to shift care from hospitals/institutions to the community in order to provide appropriate services closer where the individual lives. While this approach has value, it may have also created a ripple effect which has in turn has eroded (rather than enhanced) the provision of rehabilitation services. For instance, within the past decade, there are fewer hospitals providing ambulatory services, there has been a partial delisting of community-based physical therapy services, and creation of FHT has not been inclusive of rehabilitation providers.

Key Message #3 (Funding): Rehabilitation services are funded through a complex mix of public and private sources. There are at least 9 separate funding streams for physical therapy services, which can be categorized into public, quasi-public and private tiers. Although the data is not readily accessible, the same is true for occupational therapy services. Governments and institutions have used the argument that rehabilitation services can be paid for elsewhere in the system as justification for decreasing or eliminating services. There has been an assumption that demand for rehabilitation is ‘elastic’ in nature, meaning that delisting, de-insuring, or elimination of services in one publicly-funded sector would simply shift these same individuals to other publicly-funded sectors. The research that exists seems to disagree with this assumption.

Key Message #4 (Wait Times): Wait times can be viewed as a proxy measure of the degree to which existing supply is meeting current demand. Long wait times can thus be interpreted as having inadequate supply (human resource or financial) to meet demand. Wait time in the privately funded rehabilitation sector are relatively short, and while there is large variation, wait times in the publicly-funded sector are much longer. For instance, Communicate Care Access Centres (CCACs) had median wait times of 14.5 days, and hospital outpatient departments had wait times of 12.3 days for occupational therapy services. Individuals with chronic musculoskeletal conditions appear to be waiting longer for access to rehabilitation services. This suggests that current publicly-funded community-based rehabilitation capacity is not adequate to meet the demands for specific client populations, in specific settings.

2.0 Executive Summary

Reasonable and timely access to health services remains a critical issue across Canada's national, provincial and regional landscape. However, much of the policy attention and debate appears to revolve around hospitals, physicians, nurses, and surgical/diagnostic services. While much of the major policy attention has been concentrated elsewhere, there have been a series of events within the last few decades that have affected rehabilitation services in Ontario. These changes include, but are not limited to, the partial delisting of community based physical therapy services, introduction of Local Health Integration Networks (LHIN), introduction of advanced practice models in hospitals and the establishment of Family Health Teams. In response to these changes, there has been an emergence of rehabilitation-based research that has explored these recent events; however each study addressed only a small and focused part of the rehabilitation system in Ontario. There has not been an overall synthesis of this recent research to untangle the health policy context regarding availability and access to rehabilitation services across the Ontario's continuum of care.

In this policy research project, we sought to conduct a focused review of the emerging literature in this field of study, in order to discuss a series of policy implications and to discuss future research that would fill the knowledge gap. Thus, this project synthesized publicly available health services research regarding availability and access to occupational therapy (OT) and physical therapy (PT) services across Ontario's continuum of care. In this project, we operationally defined availability as the extent to which rehabilitation providers or services exists, or are present, in the environment. Access, on the other hand, was defined as the extent to which individuals could overcome barriers to contact or approach a rehabilitation provider. We synthesized and interpreted the information gathered, and generated a series of policy implications on availability and access to rehabilitation services.

Our objectives were four fold: (1) to understand the degree to which Ontarians have access to OT and PT services across the continuum; (2) to summarize the issue of wait lists and times for OT and PT services across the continuum; (3) to speculate on the extent to which access to rehabilitation services affects clients and their health status; and (4) to more fully understand the extent to which level of access to OT and PT has implications at the institution, regional and overall system level. Our methodology included a literature search within the peer-reviewed databases. Peer reviewed literature from 2000 to 2009 was searched through MEDLINE and CINAHL using the key words: availability, access, physiotherapy, physical therapy, occupational therapy, health services needs and demands, "supply-demand" and Canada, Ontario. Where feasible keyword searches were mapped to MeSH terms: allied health occupations/ or occupational therapy/ or "physical therapy (specialty)", Health Occupations/sn, td, ec, "Physical Therapy (Specialty)"/ma, td, sn, ec, exp "Health Services Needs and Demand"/sn, ut, td, ec [Statistics & Numerical Data, Utilization, Trends, Economics], supply.mp., demand.mp., Occupational Therapy/ma, ut, ec, td, sn., Canada exp. Ontario, and exp Canada. Additional search limitations were set on Language (English). A total of 28 articles were collected, with 14 related to access and availability within Canada or Ontario. Article titles and abstracts were skimmed and included based on their relevance to the utilization of health services provided by PTs and OTs based on Ontario or within another province in Canada. Articles that discussed shortage, supply or demand of rehabilitation health services were also included. We then interpreted the data accordingly. Please note that our health policy interpretations of the findings are included within each section of the results section, rather than the more traditional research methodologies which separate results, analysis and interpretations.

Following the literature search, we then used Schlesinger's approach to health policy analysis as a guiding principle in our interpretations. According to Schlesinger (2006), there are three approaches to health policy analysis. The first approach views policy analysis as a technical exercise, and the analytical approach uses empirical analysis and disregards issues such as emerging values and ideologies. A second approach assumes that policy analysis is a political act, wherein the "analyst's own goals and values are inextricably embedded in the ways in which problems are framed and proposed solutions evaluated." A third approach or perspective in policy analysis treats the assessment of public policy as an interpretive task. Within the framework of this latter approach, the role of the policy analyst is related to "revealing unseen aspects or social problems and hidden motives for policy formulation." In essence, the prevailing question driving the latter approach is *why* societies, or their decision-making and policy-making representatives, choose particular decisions over others.

For the purposes of this project, we have adopted the latter approach. We thus sought to examine the literature, but also to ask the question of *why* availability and access to rehabilitation "*is the way it is*" in Ontario. Based on our findings, there are 4 key points that emerged.

Key Message #1 (Health Human Resources): Rehabilitation health human resources continues to emerge as a critical health policy issue across the provincial and territorial landscapes. In Ontario, there are approximately 4000 occupational therapists (OTs) and 5500 physical therapists (PTs). These absolute numbers translate into approximately 3.2 OTs per 10,000 population, and 4.4 PTs per 10,000 population. These aggregated estimates vary widely, but consistently, across Local Health Integration Networks (LHIN). For instance, Toronto Central LHIN has the highest health human resource ratio of provider to population (5.8 OTs and 7.7 PTs per 10,000 population), and the Central West LHIN has the lowest ratio (1.4 OTs and 2.5 PTs per 10,000 population). In comparisons with other provincial jurisdictions, the health human resource ratio of PTs to population in Ontario appears to be decreasing and not keeping pace with overall population growth. A factor that complicates the interpretation of the health human resource ratio is that the ideal or optimal ratio of rehabilitation provider to population is unknown.

Key Message #2 (Health Care Restructuring): There have been a series of important restructuring events in the Province of Ontario ranging from the implementation of the recommendation from the Health Services Restructuring Commission (established in the mid-1990s) to the more recent implementation of Family Health Teams. These reforms appear to have had varying effect on rehabilitation services. In particular, there has been a trend to shift care from hospitals/institutions to the community in order to provide appropriate services closer where the individual lives. While this approach has value, it may have also created a ripple effect which has in turn eroded (rather than enhanced) the provision of rehabilitation services. For instance, within the past decade, there are fewer hospitals providing ambulatory services, there has been a partial delisting of community-based physical therapy services, and creation of FHT has not been inclusive of rehabilitation providers.

Key Message #3 (Funding): Rehabilitation services are funded through a complex mix of public and private sources. There are at least 9 separate funding streams for physical therapy services, which can be categorized into public, quasi-public and private tiers. Although the data is not readily accessible, the same is true for occupational therapy services. Governments and institutions have used the argument that rehabilitation services can be paid for elsewhere in the system as justification for decreasing or eliminating services. There has been an assumption that

demand for rehabilitation is ‘elastic’ in nature, meaning that delisting, de-insuring, or elimination of services in one publicly-funded sector would simply shift these same individuals to other publicly-funded sectors. The research that exists seems to disagree with this assumption.

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Overall, the availability and access to rehabilitation services across the care continuum does not appear to be an ideal scenario for Ontarians. There are growing absolute numbers of rehabilitation providers, but this growth does not appear to be matched with overall population growth. Moreover, it is not yet clear how many rehabilitation providers are needed in Ontario (although the presence of long wait times appears to indicate a dearth of supply) thereby complicating the interpretation of the availability or supply of providers. Health care restructuring has had an impact on the availability of rehabilitation services, and the ongoing shift from public to private, or what has been termed ‘commodification’ of rehabilitation services, have limited access to rehabilitation services. The reasons for these outcomes are complex and rather amorphous to untangle from a health policy perspective, however it would seem reasonable to assume that the focus on acute medical and hospital care has pushed aside rehabilitation. However, the evidence seems to suggest that there are growing numbers of individuals with chronic disease, which may be driven by factors such as an aging population, which may drive the demand for rehabilitation. There is some evidence to suggest that if rehabilitation needs/demands are not met, individuals may re-enter the acute health care system to access services. The trouble with this scenario is that systems “should” be designed to provide services to the right place, the right time, by the right provider.

Three suggested and prioritized areas of further research:

- 1) Empirical data regarding rehabilitation utilization.
- 2) Establish benchmarks for the treatment intensity and frequency by conditions and by setting.
- 3) Explore the extent to which rehabilitation extender (eg. trained assistants) can be used to optimize rehabilitation delivery.

3.0 Report

3.1 Context

Reasonable and timely access to health services remains a critical issue across Canada's national, provincial and regional landscape. However, much of the policy attention and debate appears to revolve around hospitals, physicians, nurses, and surgical/diagnostic services. While much of the major policy attention has been concentrated elsewhere, there have been a series of events within the last few decades that have affected rehabilitation services in Ontario. These changes include, but are not limited to, the partial delisting of community based physical therapy services, introduction of Local Health Integration Networks (LHIN), introduction of advanced practice models in hospitals and the establishment of Family Health Teams. In response to these changes, there has been an emergence of rehabilitation-based research that has explored these recent events; however each study addressed only a small and focused part of the rehabilitation system in Ontario. There has not been an overall synthesis of this recent research to untangle the health policy context regarding availability and access to rehabilitation services across the Ontario's continuum of care.

3.2 Description of Project

In this policy research project, we sought to conduct a focused review of the emerging literature in this field of study, in order to discuss a series of policy implications and to discuss future research that would fill the knowledge gap. Thus, this project synthesized publicly available health services research regarding availability and access to occupational therapy (OT) and physical therapy (PT) services across Ontario's continuum of care. In this project, we operationally defined availability as the extent to which rehabilitation providers or services exists, or are present, in the environment. Access, on the other hand, was defined as the extent to which individuals could overcome barriers to contact or approach a rehabilitation provider. We synthesized and interpreted the information gathered, and generated a series of policy implications on availability and access to rehabilitation services.

Guiding Objectives: The objectives of this policy analysis were four fold: (1) to understand the degree to which Ontarians have access to OT and PT services across the continuum; (2) to summarize the issue of wait lists and times for OT and PT services across the continuum; (3) to speculate on the extent to which access to rehabilitation services affects clients and their health status; and (4) to more fully understand the extent to which level of access to OT and PT has implications at the institution, regional and overall system level.

3.3 Research Approach

In this project, we began by reviewing the available peer-reviewed. We then used Schlesinger's approach to health policy analysis as a guiding principle in our interpretations.

A literature search was performed within the peer-reviewed databases. Peer reviewed literature from 2000 to 2009 was searched through MEDLINE and CINAHL using the key words: availability, access, physiotherapy, physical therapy, occupational therapy, health services needs and demands, "supply-demand" and Canada, Ontario. Where feasible keyword searches were mapped to MeSH terms: allied health occupations/ or occupational therapy/ or "physical therapy

(specialty)", Health Occupations/sn, td, ec, "Physical Therapy (Specialty)/ma, td, sn, ec, exp "Health Services Needs and Demand"/sn, ut, td, ec [Statistics & Numerical Data, Utilization, Trends, Economics], supply.mp., demand.mp., Occupational Therapy/ma, ut, ec, td, sn., Canada exp. Ontario, and exp Canada. Additional search limitations were set on Language (English). A total of 28 articles were collected, with 14 related to access and availability within Canada or Ontario. Article titles and abstracts were skimmed and included based on their relevance to the utilization of health services provided by PTs and OTs based on Ontario or within another province in Canada. Articles that discussed shortage, supply or demand of rehabilitation health services were also included. We then interpreted the data accordingly. Please note that our health policy interpretations of the findings are included within each section of the results section, rather than the more traditional research methodologies which separate results, analysis and interpretations.

According to Schlesinger (2006), there are three approaches to health policy analysis. The first approach views policy analysis as a technical exercise, and the analytical approach uses empirical analysis and disregards issues such as emerging values and ideologies. A second approach assumes that policy analysis is a political act, wherein the “analyst’s own goals and values are inextricable embedded in the ways in which problems are framed and proposed solutions evaluated.” A third approach or perspective in policy analysis treats the assessment of public policy as an interpretive task. Within the framework of this latter approach, the role of the policy analyst is related to “revealing unseen aspects or social problems and hidden motives for policy formulation.” In essence, the prevailing question driving the latter approach is *why* societies, or their decision-making and policy-making representatives, choose particular decisions over others.

For the purposes of this project, we have adopted the latter approach. We have thus sought to examine the literature, but also to ask the question of *why* availability and access to rehabilitation “*is the way it is*” in Ontario.

3.4 Results

We divided our key findings (or results) and interpretations according to the following 4 categories: (1) Health Human Resources, (2) Health Care Restructuring, (3) Funding, and (4) Wait Times.

3.4.1 Health Human Resources

Health human resources (HHR) continue to emerge as critical factor in health care policy planning at all levels from regional, provincial, national and international. An overall measure of supply within a workforce, the HHR ratio, is generally expressed as a number of health care practitioners relative to the population or subset of the population. The use of HHR ratios has become a common measure of the density for health care practitioners in a given geographical area. In Canada, according to the Pan-Canadian Health Human Resource Strategy, “appropriate planning and management of HHR are key to developing a health-care workforce that has the right number and mix of health professionals.” (Government of Ontario, 2006) Overall, the published literature has focused on estimating the HHR ratio for larger groups of healthcare practitioners, such as physicians and nurses across multiple time periods. There has been some research in rehabilitation, but much less in comparison with other disciplines.

The Canadian Institute for Health Information (CIHI) published a series of profiles of smaller health disciplines such as physical therapists (PTs) and occupational therapists (OTs). In their profiles of PTs, they report that the number (also referred to as supply in this report) of regulated professionals has grown by 11.3% between 2001 and 2006, and that there were 15,850 practicing PTs in Canada in 2007 (CIHI, 2008a). They also noted that 92.1% of physical therapists work in urban centers. Regarding OTs, CIHI reported that 94.8% of the 8,570 of practicing occupational therapists work in urban settings (CIHI, 2008b). These data suggest that there is a preference of both OTs and PTs to practice in urban centres presumably where there are greater concentration of setting (eg. hospitals, private practices) and where work conditions may be more stable. The preference of urban vs. rural will no doubt have supply side implications on the rehabilitation needs and demands of Ontarians living in more rural settings. However, the concentration of health providers in urban settings is common among health disciplines, and has been reported by others (Nussbaum, in press; Rondeau et al., 2009).

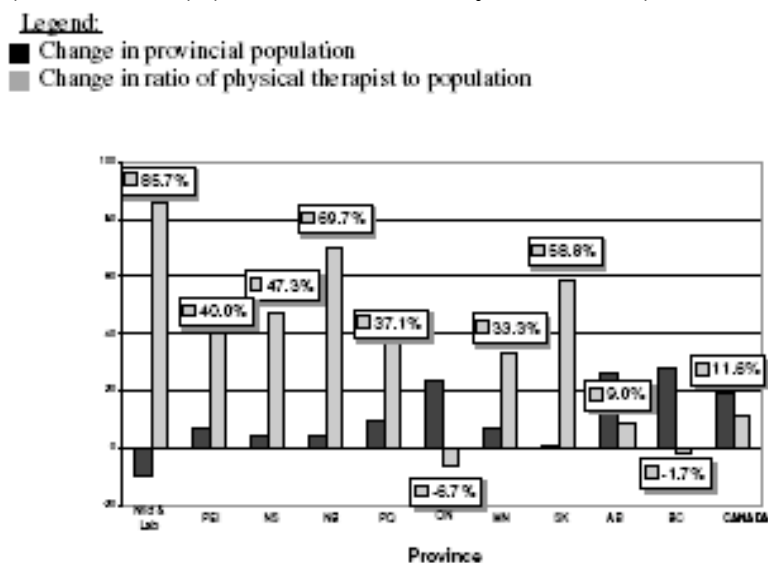
In order to interpret and contextualize the issues of health providers in a jurisdiction, the absolute numbers of providers are often transformed into a ratio in the number of provider to sub set of the population. This ratio is known as the health human resource ratio (HHR), and provides a gross estimate of provider density. Although HHR ratios are a reasonably good measure of practitioner density within a given region, they are not necessarily a sensitive measure of supply. In other words, they do not reflect population need or demand, nor do they balance other workforce factors, such as the breadth of practitioner groups or emerging practices patterns (e.g., integrative family health teams and other models of primary care). Nonetheless, the HHR ratio it does provide some sense of workforce supply and density (Landry et al., 2009).

Landry (2004) estimated that the Canadian health human resource ratio (HHR) for physical therapists to be 5.0 per 10,000 people in 2000, which represented a 16.3% increase from 1991. However, Landry et al. (2007) followed up on this earlier work and estimated that the Canadian HHR ratio for physical therapists dropped to 4.8 per 10,000 people by 2005. They reported that although there was an 11.6% increase in the national HHR ratio between 1991 and 2005, there was an alarming decline in the HHR ratio between 2000 and 2005. Similar national HHR analysis and figure were not found for OTs.

Landry et al. (2007) reported that the HHR ratio of PT to 10,000 population was 4.5 in 1991, 5.0 in 2000 and 4.8 in 2005. Thus between 1991 and 2005 there was a negative growth of 6.7% in the Ontario HHR ratio. As outlined in Figure 1, Ontario was one of the jurisdictions where population grew faster than HHR ratio of PTs to population. In their analysis they outline that this trends was also reported in British Columbia, but to a lesser magnitude.

At initial glance, these figure may be interpreted from as a negative trend (and we believe that they are), however the interpretation is somewhat speculative because the optimal ratio of rehabilitation provider to population is unknown and only speculative.

Figure 1: A Comparison of the Change in Population vs. the change in the ration of PT to 10,000 population (1991 to 1995) (Taken from Landry et al., 2001)



According to a more recent report from Arthritis Community Research and Evaluation Unit (ACREU), there are approximately 4000 OTs and 5500 PTs in Ontario in 2006 which translate into approximately 3.2 OTs per 10,000 population and 4.4 PTs per population (ACREU, 2007). In their report, Passalent et al. explored the HHR of PTs and OTs within each of the Local Health Integration Networks (LHIN), and found that the availability of PTs and OTs varied across LHINs. For example, Toronto Central LHIN has the highest rate of OTs (5.8 OTs and 7.7 PTs per 10,000 population) and the lowest in Central West (1.4 OTs and 2.2 PTs per 10,000 population). Table 1 outlines the HHR in each of the 14 LHINs, and the variation that exists across Ontario.

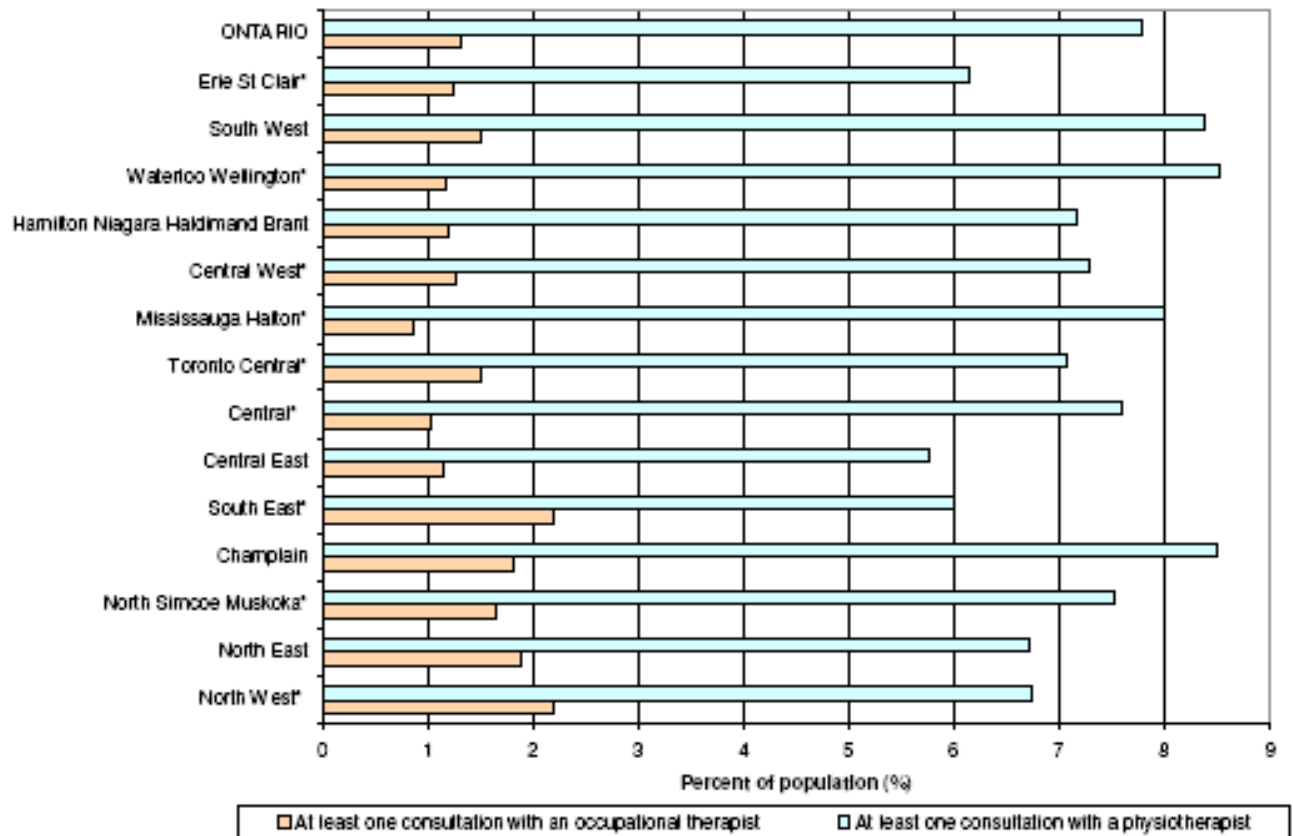
Table 1: Availability of Occupational Therapists and Physiotherapists in Ontario (Adapted from Passalent et al., 2007)

Local Health Integration Network	Population	Number of OTs per 10,000 population	Number of PTs per 10,000 population
Erie St Clair	643,205	1.9	2.7
South West	919,962	3.8	4.6
Waterloo Wellington	677,887	2.9	4.3
Hamilton Niagara Haldimand Brant	1,343,403	3.7	4.5
Central West	699,631	1.4	2.2
Mississauga Halton	100,8121	2.1	3.6
Toronto Central	1,150,938	5.8	7.7
Central	1,504,817	3.8	3.9
Central East	1,436,769	1.8	3.0
South East	478,892	3.3	4.8
Champlain	1,170,172	3.4	5.9
North Simcoe Muskoka	408,731	2.8	4.1
North East	570,777	2.5	3.6
North West	243,340	3.2	5.2
ONTARIO	12,256,645	3.2	4.3

Table 1 also indicates that there is a higher concentration and provision of services in the southern, more populated LHINs. Furthermore, compared to other provinces the number of PTs is decreasing showing a decline of 3.1%, rather than keeping up with the growth of the overall population (Landry et al., 2007).

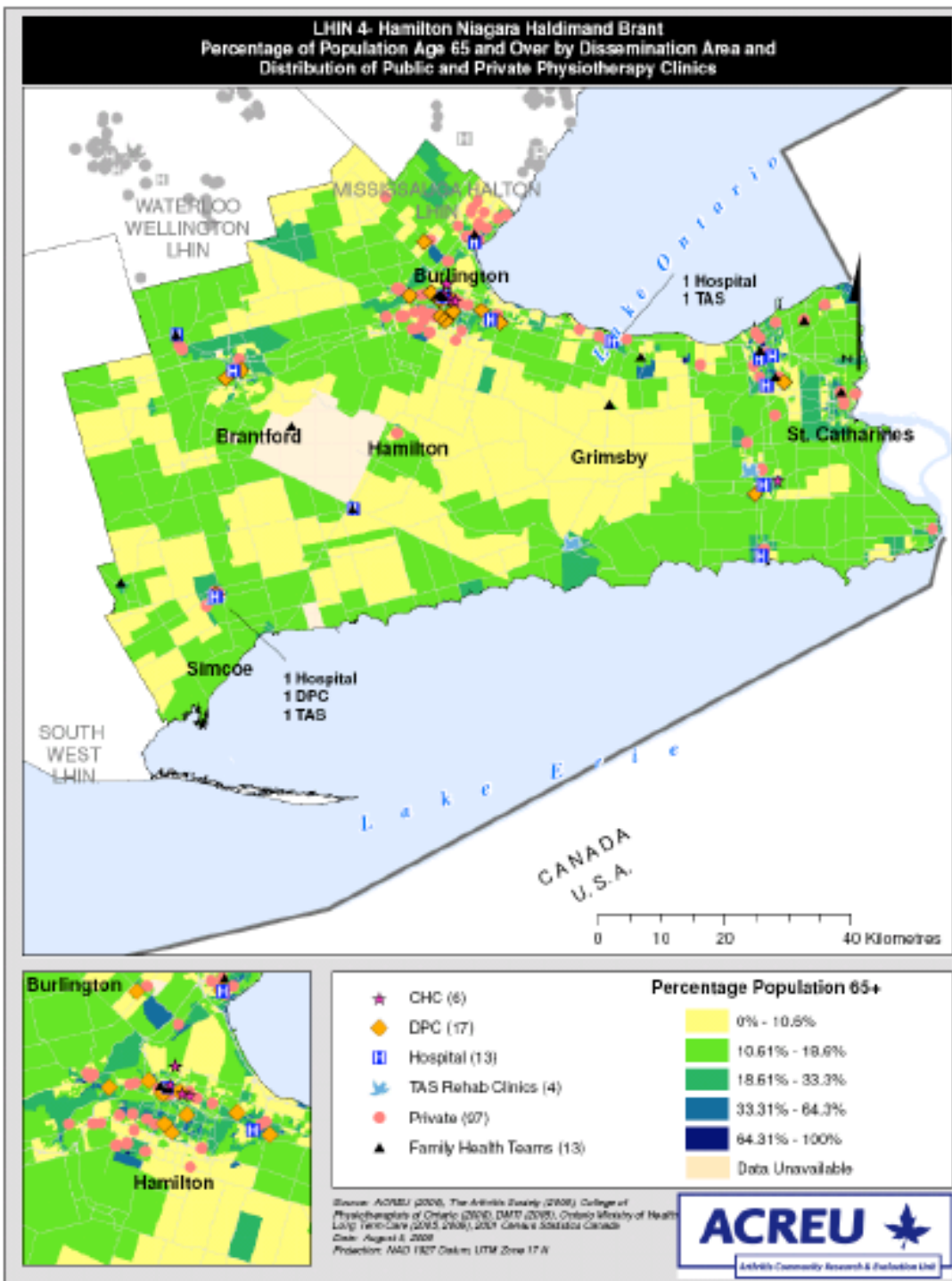
In the same report, Passalent et al. (2007) also explored the utilization rate of OT and PT services, and compared utilization with provider density. They found that aggregated utilization of services for OTs was 1.3% for Ontario, compared to 7.6% for PTs. Data gathered also indicated that the LHINs with the highest number of OT and PT utilization did not necessarily have the highest number of OTs and PTs per 10,000 populations. As outlined in Figure 2, utilization of PT is greater than OTs across all LHINs.

Figure 2: Utilization of Occupational Therapy and Physiotherapy Services by Ontario and Local Health Integration Networks, 2003 (Taken from Passalent et al., 2007)



The decreased availability of rehabilitation services is of great concern especially in rural Ontario where geographic access to health care presents a physical barrier to receiving adequate care. In rural communities, the ratio of PTs and OTs range from 2.2 – 3.6 and 1.4 – 3.2 per 10,000 population respectively. Access to PTs or OTs in these communities may therefore be challenging since physiotherapy services can be located at a distance from from where the individual lives. Figure 3 is an example of a map outlining the locations of rehabilitation services with a LHIN, in this case the Hamilton Niagara Haldimand Brant. Similar graphs (with finer resolution) for all LHIN can be accessed in the working paper series of the ACREU website (www.acreu.ca).

Figure 3: LHIN 4: Hamilton Niagara Haldimand Brant, Proximity of Rehabilitation Services
 (Taken from Cott et al., 2009)



Key Message Summary: Health Human Resources: It appears that population growth is outstripping the growth in the ratio of provider to population for PTs (data for OTs is not available) in the province. However, as indicated earlier, the interpretation of these data are complex because, to our knowledge, there does not exist a series of established HHR benchmarks across settings. Without such benchmarks or established guidelines, it will continue to be difficult

to implement effected and evidence-based processes that will ensure a sustainable workforce in the future. As the scopes of practice continue to expand and overlap with other health disciplines, the task of estimating the right number of providers may continue to be an elusive target.

3.4.2 Health Care Restructuring

There appears to exist strong support for Canada's national publicly funded health insurance system (Romanow, 2002; Kirby, 2002). This insurance plan is anchored on the principle that access to health services should be based on medical need, rather than on the ability to pay (Angus et al., 1995; Brooks and Miljan, 2003). Under the federal *Canada Health Act (CHA)*, the legislative basis of Medicare, provincial health insurance plans must comply with five national conditions; accessibility, portability, universality, comprehensiveness, and public administration (Baranek et al., 2004; Randall and Williams, 2006). Among these principles, the "comprehensiveness" condition is the most misunderstood, widely quoted and intensely debated (Gordon et al., 2006; Landry et al., 2007). The comprehensiveness criterion requires that, in order to be eligible for federal cash transfer payments and tax credits, a provincial health care insurance plan must insure all "medically necessary" health services provided to insured persons, but only if these are delivered by hospitals or physicians (Baranek et al., 2004; Landry et al., 2007). To some degree this condition effectively defines an insured service in terms of *who* delivers it and *where* it is delivered. In this case, the "who" implies physicians, and the "where" implies hospitals. Under these rules and regulations, provinces and territories can, but are not legally obliged, to insure care beyond these institutional boundaries (Baranek et al., 2004).

The CHA does not stipulate how insured services will be delivered (Flood and Archbald, 2001; Relman, 2002). There is no requirement that they be delivered or provided by the public sector; the only requirement is that they must be publicly-funded (Deber, 2004). Historically, the great majority of hospitals in Canada were owned and operated by private, not-for-profit charitable organizations (Taylor, 2002); even though many provinces have moved to quasi-independent regional health authorities, Ontario still maintains independent hospitals despite the presence of newly established Local Health Integration Networks. The CHA definition of hospitals services explicitly mentions physical therapy (PT) delivery within hospitals as a service that must be insured; PT outside of hospitals, however, can be insured but is no longer required. Accordingly, PT has for many years straddled the threshold between public and private (Hoppe et al., 1996; OPA, 2000; Gildiner, 2001; Falter, 2003). The CHA has no other specific reference to registered rehabilitation providers, but most could be assumed as a service provided by the hospital.

There have been a number of health restructuring events that have occurred in Ontario within the last few decades. In 1996, the Government of Ontario created the Health Services Restructuring Commission (HSRC) with the following mandate: (1) to make decisions on restructuring Ontario's public hospitals, and (2) to make recommendations to the Minister of Health and Long-Term Care on reinvestments in and restructuring of other parts of the health system and other changes required to support restructuring generally, and the creation of a genuine health services system in the province. (<http://www.health.gov.on.ca/hsrc/home.htm>). The results of the HSRC created a series of hospital closures and amalgamations (Lonzon and Vernon, 2002), with the ideology that these cost savings would be reinvested in the community (HSRC, 2000). Although there has been no research that has explore the specific effect of the HSRC on rehabilitation, some have speculated that there has been a reduction in the availability of rehabilitation services, especially at the community level (Landry, 2005).

In a study by Landry et al. (in press), they indicated that due to decreasing budgets and increased costs of delivering services, hospitals have been searching for ways in which to diversify revenue streams to supplement public funds. In particular, they noted the emergence of private models within the hospital setting. They also suggested that that under increasing pressures to control budgets, many hospitals had engaged in such strategic responses as “load shedding” (e.g., eliminating or reducing PT services) and “privatization” (e.g., contracting out PT services or providing them through a separate corporate entity or subsidiary) (Baranek et al., 2004; Fuller, 1998). Such responses are not controlled or documented in Ontario, and they have produced such anomalies as private pay PT clinics physically located in or affiliated with publicly-funded hospitals, which seek to avoid being classified as part of the hospital (and thus insured under the CHA) but instead being seen as independent tenants (much like coffee franchises and food outlets).

Other health restructuring in Ontario has also occurred subsequent to the HSRC. The major restructuring events that we have chose to discuss include the created of the Community Care Access Centres (CCACs), the establishment of the Local Health Integration Networks (LHINs) and the creation of the network of Community Health Centers and Family Health Teams. Moreover, a particularly relevant policy decision that occurred in 2005 was relevant to this project, and included in this report. The policy decision in question was the partial delisting of publicly-funded community based physical therapy services. Each of the above will be presented separately.

Community Care Access Centres (CCACs): Community Care Access Centres (CCACs) were introduced in the province of Ontario in the late 1990s. The CCAC were designed to replace the previous home care programs, and to act as a transfer agent between the funder (e.g. Ontario Ministry of Health and Long Term Care) and the providers. Under the previous program the funder and providers were all part of the same institutional organization. Under the CCACs, the funder would remain the Ministry of Health and Long Term Care, however, the employees of provincial home care programs were replaced under a managed competition model. Under this new model, services were no longer provided by home care employees, rather contract to provide services were put to public tender and awarded to community-based for-profit and not-for-profit providers. According to Randall (2007), rehabilitation home care services have evolved in a rather ‘peacemeal’ manner without rehabilitation professionals playing a prominent role in program design. Randall suggests that Rehabilitation services play a critical role in facilitating hospital discharges, minimizing readmissions, and improving the quality of peoples' lives. He also notes that “Canadians will benefit if occupational and physical therapists seize the unique opportunity before them to provide meaningful input into creating a national home care program.”

After the implementation of CCACs in Ontario, clients accessed publicly-funded rehabilitation services through geographically-based Community Care Access Centres (CCACs) (Williams et al., 1999; Baranek et al., 2004; OHHCPA, 2004) While Ontario had not yet regionalized hospital services, in 1996 it moved to regionalize home care through the CCACs. Note that although CCAC services are fully publicly funded, they are not Medicare entitlements, and as such clients may receive services when they meet variable eligibility requirements. Providers are paid fee-for-service, but the CCAC had a fixed budget. Two characteristics of CCACs are particularly pertinent to rehabilitation. First, within the CCACs, PT and OT services were bundled under the heading “therapy” – which included PT, OT, speech language pathology (SLP), social work, and nutrition. Informants of a study conducted by Landry et al. (2007) indicated that one of the outcomes is that therapy services previously provided by PTs are now provided by other providers.

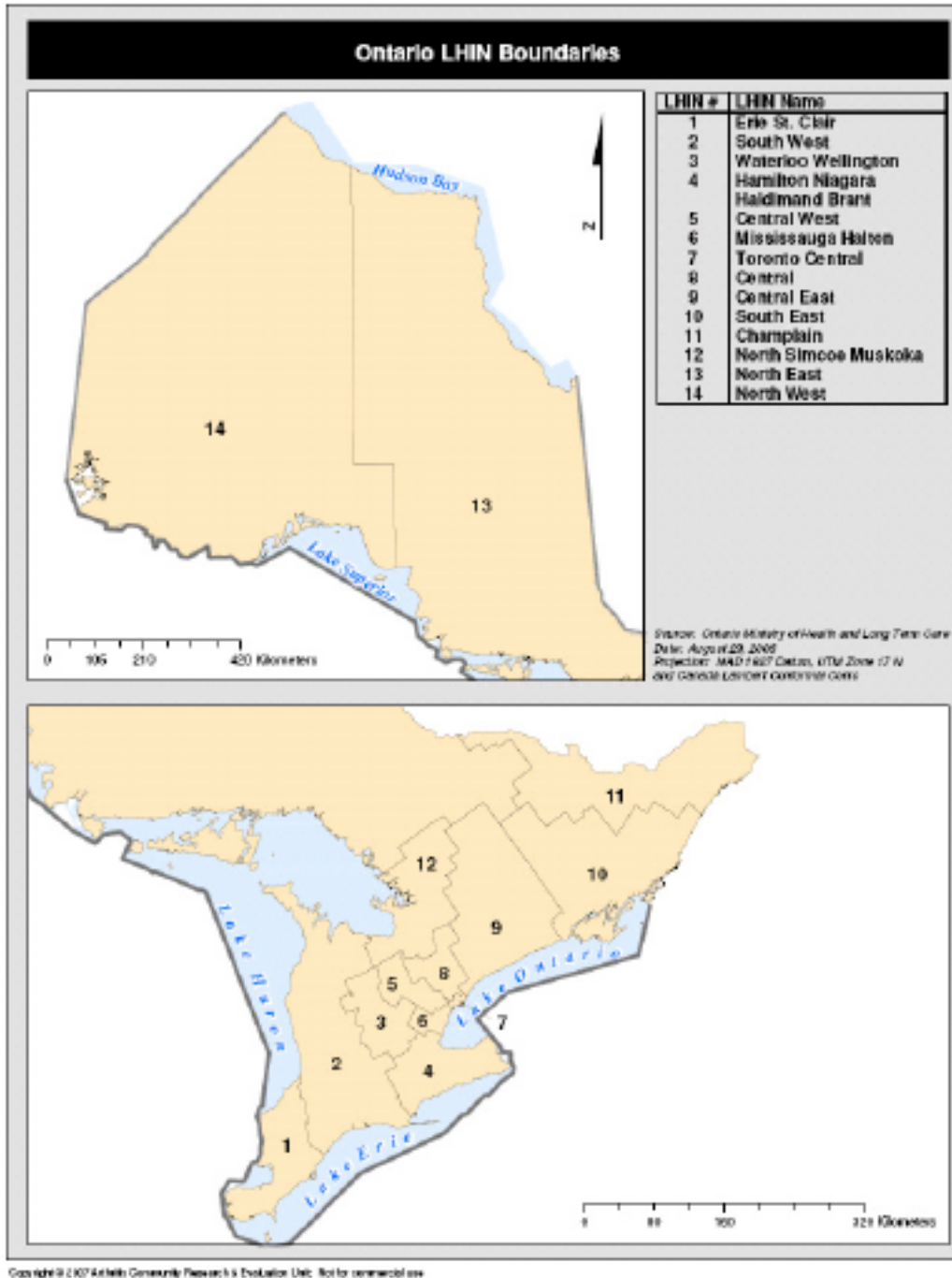
Second, CCACs use capped global budgets provided by the MOHLTC to purchase home care services from for-profit and not-for-profit providers through a competitive bidding process called “managed competition” (OHHCPA, 2004; OMH, 1998). Managed competition was introduced in 1996 by the Conservative government in power at the time as a means of achieving cost-efficiencies (i.e. “highest quality” at the “best price”); it assumed, with little evidence, that competitive forces would drive down service costs while ensuring service quality and responsiveness to client needs (Randall and Williams, 2006; Deber, 2004). This reform provided the opportunity for not-for-profit and for-profit companies to bid on service contracts equally, and has been viewed as destabilizing the sector (Randall and Williams, 2006; Caplan, 2006).

Ontario’s precursor home care agencies had employed PTs directly, under managed competition CCACs were required to divest their professional staff on the further assumption that individuals would start independent PT and OT private businesses to bid competitively for CCAC contracts (OHHCPA, 2004). However, confronted by a loss of employee benefits and downward pressures on incomes and working conditions, relatively few rehabilitation actually did so in the early phases of implementation, forcing 7 CCACs outside of major urban areas either to halt divestment, or to hire back staff on favourable terms (OHHCPA, 2004). Even in urban areas, relatively few providers actually bid for contracts (OMH, 1998). As two studies have noted, Ontario’s managed competition reform actually intensified existing shortages of rehabilitation home care services and drove up prices resulting in fewer services, and greater incentives for provider organizations to substitute lower-paid and lower-skilled workers for health care professionals such as PTs (Randall and Williams, 2006; Williams et al., 2005). Rehabilitation services had been bundled with home care nursing contracts, so that nurses now provided rehabilitation. There is little evidence that anyone is monitoring the implications for quality of care. Third, CCAC funding was complicated by a budget freeze in 2001 imposed by the provincial government.

As a way of managing their increasingly stretched resources, CCACs across the province opted to ration rehabilitation services using a variety of strategies including termination of services to clients judged by case managers to show insufficient progress toward therapeutic goals; and the introduction of “block therapy,” in which clients, regardless of assessed clinical needs, were assigned a set number of therapy sessions, after which they would be returned to a waiting list.

Local Health Integration Networks (LHIN): The means by which Ontario residents receive health services has been significantly restructured over the last several years. A significant change in provincial healthcare delivery occurred in March of 2006, when the Local Health System Integration Act received royal ascent from the Ontario legislature. This called for appointed health planning boards to plan, co-ordinate and fund health services within 14 defined geographic boundaries within Ontario. These geographic regions are referred to as Local Health Integration Networks (LHINs). Figure 4 shows the geographic boundaries for each LHIN.

Figure 4: Geographic boundaries of each Local Health Integration Network (LHIN) (Taken from Passalent et al., 2007)



LHINs operate as not-for-profit organizations that oversee health services including hospitals, community care access centres, home care, long-term care, mental health, community health centres as well as addiction and community support services (Passalent et al., 2007). The LHIN structure aims to bring together providers in order to identify local priorities, plan local health services, and deliver them in an integrated and coordinated fashion. The Ministry of Health and Long Term Care outlines the principles, goals and requirements for the LHINs to ensure that all Ontarians have access to a consistent set of health care services. With the newly established LHINs now operating throughout the province of Ontario, added attention is being given to the

delivery of care occurring at the institutional level and at the community level. A better understanding of the availability of institutional care has become established with the recent focus on the Hospital Reports that examine the performance of hospitals throughout the province (Hospital Report Research Collaborative, 2006). However, assessment of the demand and provision of community services is more problematic due to inadequate data collection and the heterogeneity of community service provision. One such area is community rehabilitation services.

Community Health Centres (CHC)/ Family Health Teams (FHT): 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. Primary care is the first level of contact in the health system (Health Canada, 2006) and has an important role in the ongoing management of persons with musculoskeletal disorders, which is the second most common reason for visits to primary care physicians (Badley, 2005). 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. Physiotherapists (PTs) and Occupational Therapists (OTs) 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.

Chronic disease places a significant demand on the health care system with diseases such as cardiovascular disease, diabetes, cancer, obesity, and respiratory conditions accounting for 46% of the global burden of disease (The World Health Organization, 2006). Some chronic conditions are more likely than others to be associated with disability (e.g., arthritis, musculoskeletal disorders, and stroke) and therefore are more likely to require ongoing rehabilitation intervention to optimize a person's ability to function in the community. Rehabilitation therapists are key to the successful and efficient management of chronic conditions (e.g. musculoskeletal conditions) through strategies such as supporting self-management and behaviour change. This role for rehabilitation therapists is likely to become increasingly important in the face of the increasing prevalence of arthritis and other chronic diseases associated with aging, putting pressure on the resources of primary care physicians. Community rehabilitation services are currently available throughout the province of Ontario, in both the public and private health care sectors. There is an increasing shift of focus of care from the hospital to community – and currently, an increasing proportion of physiotherapy services are delivered through private for profit clinics, and use of private funding sources. On the other hand, the majority of publicly funded community rehabilitation services are provided in hospital outpatient departments. There are approximately 90 Designated Physiotherapy Clinics that still provide publicly funded services to seniors, youth and other categories of clients. Other publicly funded settings include a limited number of Community Health Centres (CHC) located throughout the province and the Arthritis Society Rehabilitation and Education Program. Finally, those who are physically unable to access care at outpatient facilities may qualify for publicly funded community home care services through Community Care Access Centres (CCACs).

Community Health Centres (CHC): There are 54 CHCs located throughout the province of Ontario (Ontario Association of Health Centres, 2005), with only a small fraction of these offering

any form of rehabilitation services. The highest concentration of community rehabilitation is found in the more populated LHINs in the southern region of the province (Passalent et al., 2007). CHCs are a distinct model of primary health care delivery that incorporate the socioeconomic environment of the community, using a comprehensive approach to care that includes interdisciplinary teams and integration of services to meet the needs of clients (Shah and Moloughney 2001). The under-utilization of these settings presents an opportunity to expand community rehabilitation and increase capacity. The CHC model offers a systems approach to organized primary health care, disease prevention and health promotion that is ideal for chronic disease management of which greater than 60% of Ontario and LHIN populations report having. This makes CHCs well positioned to take on a portion of existing demand for community rehabilitation. Since CHCs have been providing primary care for more than 30 years, the model is well established to meet the needs of the community and can adapt its services accordingly (Watt et al., 2004). It is encouraging that the Ontario government recently announced its Community Health Centres Expansion Plan which will support 22 new CHCs and 17 new satellite CHCs in 39 Ontario communities by 2007. However, it is currently unknown what services will be provided out of these new clinics and if there are plans to expand services in existing CHCs.

Family Health Teams (FHT): The Family Health Teams (FHTs) approach to primary health care brings together various health care providers to coordinate the highest possible quality of care (Ministry of Health and Long Term Care, 2009). These teams primarily consist of physicians, nurses, nurse practitioners, as well as other health professionals (Cott et al., 2009). In Ontario there are no PTs or OTs employed in FHTs. Cott et al. (2009) explored the current barriers and opportunities for PTs to work within these multidisciplinary teams. In their research they interviewed executive directors, nurses, nurse practitioners, lead physicians and administrators that work within FHTs as well as PTs who work in private practice. Their results indicated that themes of funding and access were the cause to barriers with regards to including a PT within the primary care setting.

Most of the successful integration of physiotherapy into primary health care in Ontario was found in the CHCs, where all services providers are paid by salary, and the decision to include allied health professionals in the practice does not negatively impact the physician's income. Currently FHTs cannot offer physiotherapy as part of their circle of collaborative care, which has resulted in the absence of an important team member for primary health care and chronic disease management. Although an embedded PT is considered ideal within the FHT model, creating partnerships with existing health organizations and private clinics can bridge the access gap. Although these partnerships have the potential to be created, strategies around reimbursing physiotherapists would remain an issue given the large discrepancy between salaries through the public versus the private sector. Cut backs and scarce resources have encouraged providers to compete with one another for resources, making it difficult to share expertise, decision-making or authority. Related to funding, there are challenges around acquiring space and equipment that are difficult to come by in environments that were not originally built for physical therapy.

In ACREU's previous work on rehabilitation and primary care in Ontario, they found that the structure of provincial health care itself may act as a barrier to access to physiotherapy services, especially among vulnerable populations such as those with chronic conditions; those lacking private health insurance, and those living in less urban regions of Ontario (Cott et al., 2007). Moreover, they found little evidence of teamwork and collaboration between primary care PTs and physicians. For example, PTs rarely work in the same setting as physicians. The majority of primary health care physiotherapy is delivered in private PT clinics; whereas the majority of

primary health care physicians work in private practice and Ontario Family Health Network settings. One of the few primary health care settings in which rehabilitation professionals work together with physicians is in CHCs, however, the number of rehabilitation professionals employed by CHCs in Ontario is very small, and moreover, there are no PT or OTs currently practicing within FHT.

Partial delisting of publicly-funded physical therapy services: On April 1, 2005, Canada's most populous province of Ontario applied the latter strategy, and partially delisted publicly-funded community-based PT services provided at Designated Physiotherapy Centres (DPCs). Prior to the delisting, the network of approximately 98 DPCs spread across Ontario were able to provide up to 150 publicly-funded annual PT visits to residents (Sorbara, 2004). Following the partial delisting of DPCs, access to services became restricted to: (1) residents under 20 and over 64 years of age, (2) residents of long-term care facilities, (3) clients who require home PT services after hospitalization, and (4) individuals who qualify for Family Benefits, Ontario Works, or the Ontario Disability Support Program (Government of Ontario, 2005). The rationale that underpinned this policy choice was based on Ontario's strategy to target certain medical conditions for enhanced funding. As stated by the Government of Ontario, in order to improve cancer care and cardiac programs as well as to enhance home care and long-term care, "less critical services", such as PT needed to be de-listed (Sorbara, 2004).

The evolution of the delisting policy decision has been detailed elsewhere and will not be repeated in this report (Landry et al., 2006, Gordon et al., 2007). There was, however, considerable speculation at the time of delisting regarding the potential short and long-term consequences. In order to assess the short-term outcomes of partial delisting, a research collaborative conducted two prospective cohort studies that examined the consequences immediately after the delisting of PT services in Ontario. In their research, Landry et al. (2006) and Gordon et al. (2007) assessed the consequences of delisting from the client and provider perspectives respectively. Landry et al. (2006) assessed change in levels of access and Self Reported Health Status among clients who had been receiving publicly-funded services in DPCs prior to the delisting. Their results indicated that 81 of 113 (71.7%) participants who required PT services continued to receive them after de-listing because they remained eligible, were privately insured, and/or were able to pay out-of-pocket. Twenty (17.7%) participants required services but did not receive them because they were uninsured or were not able/willing to pay privately. The remaining participants were discharged two weeks after the delisting. In addition, they found that after controlling for gender, age, employment, and condition, clients who maintained access after the delisting were more likely to report very good or excellent health than those who did not (Odds Ratio: 10.72; 95% CI: 2.20-52.25).

Gordon et al. (2007) assessed the perceived consequences of partial delisting from the PT providers' perspective. In their research, they interviewed providers from four practice categories, including DPCs, privately-funded clinics, hospital out-patient departments, and home care physical therapists. Their results indicated that two weeks following the delisting, DPC providers were the only providers to perceive an immediate decrease in demand. All providers forecasted that the ineligible cohort would continue to have decreased access to PT services, primarily due to limited access in other publicly-funded settings.

The majority of clients and providers in both studies, however, reported that more time was required to observe change or effect. Thus, in order to assess the long-term consequences of delisting, we conducted a 12-month follow-up study with clients and PT providers who agreed to

be contacted after their participation in either of these two initial studies. The potential long-term consequences of reducing eligibility for PT services through delisting included: (1) clients forgoing care and sustaining secondary effects of their conditions such as decreased mobility and productivity; and (2) clients increasing their utilization of other publicly-funded health care sources such as hospitals and family physicians, ultimately leading to increased public health care costs (Verrier et al., 2004; Physiotherapy Association of British Columbia, 2003; Falter 2003). The Ontario Ministry of Health and Long Term Care (MOHLTC) contended that this policy decision would not adversely affect clients; they argued that clients who required PT services could access such services in other publicly-funded settings such as hospital out-patient departments, or through the province's publicly-funded home care program (Sorbara, 2004). In a follow up study, we contacted participants from these preceding studies to assess the long-term consequences of this policy decision 1-year after the policy took effect. Sixteen of 18 providers (89%), and 64 of 98 clients (65%) agreed to participate in a follow-up telephone interview. Our results indicate that 12-months following delisting, and despite government assurances that access would be preserved, clients rendered ineligible for publicly-funded services report ongoing access barriers across Ontario's continuum of care. Clients also express concern regarding their overall health, and report an increased use of other insured health professionals (e.g. physicians) and services (e.g. hospitals). On the other hand, providers within the network of publicly-funded clinics report an important decrease in demand for PT services, whereas PT providers in all other settings reported little change. We signal that delisting policies have long-term consequences on uninsured or under-insured clients, but that more evidence and stakeholder debate is necessary prior to implementing reform strategies aimed at improving overall health system performance.

Predictions regarding the consequences of this policy decision were varied. The MOHLTC noted that the decision to delist would not affect residents as they would still be able to access publicly funded PT services through hospitals, long-term care facilities and the province's home care program (Sorbara, 2004). In contrast, provider and client groups argued that this decision would remove an entire funding stream for PT services, potentially reducing or eliminating service availability and creating secondary negative health outcomes for particularly vulnerable or marginalized clients (Verrier et al., 2004; Yee Hong Community Wellness Foundation, 2005). Still others argued that delisting of PT services could represent false savings, estimating that there would be a 28% decrease in access (Dales, 2005) and that early termination of necessary rehabilitation services could lead to additional strain on the health system (Deloitte, 2004; Manga, 2004a, 2004b). Stabile and Ward (2004) reported that delisting PT services in some Canadian provinces resulted in a decreased number of clients who accessed services, but increased utilization rates among those clients who maintained access to services. They concluded that aggregated utilization rates are not affected by delisting policies. Conversely, the Ontario Chiropractic Association reported, that delisting of chiropractic services would result in increased utilization of emergency departments by 7–14% and increased reliance on family physicians by 1.3–2.6% to manage back pain and spinal care (Deloitte, 2004).

Early predictions regarding the consequences of this policy decision were varied. The MOHLTC noted that the decision to delist would not affect Ontarians as they would still be able to access publicly-funded PT services through hospitals, long term care facilities and the province's home care program (Sorbara, 2004). In contrast, provider and patient groups signaled that this decision would remove an entire funding stream for PT services, potentially reducing or eliminating service availability, and creating secondary negative health outcomes for particularly vulnerable or marginalized patients (Verrier et al., 2004; Yee Hong Community Wellness Foundation, 2005).

Others argued that delisting of PT services could represent false savings by yielding a 28% decrease in access (Dales, 2005); or alternatively, that early termination of necessary rehabilitation services could lead to additional strain on the health system (Manga 2004a, 2004b; Deloitte, 2004). Stabile and Ward (2004) reported that delisting PT services in some Canadian provinces resulted in a decreased number of patients who accessed services, but increased utilization rates among those patients who maintained access to services. They concluded that aggregated utilization rates are not affected by delisting policies. Conversely, the Ontario Chiropractic Association reported, through a commissioned policy report, that delisting of chiropractic services would result in increased utilization of emergency departments by 7 to 14%, and increased reliance on family physicians by 1.3 to 2.6% to manage back pain and spinal care.

Key Message Summary: Health Care Restructuring: There have been significant changes to the ways in which publicly-funded health and rehabilitation services are organized in Ontario. While health reforms seeks to optimize delivery, these changes do not appear to have enhanced rehabilitation services necessarily.

3.4.3 Funding

Recent health care restructuring initiatives in many Canadian provinces have shifted Medicare's boundaries. Driven by differing views concerning the appropriate role of government, and a desire to contain costs in the face of emerging variables such as technological advances, an aging population, changing public expectations, escalating hospital deficits, and dramatically increased pharmaceutical costs, Ontario, like other national and international jurisdictions, has shifted many health services out of hospitals. This shift tends to occur through a reduction in numbers of in-patient beds and decreases in lengths of in-hospital stays (where such services are fully publicly funded), to home and community (where the *Canada Health Act* does not require even medically necessary services to be covered). Provincial governments thus have considerable scope to find innovative ways of organizing, providing and funding health care. However, the shift also contributes to the generation of multiple public and private tiers of funding for health services such as Physical Therapy (PT). To the extent that each tier is governed by its own institutional rules and regulations regarding how clients access services, and what services physical therapists (PTs) can provide, such changes may have implications for the cost and quality of services, and for access to care.

In a previous study, we develop a conceptual framework to systematically document and analyze the mix of funding sources for PT in Ontario. Physical therapy has long straddled the boundary between public and private funding, and since the inception of Medicare, in-patient PT services have been covered in all provinces. Outside of hospitals, however, there has been a mix of public and private funding through community-based clinics, home care programs, publicly-regulated auto insurance and workplace safety insurance, private health insurance, and even out-of-pocket payments by clients. This mix has not been well documented, and the implications and impact of ongoing shifts in this mix for PTs and clients have received relatively little attention in ongoing health policy debates.

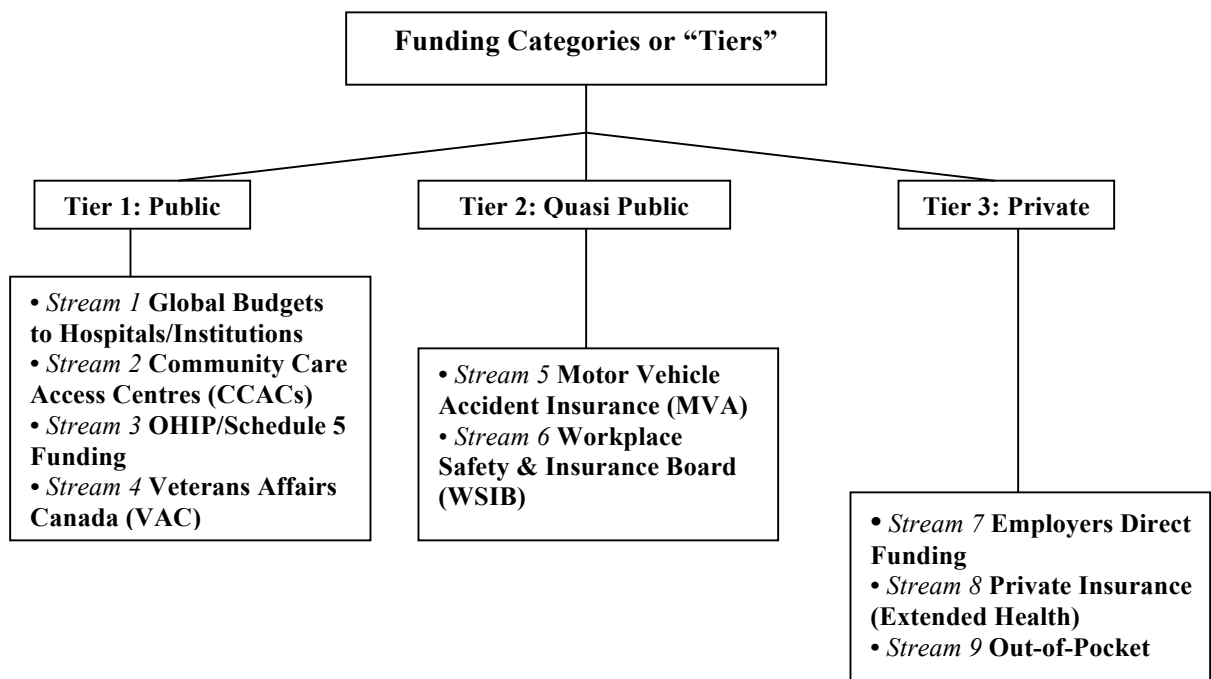
Ontario has experienced successive health care restructuring events that have altered the settings in which PT services are delivered, and the mix of public and private funding for these services. Baranek et al. (2004) have described changes in one such setting – home care, between 1985 and 2003, three different political parties were in power, which proposed five different reform models. Although the variation among these models did reflect differences in government views about

what government should pay for, and the roles of for-profit and not-for-profit providers, few changes were seen over that period in the delivery of services by physicians, which showed a greater ability to resist reform proposals.⁵ Policy impact is also affected by incentives inherent in funding models. Services funded on a fee-for-service basis have incentives to increase volumes, whereas those incorporated within global budgets are more vulnerable to cost control imperatives.

The various funding streams differ in how they reimburse providers. At one extreme, those organizations operating within global budgets usually employ salaried workers; this provides an incentive to limit services and substitute lower cost labour. At the other, those paid on a fee-for-service basis have an incentive to increase the volumes, as long as the fee is higher than the cost of delivering care. Between these extremes are models which allow fee-for-service but cap total payments, and those which pay on the basis of a diagnosis/episode of care, which provide an incentive to increase volumes but control the cost of each. In turn, the literature suggests that changing financing mechanism may change the costs, quality, and/or outcomes of care, although the precise nature of these effects will depend on a host of other factors. We identified three broad categories or tiers for PT funding in Ontario: (1) Public, (2) Quasi-Public, and (3) Private. Within these tiers, there are multiple funding streams ranging from global budgets in hospitals, to private out-of-pocket payments (see Figure 5).

There has been a general assumption that demand for PT services is ‘elastic’ in nature, which means that delisting, de-insuring or eliminating services in one publicly funded sector would simply shift these same individuals to other publicly funded sectors. Stable & Ward (however, we suspect that this assumption may not be the case for PT. Alternatively, we suggest that strategic restructuring has become synonymous with commodification of services, which in turn tends to limit, not broaden, availability of services

Figure 5: Physiotherapy Funding in Ontario (Landry et al., 2007)



Although the data do not allow us to directly assess clinical outcomes, we do suggested that shifts in the funding mix can have important implications both for the ability of clients to access care, and for the way in which PTs practice. In contrast to Medicare, where access to care is based on uniform terms and conditions, in the multiple funding streams outside of hospitals, access to care is often determined by how and where the injury or disability occurred, and whether the individual is insured through some form of public or private coverage. Instead of conceptualizing health care system as a single, monolithic entity, we conceptualize the system as a group of proximate policy streams, or sub-fields, each characterized by different funding sources, different rules and regulations, with different underlying principles for accessing services.

Key Message Summary: Funding: There are multiple ways in which rehabilitation services are funded. There has been an assumption that rehabilitation services are elastic in nature, meaning that changes in one funding stream will simply shift the responsibility to another – thereby maintain some degree to funding for rehabilitation. The data that exists seems to suggest that when changes to funding structure are made, it create significant barrier to access.

3.4.4 Wait Times

Long wait times were identified as one of the primary reasons physicians do not refer patients to rehabilitation specialists (Cott et al., 2007). Wait times for rehabilitation and access to PT and OT are an issue for publicly funded settings. The median wait time for publicly funded OT or PT services in December 2005 was 15 days (Passalent et al., 2007). In the same report Passalent at al. 2007 indicated that approximately 70% of all publicly funded clinics in Ontario providing community rehabilitation report having a wait time that range between 1 and 360 days, with the longest waits being at hospital outpatient departments for patients with chronic musculoskeletal conditions. Wait times differ according to setting, and the following outlines what is known about wait times according to setting.

Wait Times in publicly funded settings: Wait times are an issue for publicly funded settings, especially hospital outpatient departments and especially for those with chronic musculoskeletal problems (Cook et al., 2006). Most publicly funded community rehabilitation services are in hospital outpatient departments, which have long wait lists (Passalent et al., 2007) however rehabilitation services are also provided in Community Health Centres (CHCs).

Hospital Outpatient Departments: Hospital outpatient departments have the largest staff complement for community-based PT but at the same time have the largest wait lists and longest wait times (Cook et al., 2006). Most community-based rehabilitation settings are open Monday to Friday during the day, and very few settings are available beyond these hours of operation. The majority of people waiting for community-based rehabilitation services have chronic musculoskeletal conditions. Frequently used methods of wait list management at community-based settings include self management, regular audit of wait lists and referral to other clinics.

Increasing staff complement, only accepting in-house referrals, use of rehabilitation assistants and use of evidence-based benchmarks are considered to be very effective methods to manage wait lists for community- based rehabilitation.

Research indicates that wait times and wait lists for community-based rehabilitation vary based on setting and condition (Cook et al., 2006). Most notably wait lists and wait times are the longest for people with chronic musculoskeletal conditions who are waiting for hospital outpatient PT. This

suggests that current publicly-funded community-based rehabilitation capacity is not adequate to meet the demands from specific client populations, in specific settings.

Wait times for Community Based Physiotherapy: The majority (84.4%) of community-based physiotherapists (including those in publicly and privately funded settings) in Ontario reported average wait times of seven days or less from receipt of referral to when the patient was assessed (Cook et al., 2006). In a recent study of adult rehabilitation and primary health care, wait times were shorter in privately funded practice settings compared to publicly funded settings; and acute patient populations as compared to those with chronic conditions. The College of Physiotherapists of Ontario reported that patients waited on average 10 days longer for urgent PT outpatient care through hospitals than through community PT clinics.

A recent report by the provincial auditor of Ontario indicated that 14.9% of all people waiting for community care services were waiting for PT. Exploration of community rehabilitation wait times revealed “patients awaiting publicly-funded care in the home often waited longer than 2 weeks”. In contrast, others have reported that 75% of patients received home care within 4 days of discharge from post acute care institutions.

Wait Times for Community Based Occupational Therapy: According to Cook et al., (2006) over half (60.1%) of community-based occupational therapists reported average wait times of one week or less from receipt of referral to when they first see a patient in a recent study of rehabilitation and primary health care. An Ontario audit of community-based health care services that determined 45.6% of all people waiting for community health care services were waiting for home based OT. The one peer-reviewed article that we found reported a mean wait time for OT home assessment to be 16 weeks with subsequent wait times for the acquisition of adaptive devices recommended after initial assessment ranging from less than one week to 11 weeks.

Perceptions of wait times and wait lists for health care services have been addressed to some extent in the literature from the perspectives of both the health care provider and the patient waiting for health care services. In Ontario, it has been argued that wait lists exist because of insufficient capacity of rehabilitation clinics to accommodate client demand due to staffing resources and lack of physical space. Furthermore, it is reported that clinicians believe there may be few resources available for complex client needs, thereby creating a backlog of complex patients waiting for rehabilitation. Providers also perceive that if wait lists are based on patient need alone, then patients with more chronic conditions and members from vulnerable groups may never be considered troubled enough to get to the top of the list. Others suggest that long waiting times are the main reason why Canadians report they would be willing to pay for treatments outside the public health care system. In contrast to the perception that wait times evoke negative opinions, some members of the public believe there is some benefit to wait lists as it allows patients the time to decide that they may not want the intervention they are waiting for and subsequently allows time for symptom resolution or conservative treatment

The majority of key informants described the cause of wait lists to generally be rooted in two main themes. These were 1) increasing demand for services; and, 2) decreased capacity to provide services.

Increasing demand for services due to the aging of the population: Key informants attributed the increasing demands for community-based rehabilitation services to several factors. A number of participants reported the population growth over the age of 65 years is having a significant

impact on the demand for community-based rehabilitation services. This issue was frequently raised from key informants representing the rural regions of Ontario where much of the population is elderly with chronic conditions. Furthermore, key informants from the more rural areas felt that the aging population, particularly those aged 80 years and older, had less access to privately funded health care and were more reliant on the publicly-funded system. It was believed that this resulted in an increased number of people waiting for publicly funded community-based rehabilitation services.

Key informants representing remote areas of Ontario expressed similar concerns (Cook et al., 2006). However these key informants generally attributed demographic changes to issues concerning the determinants of health, including socioeconomic status (SES), education and housing. Key informants reported that individuals with lower SES, less education and poor housing tend to have chronic health problems and would likely need to seek health services from the publicly funded system, thereby putting greater demand on community-based rehabilitation services.

Decreased capacity to provide services: Key informants attributed the increasing demands for community-based rehabilitation services to several factors. Cook et al. (2006) reported the population growth over the age of 65 years is having a significant impact on the demand for community-based rehabilitation services, specifically in rural regions of Ontario where much of the population is elderly with chronic conditions. Rural regions were found to be greatly affected by geographic barriers, those over the age of 80 were found to have less access to privately funded health care and were more reliant on the publicly-funded system (Cook et al., 2006), which was believed to result in an increased number of people waiting for publicly funded community-based rehabilitation services.

Other factors that attributed to an increased demand for services were based on demographic changes. Issues concerning the determinants of health, such as socioeconomic status (SES), education and housing, individuals with lower SES, less education and poor housing tend to have chronic health problems and would likely need to seek health services from the publicly funded system, thereby putting greater demand on community-based rehabilitation services (Cook et al., 2006).

4.0 Policy Implications and Further Research

Overall, availability and access to rehabilitation services along Ontario's continuum of care does not represent a balance between supply and demand. Ironically, demand for rehabilitation services among individuals with chronic and acute disease appears to be growing exponentially at the same time as availability and access appears to be reducing. The outcomes are not yet known, but we suggest that there is a sinister undertone to this process, that in our opinion, require further debate and discussion.

Demand for services tends to surpass available supply in an environment of economic scarcity, and therefore, challenges and opportunities remain in providing a fully integrated Canadian health system that includes comprehensive rehabilitation services. As provinces and territories across the country continue to reconfigure their health systems as part of health reform strategies, it will be increasingly important to develop an enhanced understanding of current and future demand for services. Such an understanding would create a platform to facilitate effective allocation of scarce financial and human resource supply across the care continuum.

Rehabilitation services are emerging as a core component of health delivery, and as such, the provision of these services is increasingly becoming a priority across the care continuum from community-based primary care initiatives at one end, to specialized institutional-based services at the other. The inclusion of rehabilitation services across the care continuum has been reported to yield positive outcomes such as shorter lengths of inpatient hospital stay, and improved functional outcomes for a variety of specific conditions. However, from a health policy perspective, rehabilitation services are often considered beyond the insurable limits of the Canada Health Act. As a result, rehabilitation services have over time been incrementally shifted towards the privately-funded sector (Lewis et al., 2007; Fuller, 1998), and are increasingly being delivered by private for-profit providers (Barlow, 2006; Deber, 2004; Landry et al., 2006). As the shift from public (or private not-for-profit) to private for-profit continues, access to rehabilitation services also tends to move away from an entitlement and towards a defined benefit to which an individual must meet eligibility criteria [Gildiner, 2004; Cott et al., 2007; Passalent et al., 2007].

There is thus a gap between current *demand* for rehabilitation services, which we operationally define in this study as the utilization of services, and existing *need* for these same services, which we operationally define as unfulfilled demand (Lewis et al., 2007). For instance, the ‘need’ for rehabilitation may be higher than the ‘demand’ for an elderly patient or client who is receiving services through a provincial home care program that has a maximum amount of allocated annual visits per individual. Further, there is the issue of supply or *provision* of services that we define as the availability of rehabilitation services. From a health policy perspective, if rehabilitation services are provided when they are most needed, individuals are more likely to live independently with their families and in their communities thereby altering utilization of expensive and resource-intensive interventions (Carli and Zavorsky, 2005; Walsh and Herbold, 2006). As such, the alignment between demand, need and provision with respect to rehabilitation services is becoming a critical policy issue in a climate of economic constraints, an aging population and an increasing incidence of chronic conditions that would benefit from rehabilitation. Without such data and analysis, there may be ongoing misalignments between demand/need and supply that in turn may lead to poor health outcomes at the individual and population levels. Moreover, the amount of time and resources required to train health professions is significant, and hence having insights into future demand can facilitate the implementation of appropriate educational programs to again align demand with human resource supply.

Overall, we suggest that commodification of rehabilitation services in an era of increasing demand is ‘penny wise, pound foolish.’ In other words, restricting access to PT services through the process of commodification may yield short-term costs savings, by shifting the financial responsibility away from governments or private insurance plans; on the other hand, the process of commodification has the potential to restrict access, which is likely to cause individuals to go without service, potentially increasing overall costs to the system in the long term. For instance, we question the wisdom of providing resource intensive medical or surgical interventions (whether they are publicly or privately funded) in the absence of ensuring proper rehabilitative services; after all, it is not cost savings if the outcomes are poor, if individuals increase utilization of expensive institutional and medical services, or if individuals could be more effectively managed elsewhere along the continuum. The evidence is emerging that the access to PT services yields positive self reported health status (SRHS), and similarly limited access has a negative effect on SRHS (Landry et al., 2006). Given that SRHS is correlated with utilization rates of other health resources such as emergency departments and family physicians, it would seem appropriate to argue the necessity to ensure access to PT. Moreover, demand for rehabilitation services is rapidly

increasing due to a myriad of factors, and given the shift from public to private, in terms of funding and delivery, the current trends might be the initial signs of a so-called ‘perfect storm’ in terms of global rising demands for PT occurring along side a critical paradigm shift, which tends to limit access to such services. We contend that there remains time to alter this course or process of commodification if we, as a global community of physiotherapists, wish. But as always, and despite best intentions, such outcomes are highly dependent upon political will, ability to agree, desire to change the course, and an aspiration to create a more equitable world than the one we have inherited.

Three suggested and prioritized areas of further research:

1) Empirical data regarding rehabilitation utilization. The health care restructuring commission suggested well over 10 years ago that data regarding rehabilitation utilization must be improved. Although many important steps have been taken, and the field has grown significantly, there remains a dearth of information on rehabilitation in comparisons with other health disciplines. The public and private funding and delivery for rehabilitation services may well complicate generation and access to data, however it remains a critical area for future explorations.

2) Establish benchmarks for the treatment intensity and frequency by conditions and by settings. In order for policy and decision makers to create a sustainable model for rehabilitation delivery across the care continuum, it will be critical to clarify parameters of treatment for major conditions (or conditions that will increasingly absorb resources) in order to ensure that future supply will match future needs. Alternatively, policy and decision maker may choose to ignore such data or best practices, but at minimum having such data would provide a framework that advocacy groups and other interested parties may use in their advocacy/lobbying efforts.

3) Explore the extent to which rehabilitation extender (eg. trained assistants) can be used to optimize rehabilitation delivery. At the moment, the use of trained assistants is not consistent across the care continuum. Alternatively, there are an increasing number of trained OT and PT assistant in the province. In order to optimize the rehabilitation delivery system, it is imperative to more fully understand *how*, *when* and *where* to best use rehabilitation extenders in order to drive financial and delivery efficiencies across the continuum. Further research into the perspective of regulated health providers and policy/decision makers on the role of rehabilitation extenders might also shed light into an otherwise relatively untapped resource.

Overall, the availability and access to rehabilitation services across the care continuum does not appear to be an ideal scenario for Ontarians. There are growing absolute numbers of rehabilitation providers, but this growth does not appear to be matched with overall population growth. Moreover, it is not yet clear how many rehabilitation providers are needed in Ontario (although the presence of long wait times appears to indicate a dearth of supply) thereby complicating the interpretation of the availability or supply of providers. Health care restructuring has had an impact on the availability of rehabilitation services, and the ongoing shift from public to private, or what has been termed ‘commodification’ of rehabilitation services, have limited access to rehabilitation services. The reasons for these outcomes are complex and rather amorphous to untangle from a health policy perspective, however it would seem reasonable to assume that the focus on acute medical and hospital care has pushed aside rehabilitation. However, the evidence seems to suggest that there are growing numbers of individuals with chronic disease, which may be driven by factors such as an aging population, which may drive the demand for rehabilitation. There is some evidence to suggest that if rehabilitation needs/demands are not met, individuals

may reenter the acute health care system to access services. The trouble with this scenario is that systems “should” be designed to provide services to the right place, the right time, by the right provider.

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