

Wait Times for Publicly Funded Outpatient and Community Physiotherapy and Occupational Therapy Services: Implications for the Increasing Number of Persons with Chronic Conditions in Ontario, Canada

Laura A. Passalent, Michel D. Landry, Cheryl A. Cott

ABSTRACT

Background: Timely access to publicly funded health services has emerged as a priority policy issue across the continuum of care from hospitals to the home and community sector. The purpose of this study was to examine wait lists and wait times for publicly funded outpatient and community occupational therapy (OT) and physical therapy (PT) services.

Methods: A mailed self-administered questionnaire was sent in December 2005 to all publicly funded sites across Ontario that deliver outpatient or community OT or PT services ($N=374$). Descriptive statistics were used to describe the study sample and to examine wait lists and wait times by setting and client condition.

Results: Overall response rate was 57.2% ($n=214$). More than 10,000 people were reported to be waiting for OT or PT services across Ontario. Of these, 16% ($n=1,664$) were waiting for OT and 84% ($n=8,842$) for PT. Of those waiting for OT, 59% had chronic conditions and half were waiting for home care rehabilitation services. Of those waiting for PT, 73% had chronic conditions and 81% were waiting at hospital outpatient departments.

Conclusions: Individuals with chronic conditions experience excessive wait times for outpatient and community OT and PT services in Ontario, particularly if they are waiting for services in hospital outpatient departments.

Key Words: community services, physical therapy, physiotherapy, wait times

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RÉSUMÉ

Historique : L'accès en temps opportun aux services de santé publics a émergé en tant que question de politique prioritaire dans le continuum des soins, des hôpitaux au foyer et au secteur communautaire. Cette étude avait pour but d'examiner les listes d'attente et les temps d'attente pour les patients externes en ce qui a trait aux services publics d'ergothérapie et de physiothérapie en milieu communautaire.

Méthodologie : En décembre 2005, un questionnaire par la poste auto-administré fut envoyé à tous les sites gouvernementaux de l'Ontario qui assurent la prestation de services d'ergothérapie ou de physiothérapie aux patients externes ou en milieu communautaire ($N=374$). Des statistiques descriptives donnent un aperçu de l'exemple de l'étude et examinent les listes d'attente et les temps d'attente en fonction du milieu et de la condition du client.

Résultats : Le taux de réponse total a été de 57,2 % ($n=214$). En Ontario, plus de 10,000 personnes ont été rapportées comme étant en attente de services d'ergothérapie ou de physiothérapie. Parmi celles-ci, 16 % ($n=1 664$) attendaient des soins d'ergothérapie et 84 % ($n=8 842$) des soins de physiothérapie. Parmi celles qui attendaient des soins d'ergothérapie, 59 % avaient une condition chronique et la moitié attendait des services de réadaptation à domicile. Parmi les personnes qui attendaient des services de physiothérapie, 73 % avaient une condition chronique et 81 % attendaient aux départements hospitaliers de patients externes.

Conclusion : En Ontario, les personnes atteintes de conditions chroniques sont soumises à des temps d'attente excessifs pour des services d'ergothérapie et de physiothérapie en clinique externe ou au sein de la collectivité, surtout si elles attendent des services dans les départements de clinique hospitalière externes.

Mots clés : physiothérapie, services communautaires, temps d'attente, thérapie physique

Laura A. Passalent, MHS, BScPT: Research Associate, Arthritis Community Research and Evaluation Unit, Toronto, Ontario; Lecturer, Department of Physical Therapy, University of Toronto, Ontario.

Michel D. Landry, PhD, PT: Assistant Professor, Department of Physical Therapy, University of Toronto, Toronto, Ontario; Adjunct Assistant Professor, Department of Health Policy and Administration, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

Cheryl A. Cott, PhD, PT: Deputy Director, Arthritis Community Research and Evaluation Unit, Toronto, Ontario; Associate Professor, Department of Physical Therapy, University of Toronto, Toronto, Ontario.

Address correspondence to Cheryl Cott, Associate Professor, Department of Physical Therapy, Faculty of Medicine, University of Toronto, 500 University Avenue, Toronto, ON M5G 1V7 Canada; Tel.: (416) 978-0301; Fax: (416) 346-8562; E-mail: cheryl.cott@utoronto.ca.

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BACKGROUND

Equity of access to services based on need is a defining element of Canadian health care.^{1,2} However, as shifts in the demographic characteristics of the population occur and as other factors affecting supply and demand for health care change, timely access to comprehensive health services has become elusive.³ Multiple demands on health care systems are occurring across the continuum, and much of policy makers' attention has recently been focused on wait times for surgical and diagnostic services.⁴⁻⁹

In Ontario, significant policy attention has been focused on wait times for specific areas of the health system, including joint replacement, along with cardiac and cancer care.¹⁰ Other areas along the health care continuum have received less policy and research attention, which suggests that concentration of resources in one health care sector may come at the cost of other equally important but less politically visible sectors.¹¹ As a result of this so-called zero-sum game, it has been reported that wait lists for community-based services have become overshadowed by surgical and medical wait times.¹² Others have argued that success in the five priority surgical and medical areas is coming at the expense of longer wait times in other areas along the health care continuum.^{13(p.11)} These findings suggest an imbalance between the demand for overall health services and the human or financial resources available to meet these demands.¹⁴

Increases in the prevalence of specific diseases are also contributing to the demand pressures to deliver timely health services. For example, chronic disease continues to place increasing demands on the health care system: cardiovascular disease, diabetes, cancer, obesity, and respiratory conditions account for 46% of the burden of disease in Canada.¹⁵ Some chronic conditions, such as arthritis, musculoskeletal disorders, and stroke, are more likely than others to be associated with disability and are therefore more likely to require rehabilitation intervention to optimize function, mobility, and independence in the community. The shift in service delivery to favour outpatient and community settings is an attempt to reduce the pressure on hospitals; however, it has resulted in additional demands on community-based rehabilitation providers.^{14,16,17}

The changing demographics of Ontario's population, in combination with changes to current provincial health care delivery (including the partial de-listing of publicly funded community physical therapy services in 2005), underscores the need to more fully understand wait times for publicly funded outpatient and community physical therapy (PT) and occupational therapy (OT) services. Published research in peer-reviewed and grey literature examining wait times for community rehabilitation is limited, and that which does exist primarily

addresses wait times for PT.¹⁸ In a recent study of rehabilitation in primary care, wait times were found to be shorter in privately funded practice settings than in publicly funded settings and to be shorter for acute patient populations than for those with chronic conditions.¹⁹ 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.²⁰ Exploration of community rehabilitation wait times revealed that "patients awaiting publicly-funded care in the home often waited longer than two weeks."^{20(p.6)} In contrast, others have reported that up to 75% of patients received home care within 4 days of discharge from post-acute-care institutions.²¹

The literature that has examined community OT wait times indicates that more than half of community occupational therapists wait an average of 1 week or less from receipt of referral to first seeing a client.¹⁹ Furthermore, data from the 2004 Ontario Auditor General's report of community health care services suggest that 45.6% of all people waiting for community health care services were waiting for home-based OT.¹⁸ One peer-reviewed article reported a mean wait time of 16 weeks for OT home assessment, with subsequent wait times for the acquisition of adaptive devices recommended after initial assessment ranging from less than 1 week to 11 weeks.²²

The purpose of the present study was to explore wait times for OT and PT services across publicly funded outpatient and community settings in Ontario. The objective was to determine the extent of wait times and wait lists for OT and PT by setting (hospital, community, or home care) and by client condition (acute or chronic).

METHODS

The study protocol was approved by the University Health Network Research Ethics Board, Toronto, Ontario. Return of a completed questionnaire implied informed consent. In Phase 1 of the study, we conducted a series of key informant interviews with known experts in order to explore the general issue of wait times and wait lists for rehabilitation services in Ontario. The results of this first phase are reported elsewhere.²³ Briefly, key informants were purposively selected and interviewed in order to explore the complex issues of wait lists and wait times for outpatient and community OT and PT services in Ontario. In addition, the results of Phase 1 served to inform the development of questionnaires for Phase 2 of the study; the results of this second phase are described below.

Key informants from Phase 1 reviewed the questionnaire to be used in Phase 2 and made important suggestions regarding the clarity, scope, and feasibility of completion of the questionnaire. This process served to strengthen the face and content validity, clarity, relevance,

and format of the questionnaire. Among the more important findings from Phase 1 of the research was that wait times and wait lists are generally not important issues in settings that deliver privately funded rehabilitation services. For instance, private for-profit clinics that deliver rehabilitation services funded through private sources (i.e., out of pocket payment, third-party insurance) and quasi-public sources (i.e., workers' compensation insurance and motor vehicle accident insurance) generally do not have wait lists or long wait times to access services. Therefore, we did not sample private for-profit clinics or other privately owned settings that access private funding for service delivery in this survey; rather, we sampled not-for-profit settings that deliver publicly funded services. We acknowledge that restricting our sample also limits the extent to which our analysis will be generalizable; on the other hand, it did allow us to explore these issues with a relatively homogenous cohort. Nevertheless, we did choose to include Designated Physiotherapy Centres (DPCs), formerly known as Schedule 5 clinics, in the study sample because, although they are privately owned and operate on a for-profit basis, they invoice the Ontario Health Insurance Plan (OHIP) for services on a fee-for-service basis, which qualifies them as delivering publicly funded services. DPCs provide publicly funded community-based PT services, but there is no equivalent structure for OT in the province of Ontario. The political issues that surround DPCs have been reported in great depth elsewhere;^{10,11,24} however, it is important to review a few of the essential historical developments here.

Prior to April 2005, there were more than 90 active DPC providers in Ontario.¹⁰ The 2004 Ontario budget provided that, in order to improve cancer care and cardiac programmes as well as home and long-term care, less critical services such as PT would be de-listed as of April 1, 2005.¹¹ During the week prior to the proposed de-listing, however, the Ontario Ministry of Health and Long Term Care (MOHLTC) published an amendment to the original 2004 budget providing for a partial rather than a full de-listing.

Within this partial de-listing policy, the MOHLTC opted to restrict the eligibility criteria for publicly funded community-based PT services rather than to de-list them entirely. Previously, all publicly insured Ontario residents were eligible for PT treatment in DPC clinics. In order to be eligible for services as of April 1, 2005, a resident of the province must meet one of the following criteria: (1) be aged 65 years and over; (2) be aged 19 years or under; (3) reside in a long-term care facility; (4) require PT post-hospitalization; or (5) receive social benefits. Although there was significant public and professional debate regarding this policy decision, the fact remained that DPCs continued to provide some degree of access to publicly funded services, and, therefore, they were included in the study sample.

In Phase 2 of this research, community rehabilitation managers, professional practice leaders, or senior therapists at all ($N=374$) publicly funded outpatient and community sites that provide OT and/or PT services to adults (age 19 years and older) in Ontario were surveyed using a self-administered mailed questionnaire. These sites included hospital outpatient departments (OPDs), Community Health Centres (CHCs), Community Care Access Centres (CCACs), the Arthritis Society Rehabilitation and Education Program (AREP), and DPCs. Community rehabilitation services provided through mental-health institutes or institutes providing rehabilitation to children and/or adolescents, as well as specialty ambulatory programmes (e.g., amputee programmes, hand clinics), were excluded.

Sites and key contact persons providing publicly funded outpatient and community OT and PT services in Ontario were identified through the following sources:

- Ontario MOHLTC Web site (for DPCs, $n=93$)
- Ontario Hospital Association Web site (for hospital OPDs, $n=208$)
- Ontario Association of Community Care Access Centres (for CCACs, $n=42$)
- College of Occupational Therapists of Ontario and College of Physiotherapists of Ontario (for OTs and PTs working in CHCs, $n=10$)
- Senior Director of Client Programs, AREP (for regional directors of client services and individual therapists, $n=21$)

Where necessary, organizations were contacted directly by telephone to identify the most appropriate person in the organization to receive the questionnaire. Potential participants were mailed an information letter, a questionnaire, and a prepaid return envelope on November 14, 2005. Three weeks after the initial mailing, all non-respondents were mailed a second information letter, questionnaire, and prepaid return envelope. The final cut-off date for returned questionnaires was January 12, 2006. Each respondent was asked to respond to the questionnaire based on a typical month that best characterized his or her setting as a whole.

The data from the questionnaires were entered into a relational database using MS Access for Windows 2000 (Microsoft Corp., Redmond, WA). Double data entry was undertaken to ensure data quality.

Measures

Geographic Region

Outpatient and community OT and PT settings were defined as urban or rural using Canada Post's most basic definition, as indicated by the second digit of the respondent's postal code: the number 0 indicates a rural location, while the numbers 1 through 9 indicate urban locations.

Service Availability

Availability of services was reported by day of the week (Monday–Sunday) and by time of day (daytime = 7:00 a.m.–5:00 p.m.; evening = after 5:00 p.m.).

Caseload Composition

Conditions typically seen in outpatient and community OT and PT settings included hip fracture, total joint replacement, other acute musculoskeletal conditions (e.g., soft-tissue injuries, sports injuries, other fractures), other chronic musculoskeletal conditions (e.g., arthritis, low back pain, chronic soft-tissue problems, osteoporosis), acute stroke, chronic stroke, and other neurological conditions (e.g., brain injury, spinal-cord injury, neurodegenerative disease).

Wait Lists

The wait list is defined as the number of people waiting for outpatient or community OT or PT services at the time of the survey for each of the above conditions.

Wait Times

A standard definition of wait times was provided to the respondent within the text of the questionnaire: the average number of days people are waiting for hospital outpatient departments or community rehabilitation services from the date when a referral is received to the date when a client attends his or her first appointment. If the respondent used any definition of wait times other than that provided above, an “other” option was included in the questionnaire, for which respondents could specify

when the wait time started and ended for their particular setting.

Data Analysis

Descriptive statistics were used to describe the study sample, to summarize results from the study questionnaires, and to address the study objectives. Cell sizes of less than five were excluded from analyses involving frequency counts, in order to protect respondents' confidentiality. SAS Version 9.1 (SAS Institute Inc., Cary, NC) was used for all analyses. SPSS Version 13.0 (SPSS Inc., Chicago, IL) was used to display wait time distributions in graphic form.

RESULTS

The overall response rate to the survey was 57.2% (214 of a possible 374 responses). The response rates by setting were as follows: CCAC, 45.2%; CHC, 70.0%; hospital OPD, 58.7%; DPC, 50.5%; AREP, 90.5%. Table 1 presents a description of the sample by setting.

Number of People Waiting for Outpatient and Community PT and OT Services across Settings and Conditions

A total of 10,455 people were reported to be waiting for outpatient and community PT and OT services during a typical month. Of these, 15.6% ($n=1,633$) were waiting for OT services across four community settings, and 84.4% ($n=8,822$) were waiting for PT services across five community settings. Table 2 shows the overall

Table 1 Description of Sample by Setting

Characteristic	Setting				
	Community Care Access Centres n (%)	Community Health Centres n (%)	Hospital Outpatient Departments n (%)	Designated Physiotherapy Clinics n (%)	Arthritis Society Rehabilitation and Education Program n (%)
OT services only	0	2 (28.6)	18 (14.8)	N/A	4 (21.1)
PT services only	0	5 (71.4)	75 (61.5)	47 (100)	10 (52.6)
OT and PT services	19 (100)	0	29 (23.8)	N/A	5 (29.3)
Urban setting	19 (100)*	7 (100)	85 (69.7)	47 (100)	19 (100)*
Report having a waiting list for OT or PT outpatient services	9 (47.4)	5 (71.4)	108 (87.8)	17 (36.2)	18 (94.7)

OT = occupational therapy; PT = physical therapy

*Although Community Care Access Centres and Arthritis Society Rehabilitation and Education Program centres are all located in urban settings, services offered through these settings can extend to rural communities

Table 2 Number of People Waiting for Outpatient and Community Occupational Therapy and Physiotherapy, by Setting

Setting	Occupational Therapy n (%)	Physical Therapy n (%)
Community Care Access Centres	805 (49.3)	533 (6.0)
Community Health Centres	15 (1.2)	179 (2.0)
Hospital Outpatient Departments	449 (27.5)	7,190 (81.5)
Designated Physiotherapy Clinics	N/A	156 (1.8)
Arthritis Society Rehabilitation and Education Program	364 (22.2)	764 (8.7)
Total	1,633	8,822

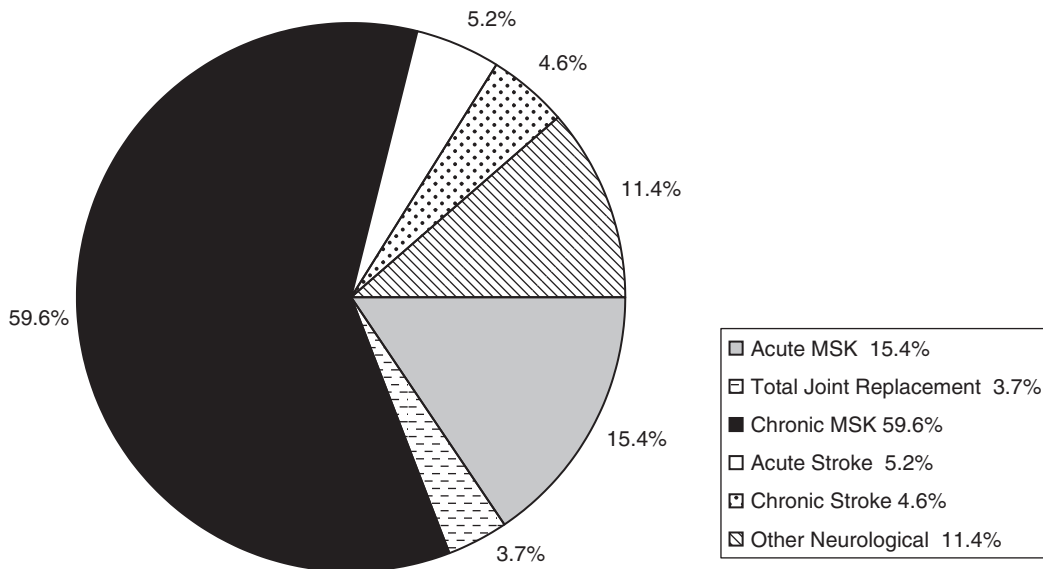


Figure 1 Percentage of clients waiting for outpatient and community OT, by condition (MSK = musculoskeletal; there were no [0%] clients with hip fractures reported to be waiting for outpatient and community OT)

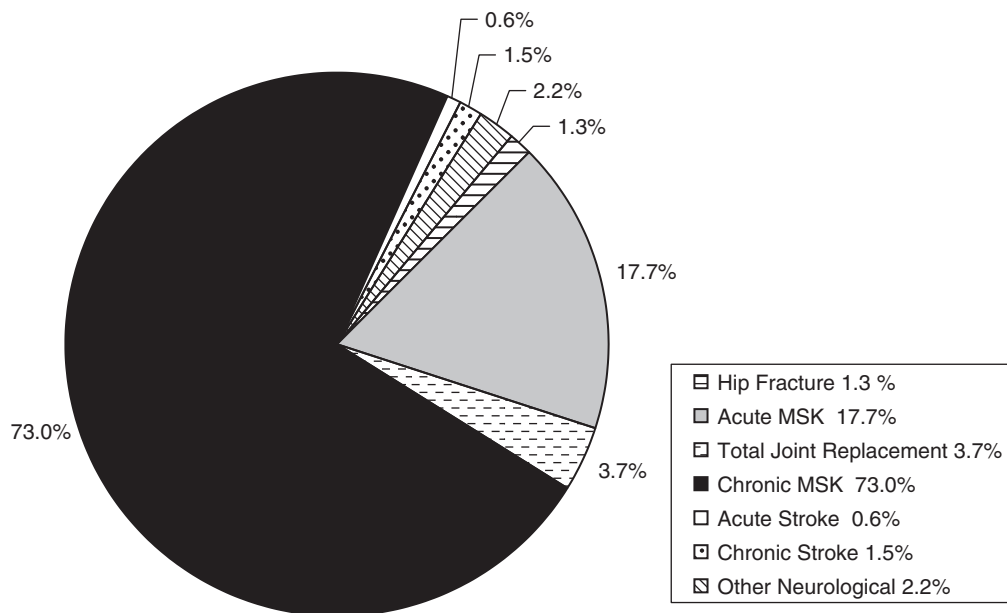


Figure 2 Percentage of clients waiting for outpatient and community PT, by condition (MSK = musculoskeletal)

distribution of people waiting for OT and PT services by setting at the time of the survey.

Half of the clients waiting for OT were waiting for service from CCACs; the remainder were almost evenly split between AREP and hospital OPDs. More than 80% of those waiting for PT were waiting for services at hospital OPDs. Figures 1 and 2 illustrate the proportion of clients waiting for OT and PT services by condition. The majority of those clients waiting for outpatient or community

services had a chronic musculoskeletal condition (59.6% for OT; 73% for PT).

Wait Times for Services

Wait times reported in this study were not normally distributed, making statistical estimates using the mean inappropriate. Therefore, box-and-whisker plots were used to present the data on wait times. Box-and-whisker

plots display the distribution of wait times for community-based rehabilitation in Ontario during a typical month, as reported by our survey respondents in December 2005. The black line inside the box reflects the median wait time, indicating that 50% of rehabilitation settings are below the line and 50% of settings are above; the upper and lower outlines of the box represent the seventy-fifth and twenty-fifth percentile scores, respectively. The whiskers extend from each ends of the box to 1.5 times the inter-quartile range, if a data point falls at this mark, or, if not, at the next closest data point within this multiple. Circles represent outliers with wait times greater than values between 1.5 and 3 box lengths from the upper edge of the box.

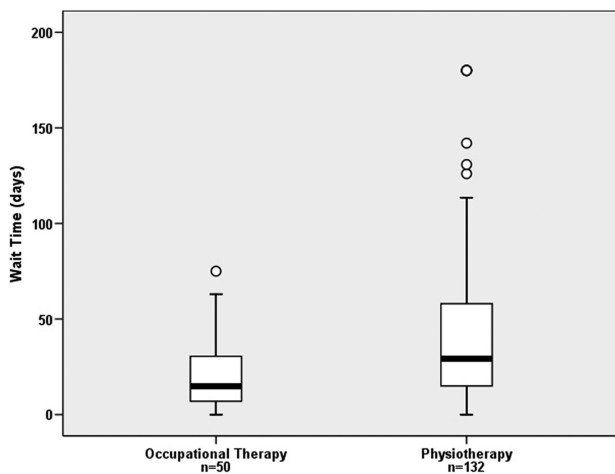


Figure 3 Reported wait time (days) for outpatient and community occupational therapy and physical therapy services (see “Wait Times for Services” section for explanation of box-and-whisker plot; *n* = number of clinical settings reporting wait times)

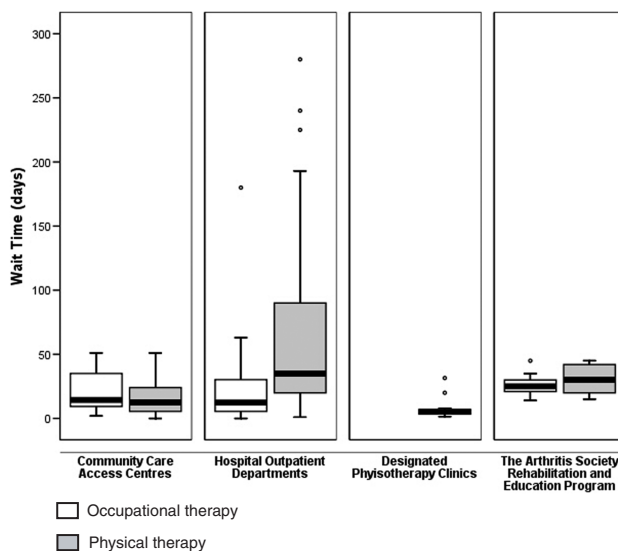


Figure 4 Reported wait time (days) for occupational therapy and physiotherapy by setting (see “Wait Times for Services” section for explanation of box-and-whisker plot)

Extreme wait times that are more than 3 box lengths from the upper edge of the box have been removed from the analysis because of concerns about data quality. Wait times were defined by 93% of respondents using the standard definition (“the average number of days people are waiting for hospital outpatient departments or community rehabilitation services from the date the referral is received to the date a client attends his/her first appointment”). Figure 3 displays the distribution of the reported wait times (in days) for community rehabilitation in Ontario at the time of the survey. In general, wait times for PT were longer than OT wait times: the median wait time was 15.0 days for OT and 29.3 days for PT. Further, wait times at the ninetieth percentile are more than twice as long for PT as for OT (140 days waiting for PT versus 60 days waiting for OT). Even though fewer OT services are available in the province of Ontario, wait times for OT remain shorter than wait times for PT services.

Figure 4 illustrates the distribution of wait times for OT and PT services by setting. The wait time distributions for OT were similar at CCACs and hospital OPDs, with median wait times of 14.5 and 12.6 days respectively; however, the ninetieth percentile for wait times at hospitals was 62 days. The AREP had a much longer median wait time of 25 days, with a smaller overall distribution for community OT services. For PT, few DPCs reported having a wait list. Moreover, the DPCs also had the shortest wait times, with a median wait time of 5 days and a ninetieth percentile for wait times no greater than 22 days. In contrast, 50% of patients waiting for PT in hospital OPDs were seen within 35 days, and the remaining 40% (i.e., ninetieth percentile) waited up to 180 days.

Figures 5 and 6 illustrate the reported wait times by client condition. As shown in Figure 5, people with chronic stroke (median = 10 days, 90th percentile = 170 days) and chronic musculoskeletal conditions (median = 21 days, 90th percentile = 94 days) waited longest

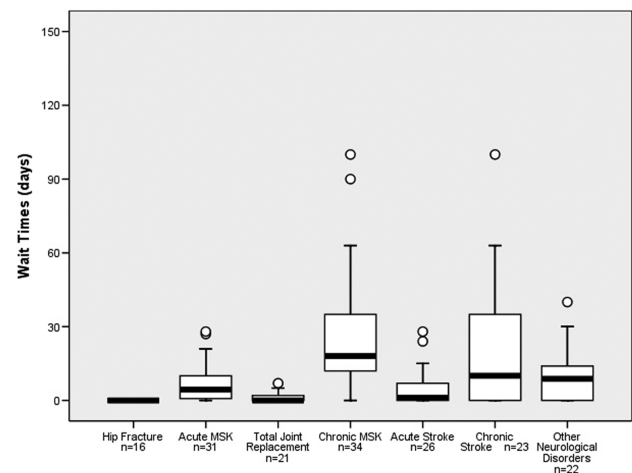


Figure 5 Reported wait times (days) for occupational therapy by condition (MSK = musculoskeletal)

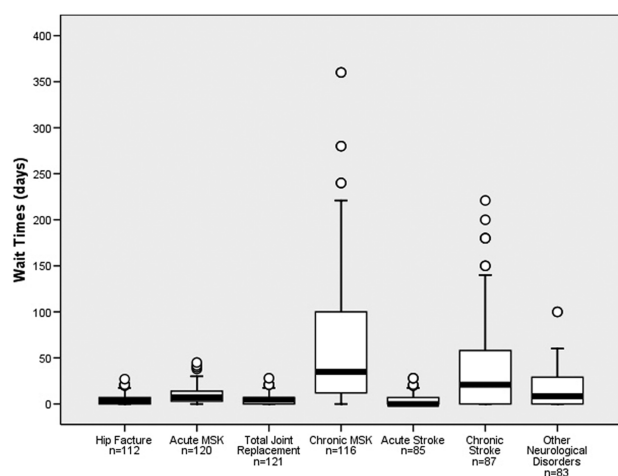


Figure 6 Reported wait time (days) for physical therapy by condition (MSK = musculoskeletal)

for outpatient and community OT services. Likewise, people with chronic conditions waited longest for PT services, as illustrated in Figure 6. Half of all patients with chronic musculoskeletal conditions waited up to 35 days for PT services; however, the remaining 40% (i.e. 90th percentile) of people with these conditions waited up to 227 days. Similarly, half of individuals with chronic stroke waited 21 days for PT services, while the remaining 40% (i.e. 90th percentile) waited up to 180 days. Acute conditions such as hip fracture, acute musculoskeletal conditions, total joint replacements, and acute stroke had much shorter wait times: most patients were seen within 30 days.

DISCUSSION

The results of this survey indicate that wait lists and wait times for publicly funded outpatient and community OT and PT services vary depending on setting and condition. These findings, and their possible policy implications, are discussed below as they relate to (1) supply and demand for rehabilitation services, (2) wait times for people with chronic conditions, and (3) implications of the findings for the overall health system.

Supply and Demand for Rehabilitation Services

Neoclassical economic theory suggests that equilibrium in health care markets is reached when demand is met within available supply; conversely, disequilibrium results when there is greater demand than available supply.^{25,26} Based on this assumption, wait times for health services serve as a proxy measure of the degree to which this equilibrium exists.¹⁴ The results of the present study illustrate that the demand for OT and PT services far exceeds the available supply, thereby

confirming speculation of a disequilibrium in the current market for publicly funded community-based OT and PT services. Although there are no specific guidelines or benchmarks to define reasonable wait times for community rehabilitation services, we suggest that current wait times either are approaching or have gone beyond acceptable and reasonable limits within a publicly funded health care system founded on the principle of access based on need.

Unlike the other settings included in this survey, DPCs are for-profit clinics where the allocation mechanism is based on fee for service; that is, the provider receives a set amount of funding for each unit of service, rather than receiving an overall annual global budget to deliver services. In the case of DPCs, the provider generally receives either \$12.20 for a clinic visit or \$24.40 if services are provided in the client's home. In the case of a clinic visit, the total payment of \$12.20 has been perceived to be below market rates,¹¹ and, as a result, many clinic-based DPC providers have imposed additional fees, paid by the client to the provider, that are above and beyond what OHIP reimburses the DPC provider.²⁴ This additional funding should not be confused with a "co-payment," which would be illegal under the Canada Health Act; rather, such payments are generally positioned as additional fees to supplement low rates of reimbursement received from the provincial government.

Another point to consider, with respect to the shorter wait times found at DPCs, is the partial de-listing policy instituted by the MOHLTC on April 1, 2005. As described above, this policy restricted the eligibility criteria for publicly funded community-based PT services such that individuals seeking treatment at DPCs who are between the ages of 20 and 64, have not had an overnight hospital stay, and are not receiving social benefits would not be eligible. The fact that fewer people can access services through these DPCs may be a factor in the shorter wait times apparent at these centres.

Regardless of the above, this finding of shorter wait times at DPCs is subject to two interpretations, both of which require further empirical research to be substantiated. First, it is our anecdotal understanding that the additional charge levied by DPCs may stream individual clients away from these sites, thereby lowering their patient volumes. In other words, individuals' willingness, or lack thereof, to pay additional fees for PT services may be lowering the numbers of clients seeking access to services at DPCs, which, in turn, lowers demand. This lower demand shortens wait times and produces equilibrium between supply and demand. Second, these findings may illustrate that for-profit delivery, assuming appropriate incentives, is more efficient than not-for-profit delivery, since the for-profit provider has a financial incentive to provide higher volumes of service by increasing supply to meet demand (i.e., hiring more staff, increasing hours of operation, etc.). Moreover, there may be more

flexibility or stimulus to alter the approach to care from an individualized approach to group-based delivery. In this case, group-based delivery would be more efficient in providing more services to more people. There are generally few incentives, financial or otherwise, to reduce long wait times in the other settings surveyed in this study. Thus it may be hypothesized, based on our results, that for-profit delivery is more efficient at aligning supply and demand. However, we do caution that there is an equally large literature suggesting that even though for-profit delivery may operate more efficiently than not-for-profit delivery, it may do so by modulating the precarious balance of efficiency and quality. In this study we did not collect data on quality, and therefore we are not able to untangle the variables of this hypothesis; however, it is important to signal that further research is needed if we are to answer this particularly critical research question.

Wait Times for People with Chronic Conditions

As discussed previously, the market for community rehabilitation services is in a state of disequilibrium. More specifically, there appear to be disproportionate wait times for people with chronic conditions seeking PT services in hospital OPDs. In our survey data, people presenting with chronic musculoskeletal conditions or chronic stroke and other neurological conditions represented the majority of people waiting for publicly funded rehabilitation, and they also had the longest wait times.

The presence of extensive wait lists and wait times suggests that the health system has a limited capacity to address the emerging needs of clients with chronic conditions. This may have implications for the overall health system, because persons with chronic diseases, such as arthritis and stroke, contribute the most to the burden of disease in Canada.^{27,28} For example, recent population data from British Columbia indicate a three- to 10-fold increase in the prevalence of chronic diseases such as chronic obstructive pulmonary disease, diabetes, osteoarthritis, and hypertension in people aged 50 to 75 years.²⁹ Compounding these rates of chronic diseases are population projections forecasting that, by the year 2028, those aged 65 and older will constitute 20.3% of Ontario's population.³⁰ These facts, combined with evidence that the presence of chronic conditions in older persons can lead to progressive disability, signal the need to assess policies around access to community rehabilitation services.

Implications of these Findings for the Overall Health System

In a prospective cohort study, Landry et al.¹⁰ demonstrated a statistically significant association between access to publicly funded community-based PT services and self-reported perceived health (SRH). It was shown

that clients who required PT and were able to access publicly funded services were more likely to report good SRH status than those who required PT services but were not able to access these services following the partial de-listing. The links between SRH status and rates of health care use, morbidity, and mortality have been identified by others.³¹⁻³⁹ Further research is clearly needed to validate the extent to which lack of access to rehabilitation services such as OT and PT translates into long-term adverse consequences. Our findings suggest that there is disequilibrium between the supply of and the demand for rehabilitation services. Ontario's decision to de-emphasize rehabilitation services may signal a need to modernize Canada's health system so that individuals with chronic conditions can access community OT and PT services in a timely manner. Furthermore, the results of this study suggest that current policies affecting the balance between supply and demand for the increasingly large group of clients with chronic conditions need to be re-examined.

These findings provide a platform to make change. Our evidence suggests that supply and demand for publicly funded rehabilitation services are in disequilibrium, and the next rational policy process is to implement strategies that will move toward aligning these economic and environmental factors. If this process is to occur, it is important to recognize that the current provincial health care system is based on the biomedical model, which has more to do with sickness than with health. There are two essential points of discussion. First, although this may not have been the original intent, access to the health care system is based on a clinical diagnosis, and generally an individual needs to be in an acute state in order to access services. Second, rehabilitation services are located at the perimeter of the existing health care system and are not always included as necessary services. As these two factors converge, the outcome is one of disequilibrium. Based on the small sample within this study, it appears that the for-profit sector has found an improved point of equilibrium between supply and demand, although this is likely to be based on outright restriction of access to those who can pay additional fees or who have access to other payers.

This disequilibrium between supply and demand for publicly funded PT and OT services is particularly severe for the increasing number of individuals with chronic conditions. The finding that clients tend to be undersupplied by the public system would seem to be in direct opposition to what evidence-based or best practice indicates as the most effective approach in the management of chronic conditions. There is a wealth of literature suggesting that the best way to manage chronic disease is by providing educational, therapeutic, and preventive services.⁴⁰⁻⁴⁶ In a previous study, Landry et al.¹⁴ concluded that the provision of "prehabilitation" services for individuals on wait lists for joint arthroplasty can

mediate the overall demand for services. Based on their results, these authors concluded that there is a need to reassess delivery in order to ensure that the health care system is prepared to provide services enabling individuals with chronic conditions to better maintain independence and mobility. We suggest that failure to address the issues of chronic disease at the rehabilitative stage, before medically intensive and hospital-based services are warranted, will serve to increase demand on an already overburdened health care system. Although it is not yet clear how such a change to the system can or should be implemented, our analysis highlights the need to conduct feasibility studies to determine the most cost-effective and clinically efficient way to initiate change.

Limitations

Limitations to this study influence the degree to which the data and analysis can be generalized to other settings. First, the extent of wait times for hospital-based outpatient rehabilitation in this study may have been underestimated because of the exclusion of specialty ambulatory rehabilitation services (e.g., amputee programmes and hand clinics) and other members of the rehabilitation team (e.g., speech language pathologists). Furthermore, we examined wait lists and wait times for adult rehabilitation only. Although there was an acceptable response rate (57.2%) to the survey, there remains a potential for response bias. For instance, it is not clear whether the non-responders did not participate in the survey because they did not have a wait list and were therefore not interested in participating, or whether they did have wait lists but were reluctant to share these data. Lastly, although the number of people waiting seems large, it is difficult to determine the scope of the problem, as we do not know the actual number of active patients during a given period. Such knowledge would allow us to calculate the ratio of people waiting to patients seen, and thus to determine the relative magnitude of problems in accessing community rehabilitation as a result of wait lists and wait times.

CONCLUSIONS

Overall, the results of this study indicate that wait times for publicly funded community rehabilitation vary depending on setting and condition. Most notably, wait times are longest for people with chronic musculoskeletal conditions who are waiting for hospital outpatient physiotherapy. This study provides the first analysis of wait times for publicly funded community-based rehabilitation for adults across Ontario. The results documented above provide data upon which to build future research examining the consequences of excessive wait times for persons with chronic conditions.

KEY MESSAGES

What Is Already Known on This Subject

Demands on the Ontario health care system are changing across the continuum as shifts in supply and demand affect access to health care, including wait times and wait lists for community rehabilitation services. Published research in peer-reviewed and grey literature examining wait times and wait lists for community rehabilitation is limited.

What This Study Adds

To our knowledge, this study represents the first comprehensive examination of wait times and wait lists for community OT and PT services in Ontario. The findings show that individuals with chronic conditions experience excessive wait times for outpatient and community OT and PT services, particularly if they are waiting for services in hospital outpatient departments.

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