Low Back Pain: Current Patterns of Canadian Physiotherapy Service Delivery

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ABSTRACT

Purpose: The aim of this study was to describe the current patterns of service delivery of Canadian physiotherapy (PT) professionals working in adult musculoskeletal (MSK) outpatient practice. **Methods:** A total of 846 Canadian PT professionals working with an adult MSK outpatient clientele participated in an online survey about how they would treat a patient with low back pain (LBP). After reading an online clinical vignette about a fictional patient with varying insurance status, participants answered questions about how they would treat the patient (e.g., wait time, frequency and duration of treatment, time allotted for initial evaluation and treatment), about their actual practice (e.g., number of patients seen per day), and about their work setting. **Results:** The vignette patients with LBP would typically be seen within 2 weeks, especially in private practice, and most would receive care 2–3 times per week for 1–3 months. Initial evaluations and subsequent treatments would take 31–60 minutes. Two-thirds of participants reported treating 6–15 patients a day in their current practice setting. Differences were found between provinces and territories (with the longest wait time in Quebec), practice settings (with a longer wait time in the public sector), and insurance status (patients covered by workers' compensation are seen more frequently). **Conclusion:** This study adds to our knowledge of the accessibility of outpatient MSK PT services for patients with LBP in Canada, and it points to potential areas for improvement.

Key Words: Canada; health care services accessibility; low back pain; outpatients.

RÉSUMÉ

Objectif : décrire les modèles actuels de prestation de services en physiothérapie en clinique externe au Canada auprès de patients adultes ayant des problèmes musculosquelettiques. **Méthodes :** un total de 846 professionnels de la physiothérapie canadiens travaillant en clinique externe auprès de patients adultes ayant des problèmes musculosquelettiques ont répondu à un sondage en ligne à propos de leur manière de traiter un patient souffrant de douleur lombaire. Après avoir lu une vignette clinique en ligne au sujet d'un patient fictif au régime d'assurance variable, les participants ont répondu à des questions au sujet de la manière dont ils traiteraient le patient (ex. : temps d'attente, fréquence et durée des traitements, temps alloué à l'évaluation initiale et au traitement) ainsi que de leur pratique actuelle (ex. : nombre de patients vus par jour) et de leur cadre de travail. **Résultats :** les patients souffrant de douleur lombaire présentés dans la vignette clinique seraient normalement vus en deux semaines, particulièrement en pratique privée, et la plupart recevraient des soins de deux à trois fois par semaine pendant un à trois mois. Les évaluations initiales et les traitements subséquents dureraient entre 31 et 60 minutes. Les deux tiers des participants ont répondu qu'ils traitent entre 6 et 15 patients par jour dans leur cadre de travail.

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actuel. Des différences sont notables entre les provinces et les territoires (le Québec a les temps d'attente les plus longs), les cadres de pratique (le temps d'attente est plus long dans le secteur public) et les régimes d'assurance (les patients couverts par une indemnisation des accidents du travail sont vus plus souvent). **Conclusion :** cette étude approfondit nos connaissances en lien avec l'accessibilité des services externes de physiothérapie musculosquelettique pour des patients souffrant de douleur lombaire au Canada et révèle des domaines d'amélioration potentiels.

In an effort to provide high-quality care, physiotherapists select the types of assessments and treatments that are most relevant to each patient's clinical presentation. They also make decisions about how they will provide physiotherapy (PT) services to individual patients, including wait time for an appointment and the frequency and duration of treatment. Departmental or clinic policies, such as how long the initial evaluation and subsequent treatment sessions should last and how many patients each therapist should see per day, may also influence the quality of care therapists provide to patients. Despite the importance of these decisions and practices, there are only a few descriptive articles on this topic, and there are no established standards for these service delivery parameters. As a result, there is limited grounding for clinicians and policymakers seeking to implement evidence-informed clinical practice in this area.

A 1999 British study on public hospital PT outpatient departments showed that clients with acute problems were seen sooner than the established target of 5–7 days and that those with subacute conditions were seen on target (4–6 wk). Individuals with chronic or routine cases waited 14–15 weeks, in contrast to the median target, which was set at 6–8 weeks.¹ A study in Ontario confirmed that patients with a chronic condition wait longer for outpatient and community PT services than those with acute or subacute conditions, and more than 50% of patients waited longer than 4 weeks.² This is in contrast to an Irish study, in which 73% of patients with low back pain (LBP) waited less than 4 weeks for PT.³ Cook and colleagues⁴ found that the majority of people waiting for community-based PT services in Ontario had chronic musculoskeletal (MSK) conditions; in that province, wait times were significantly longer in the public than in the private sector.⁵

Regarding the frequency of treatment, a study among physiotherapists in Quebec using a clinical vignette methodology found that, on average, the typical overall treatment frequency was 2.39 times a week for a patient with acute LBP.⁶ No differences were found in treatment frequency between services occurring in the public and private sectors.

Some of the information available on total treatment duration in PT comes from injured workers compensated by workers' compensation boards (WCBs) or those insured by motor vehicle accident insurers. Arbitrary limits on the duration of PT treatments are set by provincial policies for WCBs;⁷ in Alberta, British Columbia, and the Northwest Territories, these limits are approximately 6 weeks, compared with 12 weeks in Ontario.⁸ In addition,

the study conducted in Quebec by Mikhail and colleagues⁶ showed that 51% of physiotherapists working in the public, private, and both sectors would engage in a 6- to 10-week treatment for a vignette patient with acute LBP.

No information was found in the literature regarding the time allotted for the initial evaluation. However, two studies provided some information on the average time per treatment. A New Zealand study conducted among sports physiotherapists working with patients diagnosed with non-specific LBP found that 44.1% of the therapists treated their patients for 20–30 minutes.⁹ In Quebec, the majority of physiotherapists (79%) would spend between 30 and 60 minutes with a hypothetical vignette patient.⁶

We found no information on the number of patients seen by a physiotherapist per day. However, a 2008 report on PT practices in Canada indicated that physiotherapists treated 25–49 patients per week in hospitals and 50–74 patients per week in community settings or clinics.¹⁰

Wait time, frequency and duration of treatment, time available for the initial evaluation and per treatment, and number of patients seen by physiotherapists per day are likely important parameters for understanding the effectiveness and efficiency of PT service delivery. However, little is known about these factors in clinical settings across Canada. Using these parameters, this study presents comparative data on how PT patients are served in the different Canadian provinces and territories.

The purpose of this study was to describe the current patterns of service delivered by Canadian PT professionals working in adult MSK outpatient practice to patients reporting LBP. The specific objectives were to (1) examine access (based on wait times) to PT, (2) describe how PT is provided (i.e., frequency and total duration of treatment, amount of time allotted to initial evaluation and treatment), (3) describe patient volumes (based on the number of patients seen per day), and (4) compare these parameters by clinical setting (i.e., private vs. public) and funding source (i.e., private, WCB, no insurance).

METHODS

Study design

This study is part of a larger research program investigating organizational issues and ethical challenges in PT care in Canada.^{11,12} A total of 846 PT professionals completed an online survey consisting of 1 clinical vignette (i.e., patient case scenario), out of 24 possible combinations, describing a fictional patient (male or female, 34 or 59 years old, senior manager or office clerk) with LBP and varying insurance status (private insurance, WCB,

no insurance). The associated questionnaire included questions about the participants' demographic information and about how PT services (wait time, frequency and duration of treatment) would be provided to the vignette patient if he or she were seen in the participant's professional practice setting. Study data were collected and managed using Research Electronic Data Capture (REDCap), a secure Web-based application designed to support data capture for research studies (REDCap Consortium, Vanderbilt University, Nashville, TN).¹³

Clinical vignettes have been shown to be an effective method of allowing researchers to assess PT clinical practices.¹⁴ We developed and validated the clinical vignette on the basis of the methodological frameworks of Flakerud and of Cazale and colleagues.^{15,16} Our vignette described a patient experiencing LBP that started 5 years ago and has worsened in the past few months after a fall. The vignette patient has been off work for the past 4 weeks and is now also experiencing pain radiating down the left buttock, left thigh, and left leg, causing significant discomfort. He or she was referred to PT for lumbar rehabilitation by a physician who suspected a disc protrusion at the L4–L5 level. The physician noted that the patient had hypoesthesia to pain and to touch in the L5 dermatome. The patient reported pain 3/10 in the lumbar region and 5/10 in the leg (on a visual–verbal analogue scale on which 0 indicates no pain and 10 indicates intolerable pain).

Participants were randomized to receive 1 of 24 versions of the clinical vignette in which the patient (1) was being compensated by the WCB, (2) had private insurance, or (3) had no insurance. In addition to being randomly assigned, the versions of the vignette were stratified according to the province or territory in which the participants worked to ensure similar distribution of vignettes in each province or territory.

Recruitment

PT professionals from each of the 10 Canadian provinces and 3 territories were solicited to participate in the study between July and November 2014. We recruited participants through invitations in newsletters or by emails sent by PT associations (provincial and federal) and professional licensing boards. The invitations described the project and included the link to the survey.

This study included participants who were Canadian PT professionals currently working full or part time with an adult MSK clientele. These professionals included both physiotherapists, who are trained at the university level (bachelor's or master's degree), and physical rehabilitation therapists, who are trained at the community college level (post-secondary diploma). Physical rehabilitation therapists are regulated health professionals working in Quebec; they were included because they treat MSK problems, are employed in both the private and the public sectors,¹⁷ and can make decisions about

parameters such as wait times and the frequency and duration of treatment.

Analysis

To address objectives 1–3, descriptive statistical analyses were carried out to highlight the corresponding frequencies and percentages. Chi-square analyses were conducted to answer objective 4. More specifically, separate χ^2 analyses were used to compare wait time, frequency and duration of treatment, time allotted for initial evaluation and treatment, and number of patients seen per day according to both clinical setting (private or public) and the vignette patient's funding source (private insurance, no insurance, WCB). Finally, to measure the strength of the association between, on one hand, wait times and duration of treatment and, on the other hand, average time per treatment and duration of treatment, Cramer's *V* statistic was calculated.¹⁸

All descriptive and inferential statistical analyses were carried out using SAS statistical software, version 9.3 (SAS Institute, Cary, NC). The Centre for Research in Rehabilitation of Greater Montreal Research Ethics Board approved our research project, and all study participants signed an electronic informed consent form (on the survey Web site) before beginning the study.

RESULTS

As of 2014, 20,842 physiotherapists and 2,473 physical rehabilitation therapists were licensed to practice in Canada, a total of 23,315 PT professionals.^{19,20} Of these, 39.8% of physiotherapists worked with MSK patients, resulting in a predicted respondent pool of 9,279. Of the 1,292 people who responded to the survey, 846 individuals were included for analysis (9.1% of the predicted respondent pool). We excluded respondents (446) if they answered only the first link (consent and inclusion criteria) and did not complete the questionnaire, if they did not meet the inclusion criteria, or if they were duplicates.

The breakdown of participants was as follows: 43.5% were from Quebec, 13.2% from Ontario, 14.3% from British Columbia, 20.5% from the Atlantic provinces (Prince Edward Island, Nova Scotia, New Brunswick, Newfoundland and Labrador), 8.0% from the Prairie provinces (Alberta, Manitoba, and Saskatchewan), and 0.5% from the northern territories (Yukon, Nunavut, and the Northwest Territories). Because of the low response rate for the territories, we did not include these participants in the inferential statistical analysis. The majority of participants were women (79.2%), and 51.2% were aged 36–55 years. Most (86.8%) were university-trained physiotherapists. More than half of the respondents (54.6%) worked in private clinics, and 30.1% worked in hospitals, 17.3% in home care services, and 11.2% in long-term care centres. Questions about workplace and field of practice were not restricted to only one choice because participants could have multiple employers.

Table 1 Wait Times, Frequency and Duration of Treatment, Time Allotted for Initial Evaluation, Average Time per Treatment Session, and Average Number of Patients Seen per Day, by Respondents' Province, Region, or Territory and for Canada Overall

Category and amount of time or no. of patients	No. (%) of respondents in each province, region, or territory						Total (Canada)
	QC*	ON†	BC‡	PEI, NS, NB, NL§	AB, MB, SK¶	YT, NT, NU**	
Wait time (<i>n</i> = 841)							
<2 wk	198 (54.4)	87 (77.7)	85 (70.3)	93 (54.1)	50 (73.5)	4 (100.0)	517 (61.5)
2–12 wk	90 (24.7)	15 (13.4)	16 (13.2)	58 (33.7)	14 (20.6)	0 (0.0)	193 (22.9)
>3 mo	40 (11.0)	3 (2.7)	10 (8.3)	17 (9.9)	1 (1.5)	0 (0.0)	71 (8.4)
Never seen	36 (9.9)	7 (6.3)	10 (8.3)	4 (2.3)	3 (4.4)	0 (0.0)	60 (7.1)
Frequency (<i>n</i> = 796)							
≤1 time/wk	77 (22.8)	17 (15.6)	31 (28.2)	27 (15.8)	8 (12.3)	1 (25.0)	161 (20.2)
2–3 times/wk	178 (52.8)	58 (53.2)	60 (54.5)	102 (59.6)	40 (61.5)	3 (75.0)	441 (55.4)
4–5 times/wk	58 (17.2)	26 (23.9)	12 (10.9)	31 (18.1)	12 (18.5)	0 (0.0)	139 (17.5)
Varies	24 (7.1)	8 (7.3)	7 (6.4)	11 (6.4)	5 (7.7)	0 (0.0)	55 (6.9)
Duration (<i>n</i> = 816)							
≤4 wk	54 (15.4)	19 (17.0)	27 (24.1)	21 (12.3)	9 (13.6)	0 (0.0)	130 (15.9)
1–3 mo	209 (59.5)	74 (66.1)	67 (59.8)	116 (67.8)	46 (69.7)	2 (50.0)	514 (63.0)
>3 mo	56 (16.0)	11 (9.8)	13 (11.6)	25 (14.6)	8 (12.1)	1 (25.0)	114 (14.0)
Varies	32 (9.1)	8 (7.1)	5 (4.5)	9 (5.3)	3 (4.5)	1 (25.0)	58 (7.1)
Time for initial evaluation (<i>n</i> = 822), min							
≤30	17 (4.8)	4 (3.6)	19 (16.7)	3 (1.7)	9 (13.8)	0 (0.0)	52 (6.3)
31–60	280 (78.7)	103 (92.8)	88 (77.2)	146 (84.9)	54 (83.1)	4 (100.0)	675 (82.1)
>60	59 (16.6)	4 (3.6)	7 (6.1)	23 (13.4)	2 (3.1)	0 (0.0)	95 (11.6)
Average time per treatment (<i>n</i> = 821), min							
≤30	116 (32.7)	68 (61.3)	63 (55.3)	95 (55.2)	44 (67.7)	3 (75.0)	389 (47.4)
31–60	226 (63.7)	42 (37.8)	50 (43.9)	76 (44.2)	20 (30.8)	1 (25.0)	415 (50.5)
>60	13 (3.7)	1 (0.9)	1 (0.9)	1 (0.6)	1 (1.5)	0 (0.0)	17 (2.1)
No. of patients seen per day (<i>n</i> = 845)							
0–5	99 (26.9)	17 (15.2)	20 (16.5)	29 (16.9)	5 (7.4)	1 (25.0)	171 (20.2)
6–10	131 (35.6)	37 (33.0)	36 (29.8)	44 (25.6)	18 (26.5)	1 (25.0)	267 (31.6)
11–15	115 (31.3)	34 (30.4)	47 (38.8)	69 (40.1)	26 (38.2)	2 (50.0)	293 (34.8)
≥16	23 (6.3)	24 (21.4)	18 (14.9)	30 (17.4)	19 (27.9)	0 (0.0)	114 (13.5)

Note: Percentages may not total 100 because of rounding.

*For wait time, *n* = 364; for frequency, *n* = 337; for duration, *n* = 351; for time for initial evaluation, *n* = 356; for average time per treatment, *n* = 355; and for no. of patients seen per day, *n* = 368.

†For wait time, *n* = 112; for frequency, *n* = 109; for duration, *n* = 112; for time for initial evaluation, *n* = 111; for average time per treatment, *n* = 111; and for no. of patients seen per day, *n* = 112.

‡For wait time, *n* = 121; for frequency, *n* = 110; for duration, *n* = 112; for time for initial evaluation, *n* = 114; for average time per treatment, *n* = 114; and for no. of patients seen per day, *n* = 121.

§For wait time, *n* = 172; for frequency, *n* = 171; for duration, *n* = 171; for time for initial evaluation, *n* = 172; for average time per treatment, *n* = 172; and for no. of patients seen per day, *n* = 172.

¶For wait time, *n* = 68; for frequency, *n* = 65; for duration, *n* = 66; for time for initial evaluation, *n* = 65; for average time per treatment, *n* = 65; and for no. of patients seen per day, *n* = 68.

**For wait time, frequency, duration, time for initial evaluation, average time per treatment, and no. of patients seen per day, *n* = 4.

Table 1 presents the wait times, frequency and duration of treatment, time allotted for the initial evaluation, average time per PT treatment session, and average number of patients seen per day for each province or region and for all of Canada. Overall, 61.5% of respondents reported that they would see the vignette patient within 2 weeks. At one end of the spectrum, the province of Quebec had the longest wait times, with the highest percentage of people waiting more than 3 months for their first appointment or never receiving an appointment (11.0% and 9.9%, respectively). Except for the territories (for which there were only 4 respondents, who all said that patients would be seen within 2 wk), Ontario had

the shortest wait times, with the highest percentage of patients seen within 2 weeks (77.7%).

Table 2 presents the wait times, frequency and duration of treatment, time allotted for the initial evaluation, average time per PT treatment session, and average number of patients seen per day by respondents' clinical setting and vignette patient's insurance coverage. When analyzed by clinical setting (public vs. private), 92.0% of respondents working in the private setting would see the vignette patient in less than 2 weeks and 5.7% in 2–4 weeks. By comparison, in the public setting, 25.4% would see the patient in less than 2 weeks, 23.1% in 2–4 weeks, 18.3% in 1–2 months, and 18.3% in more than 3 months.

Table 2 Wait Times, Frequency and Duration of Treatment, Time Allotted for Initial Evaluation, Average Time per Treatment Session, and Number of Patients Seen per Day by Respondents' Clinical Setting and Vignette Patient's Insurance Coverage

Category and amount of time or no. of patients	Respondents' clinical setting		Vignette patient's coverage		
	Private*	Public†	No insurance‡	Private insurance§	WCB¶
Wait time					
<2 wk	355 (92.0)	89 (25.4)	182 (61.5)	170 (61.6)	165 (61.3)
2–4 wk	22 (5.7)	81 (23.1)	51 (17.2)	34 (12.3)	30 (11.2)
1–2 mo	5 (1.3)	64 (18.3)	18 (6.1)	32 (11.6)	28 (10.4)
>3 mo	3 (0.8)	64 (18.3)	28 (9.5)	17 (6.2)	26 (9.7)
Never seen	1 (0.3)	52 (14.9)	17 (5.7)	23 (8.3)	20 (7.4)
Frequency					
≤1 time/wk	76 (19.7)	64 (20.4)	68 (24.1)	47 (18.0)	46 (18.2)
2–3 times/wk	204 (53.0)	190 (60.7)	167 (59.2)	153 (58.6)	121 (47.8)
4–5 times/wk	83 (21.6)	36 (11.5)	28 (9.9)	44 (16.9)	67 (26.5)
Varies	22 (5.7)	23 (7.3)	19 (6.7)	17 (6.5)	19 (7.5)
Duration					
≤4 wk	56 (14.6)	54 (16.4)	51 (17.4)	44 (16.6)	35 (13.6)
1–3 mo	260 (67.7)	189 (57.3)	184 (62.8)	162 (61.1)	168 (65.1)
>3 mo	47 (12.2)	60 (19.2)	41 (14.0)	34 (12.8)	39 (15.1)
Varies	21 (5.5)	27 (8.2)	17 (5.8)	25 (9.4)	16 (6.2)
Time for initial evaluation, min					
≤30	38 (9.8)	11 (3.3)	10 (3.4)	16 (6.0)	26 (9.9)
31–60	330 (85.5)	259 (77.3)	254 (86.7)	222 (83.5)	199 (75.7)
>60	18 (4.7)	65 (19.4)	29 (9.9)	28 (10.5)	38 (14.4)
Average time for treatment					
≤30	215 (55.7)	131 (39.3)	131 (44.6)	135 (50.8)	123 (47.1)
31–60	166 (43.0)	192 (57.7)	159 (54.1)	126 (47.4)	130 (49.8)
>60	5 (1.3)	10 (3.0)	4 (1.4)	5 (1.9)	8 (3.1)
Patients seen per day, no.					
0–5	20 (5.2)	130 (36.8)	N/A	N/A	N/A
6–10	103 (26.6)	125 (35.4)	N/A	N/A	N/A
11–15	183 (47.3)	78 (22.1)	N/A	N/A	N/A
≥16	81 (20.9)	20 (5.7)	N/A	N/A	N/A

Note: Percentages may not total 100 because of rounding.

*For wait time, $n = 386$; for frequency, $n = 385$; for duration, $n = 384$; for time for initial evaluation, $n = 386$; for average time per treatment, $n = 386$; and for no. of patients seen per day, $n = 387$.

†For wait time, $n = 350$; for frequency, $n = 313$; for duration, $n = 330$; for time for initial evaluation, $n = 335$; for average time per treatment, $n = 333$; and for no. of patients seen per day, $n = 353$.

‡For wait time, $n = 296$; for frequency, $n = 282$; for duration, $n = 293$; for time for initial evaluation, $n = 293$; for average time per treatment, $n = 294$; and for no. of patients seen per day, $n =$.

§For wait time, $n = 276$; for frequency, $n = 261$; for duration, $n = 265$; for time for initial evaluation, $n = 266$; and for average time per treatment, $n = 266$.

¶For wait time, $n = 269$; for frequency, $n = 253$; for duration, $n = 258$; for time for initial evaluation, $n = 263$; and for average time per treatment, $n = 261$.

N/A = not applicable.

Vignette patients were most commonly seen 2–3 times per week (53.0% in private settings, 60.7% in public settings), followed by once a week or less (19.7% in private settings, 20.4% in public settings) and 4–5 times a week (21.6% in private settings, 11.5% in public settings). The frequency of treatment specifically in private settings differed according to the vignette patient's insurance status; patients covered by WCB were more likely to be seen in private settings 4–5 times a week (35.4%) compared with vignette patients with another insurance status (private insurance, 19.0%; no insurance, 10.9%).

For the duration of treatment, 63.0% of respondents would see the vignette patient for a period of 1–3 months. Most commonly, the patient would be seen for 31–60 minutes during the initial evaluation. Just more

than half of the respondents would treat the patient for 31–60 minutes, with few seeing the patient for more than 60 minutes. The province of Quebec had the highest percentage of respondents who said that they would see the patient for more than 60 minutes during the initial evaluation (16.6%) and for treatment (3.7%).

For the sake of inferential statistics, only the relevant a priori identified groups (e.g., excluded responses or “never seen” and “frequency varies”) were included in the χ^2 analysis. A higher proportion of PTs working in the private sector reported shorter wait times than those working in the public sector (92.2% vs. 29.9%; $p < 0.0001$) and a higher frequency of treatment sessions per week (22.9% vs. 12.4% would treat the vignette patient 4–5 times/wk; $p = 0.002$). In terms of time allotted per

session, the proportion of patients initially evaluated for more than 60 minutes was higher in the public sector than in the private sector (19.4% vs. 4.6%; $p < 0.0001$), and the proportion treated for less than 30 minutes was, on average, lower in the public sector (39.3% vs. 55.7%; $p < 0.0001$). The proportion of participants treating more than 16 patients per day was almost 4 times higher in the private sector than in the public sector (20.9% vs. 5.7%; $p < 0.0001$). The most common number of patients seen in 1 day in Canada was 11–15 (34.8%), followed by 6–10 (31.6%; Table 1). Respondents from Quebec had the highest and lowest percentages at both extremes: 26.9% saw 0–5 patients per day, and 6.3% saw more than 16 patients a day.

When examining differences in practice according to the funding source of the vignette patient, we found that the proportion of patients treated at a higher frequency (4–5 times/wk) was greater among PT professionals treating WCB vignette patients than among those treating patients covered by private insurance or with no insurance (28.6% vs. 18.0% vs. 10.7%; $p < 0.0001$). The longest amount of time allotted for the initial evaluation (>60 min) was more frequently reported for WCB vignette patients than for those with private insurance or no insurance (14.5% vs. 10.5% vs. 9.9%; $p = 0.007$).

We found a moderate correlation (Cramer's $V = 0.32$) between wait time and duration of treatment, with longer wait times associated with longer duration. The correlation between average time per treatment and duration of treatment was strong (Cramer's $V = 0.47$), with longer treatments associated with longer durations.¹⁸

DISCUSSION

We observed that, in Canada, the most common pattern of care for delivering PT services to a patient with LBP involved seeing the patient within 2 weeks, 2–3 times a week, for 1–3 months. Initial evaluations and subsequent treatments most commonly took 31–60 minutes, and a third of the PT professionals who responded to the survey treated 11–15 patients a day. The province of Quebec stood out with the longest wait times. We also observed that the frequency of treatment in private settings for vignette patients covered by a WCB was more likely to be higher (4–5 times/wk) than that for vignette patients with another insurance status (private insurance or no insurance coverage). Our finding of shorter wait times in the private sector is in line with that of a 2004 Ontario study.⁵ Wait times were longer in the public sector, showing that individuals without insurance or those who are unable to afford private services have to wait much longer; this is worrisome because earlier receipt of PT services for LBP is associated with better outcomes.^{21,22}

Although we found no differences between public and private clinical settings for either frequency or duration of treatment, it is not possible to conclude what the ideal

service delivery parameters would be. The nature of a patient's condition needs to be taken into account because people with acute conditions might benefit from more frequent treatments over a shorter time period, whereas those with chronic conditions might benefit from less frequent treatments over a longer time period.²³ However, in a previous study, when two patient groups were treated either 20 times or 7 times after surgery (considered to be an acute condition), both groups had successful, and similar, outcomes.²⁴ Although a patient's needs should be the main factor guiding clinical decisions, financial incentives seem to have an influence on frequency and duration of treatment. In the United States, for example, post-surgical patients followed in a clinic in which their surgeon had a financial interest received twice as many treatments.²⁵

For an outpatient orthopaedic clientele, funding source was found to be an important factor during discharge planning.²⁶ A previous study conducted by our research group showed that giving priority to WCB patients in Quebec may hinder accessibility for others who require PT services because WCB patients are seen more quickly and more often than non-WCB patients (whether with private insurance or no insurance), and their treatment time was possibly also shorter.^{11,12}

Regarding the number of patients seen per day, our results are in line with the 2008 report on Canadian PT practices, which found that approximately one-third of respondents treated 25–49 patients per week in hospital and one-third treated 50–74 patients in community settings or clinics.¹⁰

The results of this study indicate that the Canadian population with LBP has unequal access to PT services and that service delivery differs by province, clinical setting (public vs. private), and source of funding (private, WCB, no insurance). The Prairie provinces had the lowest percentage of vignette patients with LBP waiting more than 3 months, and the Atlantic provinces had the lowest percentage of vignette patients not receiving PT services. At the opposite end of the spectrum, Quebec had the longest wait times, with the highest percentage of vignette patients waiting more than 3 months and the highest percentage of vignette patients never receiving services at all. Quebec also had the highest percentage of vignette patients seen for more than 60 minutes during the initial evaluation and for treatments. Thus, according to the vignette scenarios, patients from Quebec would wait the longest to see a physiotherapist, but when they did, they would also receive the longest evaluation and treatment sessions.

Further research is needed to clarify contributing factors and the sources of these differences in access and service delivery. This research could inform policymakers regarding the development of more efficient policies for PT access and service delivery. Considering that the aging population will place increasing pressure on the

Canadian health care system, making PT services more accessible and efficient will help decrease this burden.^{27,28}

Our study had several limitations. The responses obtained were based on a vignette (case study of a patient with LBP) that provided a standard case for all respondents but did not report on actual practices; thus, the responses may not be an accurate representation of the situation in Canada. Another limitation was that although LBP is a common condition seen in PT (an Australian study estimated that it accounted for 25%–45% of physiotherapists' caseloads),²⁹ it is not necessarily representative of the overall MSK PT practice in Canada.

A final limitation was the under-representation of some provinces and regions (e.g., Ontario and the Prairie provinces) and the over-representation of others (e.g., Quebec and the Atlantic provinces) compared with the actual percentage of PT professionals by province: Quebec (21.4%), Ontario (37.5%), British Columbia (15.8%), Atlantic provinces (6.7%), Prairie provinces (18.5%), and territories (0.2%).¹⁹ Recruitment methods in each province were similar, but outside factors could explain some of the discrepancies in the response rate; for example, competing studies advertised in the same newsletters; actual placement of the advertisement; and, possibly, greater interest in the topic from licensing boards, associations, and participants in certain provinces.

CONCLUSION

This study sheds light on the accessibility and service provision of outpatient MSK PT services in Canada and identifies potential areas for improvement. It provides an overview of outpatient MSK PT services for a typical vignette LBP patient across Canada, including wait times, frequency and duration of treatment, time allotted for evaluation and treatment, and number of patients seen per day. Provincial and national studies are necessary to better situate the results within provincial policies, the public health care system, and socio-historical contexts. Hence, further research is needed: lessons could be learned from provinces that are performing better, and possible solutions could be considered for low-performing provinces.

KEY MESSAGES

What is already known on this topic

Nearly 40% of Canadian physiotherapists work with MSK patients, yet data on current patterns of service delivery for those working in an adult MSK outpatient setting are scarce.

What this study adds

Data are now available regarding wait times, frequency and duration of treatment, time allotted for initial evaluation and treatment, and number of patients seen per day for outpatient MSK PT services for a typical LBP patient across Canada. On the basis of responses to a vignette, the Prairie provinces had the lowest percentage of patients

waiting more than 3 months, the Atlantic provinces had the lowest percentage of patients not receiving services in PT, and Quebec had the highest percentage of patients waiting more than 3 months or never seen at all.

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