



TELEREHABILITATION IN PHYSIOTHERAPY DURING THE COVID-19 PANDEMIC

SURVEY REPORT

August 19, 2020

365 members participated in the OPA telerehabilitation survey which ran for three weeks starting April 27, 2020. The purpose of the survey was to capture the experience of physiotherapists implementing telerehabilitation during the COVID-19 pandemic with a focus on activities immediately following the Ontario Government order to limit in-person services to “emergency care” only within the community.

This backgrounder has been prepared for the physiotherapy stakeholder community to share key findings of the survey data in order to further the dialogue on the implications of telerehabilitation on the physiotherapy profession, and the delivery of services and patients’ access to care. It is also important to acknowledge that this survey data reflects experiences with telerehabilitation within the physiotherapy profession during a specific context that was characterized with rapid and widespread implementation, as a way to ensure continuity of care and business continuity during the COVID-19 pandemic. These findings reflect a starting point of conversation among stakeholders on the role of telerehabilitation as a component to service delivery over the long term.

WHAT IS TELEREHABILITATION?

Telerehabilitation, also known as virtual care, is the delivery of professional rehabilitation services such as the services of a physiotherapist and/or physiotherapist assistant, at a distance, using telecommunications technology as the service delivery medium. Tele-rehabilitation relates to all aspects of patient care including the patient interview, physical assessment and diagnosis, treatment, maintenance activities, consultation, education, and training. It can include the use of media such as videoconferencing, email, apps, web-based communication, and wearable technology¹.

¹ College of Physiotherapists of Ontario. (n/a). Virtual practice: expectations regarding tele-rehabilitation (virtual practice) based on existing College of Physiotherapists of Ontario standards and rules. <https://www.collegept.org/registrants/virtual-practice-in-physiotherapy>



THE ROLE AND IMPACT OF TELEREHABILITATION

Key learnings about the successes and challenges physiotherapists experienced with implementing telerehabilitation have been outlined, along with the implications this has on the profession moving forward and key considerations that should be considered among stakeholders. Beyond the survey findings, research has shown that telerehabilitation has various clinical benefits, and cost- and time- saving system benefits. These include: reducing hospitalization rates and preventing readmission, supporting early discharge from rehabilitation units, supporting immediate access to outpatient rehabilitation services, reducing waitlists, increasing care efficiency while containing costs, maintaining continuity of care, improving health outcomes and quality of life, supporting early return to work, reducing unnecessary travel for patients to receive in-person care, and high patient satisfaction and compliance^{2,3,4,5}.

It is important for the stakeholder community to engage in dialogue on the role telerehabilitation has in an evolving health care system, along with key enablers to prepare the physiotherapy profession for these changes in options for service delivery.

WHO RESPONDED?

Physiotherapists from various **practice settings** implemented telerehabilitation during this time. A large majority of respondents either owned or worked in a private practice setting (79%), followed by those who worked in an acute care hospital or outpatient clinic (7%) and in homecare (5%). The remaining respondents worked in rehabilitation hospitals, primary health care organizations, and in long-term care.

Physiotherapists from various **practice areas** implemented telerehabilitation. The most prominent practice areas where patients were seen virtually were in orthopaedics (83%) and musculoskeletal (78%), followed by sports injuries (34%), joint replacement (29%), neuro (stroke, mTBI/concussion, brain injury) (19%), and geriatrics (seniors' health) (17%).

² Turolla, A., Rossetini, G., Viceconti, A., Palese, A., & Geri, T. (2020). Musculoskeletal physical therapy during the COVID-19 pandemic: is telerehabilitation the answer? *Physical therapy*, 100(8): 1260-1264. doi: 10.1093/ptj/pzaa093.

³ Sahu, D. & Rathod, V. (2020). Telerehabilitation during COVID 19: shoulder rehabilitation. *Journal of Shoulder and Elbow Surgery*, doi: <https://doi.org/10.1016/j.jse.2020.07.001>.

⁴ Scherrenberg, M., Wilhelm, M., Hansen, D., Völler, H., Cornelissen, V., Frederix, I., ... & Dendale, P. (2020). The future is now: a call for action for cardiac telerehabilitation in the COVID-19 pandemic from the secondary prevention and rehabilitation section of the European Association of Preventive Cardiology. *European Journal of Preventive Cardiology*, 0(0): 1-21. Doi: <https://doi.org/10.1177/2047487320939671>

⁵ Salawu, A., Green, A., Crooks, M. G., Brixey, N., Ross, D. H., & Sivan, M. (2020). A proposal for multidisciplinary tele-rehabilitation in the assessment and rehabilitation of COVID-19 survivors. *International Journal of Environmental Research and Public Health*, 17(13), 4890. doi: 10.3390/ijerph17134890



The remaining respondents practiced in pelvic health, pediatrics, cardio-respiratory, oncology, and spinal cord injury.

SHIFT IN PRACTICE DURING AND BEYOND THE PANDEMIC IN ONTARIO

COVID-19 led to a substantial shift in practice, as many physiotherapists transitioned from delivering either all, or a portion of their services from in-person to telerehabilitation. The majority of survey respondents did not provide telerehabilitation services prior to the pandemic (94%) and either began or intended to start providing virtual care in the upcoming two weeks from the date they completed the survey (94%).

The survey was conducted prior to the changes in public health directives in late May that allowed for a gradual return to in-person care. Even so, there was significant interest in continuing to provide telerehabilitation even after in-person services would resume with 64% indicating they will continue to offer telerehabilitation and 32% saying they may continue to do so. This suggests that telerehabilitation may be here to stay as part of how physiotherapy services are delivered, at least in some areas, beyond the pandemic.

SUCCESSSES WITH TELEREHABILITATION

When respondents were asked an open-ended qualitative question, they identified many successes they experienced with implementing telerehabilitation (348 respondents), which included:

- High patient satisfaction
- Good patient progress and treatment outcomes
- Greater emphasis on education, exercise, and teaching self-management techniques
- Greater patient compliance, responsibility and engagement to their treatment program and a more collaborative approach between the patient and physiotherapist during the rehabilitative process
- Greater access to care to overcome issues with geography or transportation
- Ensuring continuity of care and no treatment interruption during the pandemic
- Greater assessment and accommodation of the home environment



TELEREHABILITATION CHALLENGES

When respondents were asked an open-ended qualitative question, they identified the challenges they experienced with implementing telerehabilitation (353 respondents), which included:

- Technology issues
- Challenges in acceptance by patients to convert from in-person to telerehabilitation and perception of value of telerehabilitation
- Need for manual or hands-on care for some conditions/patients
- Difficulty ensuring that third-party insurers and extended health benefit payors would cover telerehabilitation services
- Increased time needed to deliver services due to technological interruptions or issues, and comprehension and sensory issues among patients
- Concerns with elderly population (e.g. access to and competence with technology, comprehension and sensory issues, needing in-home visits for hands-on assessment, risk of falls)

ALIGNING PATIENT DEMAND AND PHYSIOTHERAPIST INTEREST WITH TELEREHABILITATION

Telerehabilitation is not simply a matter of moving to a new platform; it requires a cultural transformation in how physiotherapists and the public view physiotherapy – a profession traditionally viewed as being hands-on and physical. Respondents were asked about their patients' most common response when they offered to initiate or continue physiotherapy through telerehabilitation. 21% of respondents indicated that their patients initially hesitated but embraced telerehabilitation after they explained why it would be a good fit for them; 8% of respondents indicated that their patients embraced telerehabilitation and felt that it was as effective as receiving physiotherapy in-person. Many respondents also indicated that their patients declined or hesitated, mainly due to concerns about their perceptions of the effectiveness of telerehabilitation compared to receiving physiotherapy in person (25%) or due to preferring in-person services (27%). Patients level of competence or trust with technology (4%), or believing they were not a good fit for telerehabilitation due to their health condition (less than 1%) had a negligible impact.

As noted in the responses, public perception of telerehabilitation is another key consideration that would impact implementation among the profession, especially perception of effectiveness. Research has been done on the effectiveness of telerehabilitation for specific populations, however, this is beyond the scope of this particular report. Shifting public acceptance of telerehabilitation will require education on evidence supporting the effectiveness of services delivered for which conditions through these mediums.



Considering that there is substantial interest to continue delivering telerehabilitation (and in the current environment, the recommendation from health officials to continue to do so over the short and medium term), whether that involves a hybrid model of care or not, the demand among the public must also increase to successfully integrate telerehabilitation as a sustainable, long-term delivery option for patients and physiotherapists.

INCREASING ACCESS TO CARE THROUGH GREATER FINANCIAL COVERAGE FOR TELEREHABILITATION

When asked a qualitative question about the challenges respondents experienced with implementing telerehabilitation, they indicated that not all payors accepted the shift to virtual care and some reported difficulty in ensuring that some (e.g. auto insurance and extended health benefit payors) would cover physiotherapy services provided virtually.

In general, telerehabilitation has helped to address some of the inequalities in access to physiotherapy across Ontario primarily for those who live in rural or remote areas⁶. The Ontario government has identified the integration of virtual care into the Ontario health care system as a long-term priority in order to minimize geographic and socio-demographic barriers to accessing care. External payors and extended health benefit insurers can support this transition by making changes to their policies to allow submitted claims for physiotherapy visits delivered virtually to be paid as they would for in person visits. In turn, this would support increased options for patients to access care in a variety of ways that meets their needs.

SUPPORTING PHYSIOTHERAPISTS TO DELIVER HIGH QUALITY CARE THROUGH TELEREHABILITATION

One of the challenges that respondents had with telerehabilitation was that they felt disadvantaged in providing the level of care they are familiar with by being unable to do hands-on, manual assessment or treatments, or that it was not as effective as providing hands-on, manual therapy. This may indicate that telerehabilitation may be more appropriate for certain practice areas or diagnoses, and/or that physiotherapists have varying levels of comfort with implementing physiotherapy programs virtually that doesn't allow for the application of hands-on assessment and treatment approaches.

It is important to ensure that physiotherapists are equipped with the training, tools and knowledge needed to provide an equivalent quality of care that meets Practice Standards outlined by the College.

⁶ Rehabilitative Care Alliance. (2020, May 13). Tele-rehab: a sharing of approaches and processes. <http://rehabcarealliance.ca/webinars>



DIGITAL HEALTH LITERACY

The findings also indicated that some respondents had difficulty implementing telerehabilitation with patients, particularly with using video conferencing platforms with elderly patients. Considering that Ontario has a growing aging population, digital health literacy among the elderly (and general public) is an important consideration that would impact the effectiveness of implementing telerehabilitation, including the supports and resources needed to equip patients to have a successful experience with telerehabilitation.

CONCLUSION

In the context of the COVID-19 pandemic, the Ontario government has recommended that health care providers continue to implement virtual care where appropriate. Beyond the current context, integration of virtual care within health system transformation remains a long-term priority of the Ontario government. Ontario Health Teams (OHTs) are required to greatly expand access to patients to virtual care⁷. This is also evident in changing program criteria in publicly funded government programs, such as Bundled Care and the Episode of Care program, which now allow for the delivery of services through virtual means^{8,9}.

It is important to examine the considerations required to prepare the profession (including academic programs) for the future state of the Ontario health care system. It is likely that the profession will shift toward a hybrid model of care, with components of physiotherapy assessment and intervention being done in-person and virtually where appropriate.

The findings from this survey indicate that there is substantial interest among the physiotherapy profession to continue the delivery of telerehabilitation or a hybrid model of care, that includes a combination of care delivered in-person and virtually where appropriate. Considering that integration of virtual care within health system transformation remains a long-term priority of the Ontario government, it is important to prepare the profession for the future state of the Ontario health care system.

Moving forward, there is potential to explore further the implementation of telerehabilitation during health system transformation. Dialogue among stakeholders on the role and implications of telerehabilitation, along with the considerations required to ensure successful implementation, are needed to ensure that telerehabilitation is integrated in the health care system to the benefit of patients, providers, and the system as whole.

⁷ Ontario government. (2019). A health Ontario: building a sustainable health care system: 2nd report from the Premier's Council on improving healthcare and ending hallway medicine. https://www.ontario.ca/document/healthy-ontario-building-sustainable-health-care-system?_ga=2.258411785.288094631.1591807986-2097745704.1591807986

⁸ Ministry of Health (2020, June). Bundled Care FAQs: supplemental: Bundled Care during COVID-19. Ontario government. https://quorum.hqontario.ca/Portals/0/Users/211/63/10963/FAQs%20-%20Bundled%20Care%20and%20COVID-19_2020_06_04_FINAL.pdf?ver=2020-06-05-141430-727

⁹ Health Services Branch, Ministry of Health (2020, May 6). Revision to "2020-2022 funding agreement notice & COVID-19" memo of April 14, 2020, addressed to Community Physiotherapy Clinic Program recipients.