

The Business Case for Publicly funded physiotherapy services as a component of optimal care for PLWHIV

The Challenge

HIV is now considered to be a chronic health condition, and is often complicated by multiple comorbidities, ageing, and the effects of medication.

More than 30% of people living with HIV (PLWHIV) in Ontario are also living with at least one other physical condition.¹

When people living with chronic health conditions, including HIV, look to access rehabilitation services, they may not have the capacity to pay out-of-pocket for private services.

- Poor health is a predictor of decreased income resulting partly from decreased labour force participation and cost of medical and ancillary services²
- Each province has the agency to determine how much out-patient physiotherapy is publicly-funded; at this time, most provinces have either delisted the service or provide physiotherapy in limited circumstances

Definitions

Cost-effectiveness:

Measured by comparing the expected cost or cost savings to the expected gains in quality of life brought about through physiotherapy intervention

Quality Adjusted Life Years (QALY):

Generic measure of disease burden involving both quality and duration of life

Cost-utility:

Cost per QALY gained through physiotherapy intervention

The Solution

Physiotherapy is an important component of overall care to assist people living with chronic health conditions manage their symptoms, functional impairments and overall health³

Improved access to publicly-funded community-based physiotherapy services would be beneficial for PLWHIV and their communities at large.

Physiotherapy for PLWHIV is cost-effective from both a health payer and societal perspective.

Additionally, as physiotherapy can decrease pain, improve endurance, and have an overall positive impact on quality of life for PLWHIV, this change could improve participation in community including work, volunteer pursuits, hobbies and social activities.

1 - Kendall, C., Wong, J., Taljaard, M., Glazier, R., Hogg, W., Younger, J., & Manuel, D. (2014). A cross-sectional, population-based study measuring comorbidity among people living with HIV in Ontario. BMC Public Health, 14(1). <http://dx.doi.org/10.1186/1471-2458-14-161>

2 - Conference Board of Canada. (2013). Health Matters: An Economic Perspective. Accessed from <http://www.conferenceboard.ca/e-library/abstract.aspx?did=5309>

3 - Canadian Physiotherapy Association, (2012). Chronic Disease. Ottawa. Retrieved from https://physiotherapy.ca/sites/default/files/valuePT/cpa_valuept_chronicdisease-en.pdf

The Data

The overall cost-utility of publicly-funding physiotherapy was assessed using estimated costs associated with onset, and exacerbation of comorbidities among PLWHIV in Ontario, and cost models for community-based physiotherapy.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Intensity of PT services funded	Low intensity	High intensity	Low intensity	High intensity
Costs taken into account	Health system	Health system	Health system & job loss	Health system & job loss
Outcome	Cost-effective	Cost-effective	Cost-saving	Cost-effective
Cost Utility (negative cost represents savings)	\$1,097	\$6,561	-\$3,935	\$1,528

Four key scenarios were developed and compared to a base case in which no publicly-funded physiotherapy services were offered

Health system costs

Cost-savings was found in one of the four scenarios (#3) in which publicly-funded physiotherapy treatment was implemented.

- In two of the remaining scenarios (#1,2), when only health system costs were considered, the cost per QALY gained ranged from \$1,097 to \$6,561.
- In the final scenario (#4) which took into consideration both health system costs and potential job loss from HIV or NCDs, and where high intensity physiotherapy was proposed for PLWHIV, the cost per QALY gained was \$1,528.
- All three of these cases are still considered cost-effective by any conventional willingness to pay threshold.

When looking over the entire projected lifespan of PLWHIV, PT is estimated to add 1.6 additional QALYs through prevention or delay of certain NCDs and improved survival.

Cost savings and QALY gains resulted from downstream cost savings due to prevention of chronic condition onset, prevention of adverse events, and mitigation of health system usage following an adverse event.

Publicly funded physiotherapy services as a component of optimal care for PLWHIV is cost-effective, results in meaningful QALY gains, and is beneficial to the individual, the community, and under the right circumstances, government payers.