

Health Quality Ontario

Let's make our health system healthier

Structured Education and Neuromuscular Exercise Program for Hip and/or Knee Osteoarthritis: Health Quality Ontario Recommendation

FINAL RECOMMENDATION

- Health Quality Ontario, under the guidance of the Ontario Health Technology Advisory Committee, recommends publicly funding a structured education and neuromuscular exercise program for the management of people with osteoarthritis of the hip and/or knee

RATIONALE FOR THE RECOMMENDATION

The Ontario Health Technology Advisory Committee has reviewed the findings of the health technology assessment¹ and concluded that a structured education and neuromuscular exercise program provides clinical benefit in the management of hip and/or knee osteoarthritis and is consistent with patient values and preferences. The Ontario Health Technology Advisory Committee supported data collection and outcome monitoring as an integral part of the program.

Although a group-based structured education and neuromuscular exercise program would increase costs to Ontario's health system, the Ontario Health Technology Advisory Committee agreed that such a program would likely represent good value for money.

Decision Determinants for a Structured Education and Neuromuscular Exercise Program for Hip and/or Knee Osteoarthritis

Decision Criteria	Subcriteria	Decision Determinants Considerations
Overall clinical benefit How likely is the health technology/intervention to result in high, moderate, or low overall benefit?	Effectiveness How effective is the health technology/intervention likely to be (taking into account any variability)?	Overall, a structured education and neuromuscular exercise program was found to be more effective than usual care for improving physical function, quality of life, and the ability to perform activities of daily living.
	Safety How safe is the health technology/intervention likely to be?	No significant difference in serious adverse events and non-serious adverse events were reported for people with knee osteoarthritis randomized to a structured education and neuromuscular exercise program versus usual care.
	Burden of illness What is the likely size of the burden of illness pertaining to this health technology/intervention?	As of 2009, in Canada, the prevalence of knee osteoarthritis was 29%, and the prevalence of hip osteoarthritis was 12%.
	Need How large is the need for this health technology/intervention?	Publicly funded physiotherapy is available in Ontario, though access is limited and wait times can be long.
Consistency with expected societal and ethical values^a How likely is adoption of the health technology/intervention to be congruent with societal and ethical values?	Societal values How likely is adoption of the health technology/intervention to be congruent with expected societal values?	Expected to be congruent with societal values. People with osteoarthritis of the hip and/or knee interviewed reported that they viewed the GLA:D Canada program to be consistent with their efforts to manage symptoms through exercise.
	Ethical values How likely is adoption of the health technology/intervention to be congruent with expected ethical values?	Expected to be congruent with ethical values.
Value for money How efficient is the health technology/intervention likely to be?	Economic evaluation How efficient is the health technology/intervention likely to be?	Compared with usual care, a group-based structured education and neuromuscular exercise program consisting of two educational sessions and 24 exercise sessions is associated with an incremental cost of \$719 and an incremental 0.03 QALYs for people with knee osteoarthritis, resulting in an incremental cost-effectiveness ratio of \$23,967 per QALY gained. Therefore, a group-based structured education and neuromuscular exercise program seems to be cost-effective.
Feasibility of adoption into health system How feasible is it to adopt the health technology/intervention into the Ontario health care system?	Economic feasibility How economically feasible is the health technology/intervention?	We estimated that public funding for this type of program in Ontario might cost about \$21 million in the first year and \$92 million in the fifth year, depending on uptake. If the program could be delivered with 12 exercise sessions, the cost might be reduced to \$12 million in the first year and \$53 million in the fifth year, again depending on uptake.
	Organizational feasibility How organizationally feasible is it to implement the health technology/intervention?	The GLA:D Canada group-based structured education and neuromuscular exercise program is already offered at private clinics in Ontario, and clinicians have been trained to deliver this program to people with osteoarthritis of the hip and/or knee.

Abbreviations: GLA:D Canada, Good Life with osteoarthritis in Denmark–Canada; QALY, quality-adjusted life-year.

^aThe anticipated or assumed common ethical and societal values held in regard to the target condition, target population, and/or treatment options. Unless there is evidence from scientific sources to corroborate the true nature of the ethical and societal values, the expected values are considered.

REFERENCE

- (1) Health Quality Ontario. Structured education and neuromuscular exercise program for hip and/or knee osteoarthritis: a health technology assessment. Ont Health Technol Assess Ser [Internet]. 2018 Nov;18(8):1–110. Available from: <http://www.hqontario.ca/evidence-to-improve-care/journal-ontario-health-technology-assessment-series>

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