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

DRAFT 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 persons 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 assessment\(^1\) 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 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.

Public Comment: TBA.
### Decision Determinants for a Structured Education and Neuromuscular Exercise Program for Hip and/or Knee Osteoarthritis

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<th>Decision Criteria</th>
<th>Subcriteria</th>
<th>Decision Determinants Considerations</th>
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<tr>
<td>Overall clinical benefit</td>
<td>Effectiveness</td>
<td>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.</td>
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<td>Safety</td>
<td>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.</td>
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<td>Burden of illness</td>
<td>As of 2009 in Canada, the prevalence of knee osteoarthritis was 29%, and the prevalence of hip osteoarthritis was 12%.</td>
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<td>Need</td>
<td>Publicly funded physiotherapy is available in Ontario, though access is limited and wait times can be long.</td>
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<td>Consistency with expected societal and ethical values</td>
<td>Societal values</td>
<td>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.</td>
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<tr>
<td></td>
<td>Ethical values</td>
<td>Expected to be congruent with ethical values.</td>
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<td>Value for money</td>
<td>Economic evaluation</td>
<td>Compared with usual care, a structured education and neuromuscular exercise program consisting of 2 educational sessions and 24 exercise sessions is associated with an incremental cost of $719 and an incremental 0.03 quality-adjusted life-years (QALYs) for people with knee osteoarthritis, resulting in an incremental cost-effectiveness ratio of $23,967 per QALY gained. Therefore, a structured education and neuromuscular exercise program seems to be cost-effective.</td>
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<td>Feasibility of adoption into health system</td>
<td>Economic feasibility</td>
<td>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.</td>
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<td>Organizational feasibility</td>
<td>The GLA:D Canada structured education and neuromuscular exercise program is already offered at private clinics in Ontario and there are clinicians trained in delivering this program to persons with osteoarthritis of the knee and hip.</td>
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**Note:** The 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) TBA

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