



Rehabilitative Care: An Essential Component of Connected Care

Rehabilitation is an essential component of Ontario's vision for connected care.

For patients, rehabilitation can improve health outcomes, reduce disability and help individuals remain independent and in their homes well into their older years.

For providers, rehabilitation can reduce costs, improve efficiency and reduce hallway health care by shortening length of stay, reducing readmissions and emergency department visits and helping patients flow through the system.

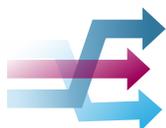
Rehabilitative care...



... **is an essential element of client-centered, integrated care.** People may require rehabilitative care as a result of illness, injury, disability, chronic disease or aging. This can include a broad range of interventions that help to restore and maximize functional and cognitive abilities. Rehabilitation professionals develop comprehensive, goal-directed plans with patients and families that assess and address all aspects of a person's needs, including their physical, cognitive and psychosocial needs.



... **is provided in settings across the continuum of care.** Physiotherapists, occupational therapists and other rehab professionals are located in primary care (Family Health Teams, Community Health Centres), the community (schools, ambulatory care, home care), hospitals (acute and post-acute) and long-term care. Rehab professionals are key members of interprofessional teams and rehabilitative care is integral to bundled care for many populations.



... **contributes to seamless transitions and supports successful return to community settings.** Rehab plans assess function and what individuals require to transition to the next level of care. This may include rehabilitation, prescription of assistive devices and exercise programs, skills re-training for activities of daily living, modifications to the home environment, psychosocial counseling and caregiver support. Rehabilitation helps individuals adjust to new functional levels or complex conditions, working with them to adapt skills and reintegrate into the community.

How rehab contributes to the quadruple aim

Primary Care/ Prevention

- **Keeping older adults healthy:** Rehab lowers the risk of falls, reduces ER visits and hospital admissions, helps people deal with limitations in functioning and supports independence.^{1,2,3}
- **Reducing opioid use:** Patients with low back pain who saw a physiotherapist were 89% less likely to have an opioid prescription.⁴
- **Supporting self-management of chronic conditions:** Rehabilitation helps to decrease symptoms and improve daily functioning for people living with COPD, cancer and other chronic conditions.^{5,6}

Acute Care/ Rehab/ Complex Continuing Care

- **Reducing length of stay:** Early mobilization in acute care through rehabilitation reduces length of stay. For example, rehabilitation after hip fracture can reduce LOS by 10 days.⁷
- **Avoiding acute care admissions:** The RCA's [Direct Access Priority Process](#) (DAPP) facilitates referrals to inpatient rehabilitation directly from the community or emergency department.
- **Improving function:** Rehabilitation helps patients with hip fracture, stroke and other conditions to return to day-to-day functioning and improves their quality of life.^{8,9,10,11,12}
- **Reducing mortality:** Cardiac rehab can reduce patient mortality by 50%.¹³
- **Reducing costs:** Rehabilitation has been shown to reduce costs, shorten the length of hospital stays, increase people's independence so they are less reliant on home care services and reduce hospital readmissions.
14,15,16,17,18,19,20,21

Home Care/ Community Support

- **Reducing readmissions:** Rehab plays an important role in reducing hospital admissions/readmissions among people with COPD, CHF and other chronic conditions.^{22,23}
- **Helping older adults stay at home:** Rehab provides older adults with cognitive or physical impairment with strategies to help them remain independent, safe and in place.^{24,25}
- **Improving quality of life for children and their families:** Childhood disability is on the rise. Rehab enables children and youth to learn and develop life skills, be creative and interact with their environment/community.^{26,27}

More information on how rehabilitative care improves outcomes can be found in the RCA's [Patient and System-Level Benefits of Rehabilitative Care: A primer to support planning by OHTs and Ontario Health](#).

What this means for Ontario Health Teams

1

Ensure rehabilitative care providers are at your planning table

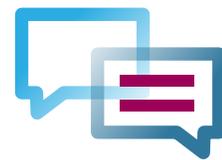
Engage rehabilitative care providers from a variety of sectors in planning your services.



2

Solicit input from patients/clients who have received rehabilitative care

As you engage patients and families in developing and evaluating your services and care delivery, include those who have received rehabilitation services. Find out what they found most helpful.



3

Identify all the services in your continuum where rehabilitative care should be integrated

There is strong evidence in many populations that rehabilitative care plays an important role in improving patient outcomes and maintaining population health. When mapping out patient pathways, identify who benefits from rehabilitation and the ideal timing. Rehabilitation should be an integral part of services provided by your Ontario Health Team.



Rehabilitation will contribute to a better patient and caregiver experience, better health outcomes, better value and a better provider experience.

References

- 1 Gillespie, L. D., Robertson, M. C., Gillespie, W. J., Sherrington, C., Gates, S., Clemson, L. M., & Lamb, S. E. (2012). Interventions for preventing falls in older people living in the community. *Cochrane Database of Systematic Reviews*.
- 2 Canadian Institute for Health Information. (2019). Retrieved from <https://www.cihi.ca/en/injuries-among-seniors>
- 3 Knapp, M., Lemmi, V. & Romeo, R. (2013). Dementia care costs and outcomes: A systematic review. *International Journal of Geriatric Psychiatry*, 28, 551-561.
- 4 Frogner, B. K., Harwood, K., Andrilla, H. A., Schwartz, M. & Pines, J. M. (2018). Physical therapy as the first point of care to treat low back pain: An instrumental variables approach to estimate impact on opioid prescription, health care utilization, and costs. *Health Services Research*.
- 5 Agency for Clinical Innovation. (2017). Rehabilitation for chronic conditions working group – Rehabilitation for chronic conditions framework. Retrieved from https://www.aci.health.nsw.gov.au/___data/assets/pdf_file/0006/385998/ACI_Rehabilitation_for_-chronic_conditions_framework_FINAL.PDF
- 6 Canadian Physiotherapy Association. (2012). The value of physiotherapy – Chronic conditions. Retrieved from https://physiotherapy.ca/sites/default/files/valuePT/cpa_valuept_chronicdisease-en.pdf
- 7 Kimmel, L. A., Liew, S. M., Sayer, J. M. & Holland, A. E. (2016). HIP4Hips (High intensity physiotherapy for hip fractures in the acute hospital setting): A randomised controlled trial. *Medical Journal of Australia*. 205(2), 73-78.
- 8 Burge, E., Monnin, D., Berchtold, A. & Allet, L. (2016). Cost-effectiveness of physical therapy only and of usual care for various health conditions: Systematic review. *Physical Therapy*, 96(6), 774-786.
- 9 Ostrow, P., Parente, R., Ottenbacher, K. & Bonder, B. (1989). Functional outcomes and rehabilitation: An acute care field study. *Journal of Rehabilitation Research and Development*, 26(3), 17-26.
- 10 Steultjens E. M., Dekker J., Bouter L. M., van de Nes, J. C., Cup, E. H., & van den Ende, C. H. (2003). Occupational therapy for stroke patients: A systematic review. *Stroke* 34(3), 676-686.
- 11 Steultjens, E., Dekker, J., Bouter, L., Van Schaardenburg, D., Van Kuyk, M. & Van Den Ende, C. (2004). Occupational therapy for rheumatoid arthritis. *Cochrane Database of Systematic Reviews*.
- 12 MOVE Canada. (2019). Mobilization of Vulnerable Elders in Ontario Project. <https://www.movescanada.ca/mobilization/>
- 13 Retrieved from <https://www.corhealthontario.ca/Rehabilitation-by-the-Numbers.pdf>
- 14 Heart and Stroke Foundation Canada. (2018) Canadian stroke best practice recommendations – Stroke rehabilitation. 5th edition, 2016 update. Retrieved from <https://www.strokebestpractices.ca/recommendations/stroke-rehabilitation/delivery-of-inpatient-stroke-rehabilitation>
- 15 Knapp, et al.
- 16 World Health Organization. (2011) World Report on Disability, Chapter 4, Rehabilitation. https://www.who.int/disabilities/world_report/2011/chapter4.pdf?ua=1
- 17 Kimmel, et al.
- 18 MOVE Canada. (2019).
- 19 Lewin, G.F., Alfonso, H. S., & Alan, J. J. (2013). Evidence for the long term cost effectiveness of home care reablement programs. *Clinical Interventions in Aging*, 8, 1273-1281. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3794867/>
- 20 Tinetti, M., Charpentier, P., Gottschalk, M. & Baker, D. (2012). Effect of a restorative model of posthospital home care on hospital readmissions. *Journal of the American Geriatric Society* 60(8), 1521-1526.
- 21 Rogers, A. T., Bai, G., Lavin, R. A., & Anderson, G. F. (2016). Higher hospital spending on occupational therapy is associated with lower readmission rates. *Medical Care Research and Review* 74(6), 668-6861.
- 22 Rogers, et al.
- 23 Bhatt, S.P., Patel, S.B., Anderson, E.M., Baugh, D., Givens, T., Schumann, C., Sanders, J.G., Windham, S.T., Cutter, G.R., & Dransfield, M.T. (2019). Video telehealth pulmonary rehabilitation intervention in chronic obstructive pulmonary disease reduces 30-day readmissions. *American Journal of Respiratory and Critical Care Medicine*, 200(4), 511-513.
- 24 The American Occupational Therapy Association, Inc. Occupational therapy can help reduce nursing home admissions. Retrieved from <https://www.aota.org/~media/Corporate/Files/Advocacy/OT-Supports-Aging-In-Place>.
- 25 Pimouguet, C., Le Goff, M., Wittwer, J., Dartigues, J. & Helmer, C. (2017). Benefits of occupational therapy in dementia patients: Finding from a real-world observational study. *Journal of Alzheimer's Disease*, 56(2), 509-517.
- 26 Houtrow, A.J., Larson, K., Olson, L.M., Newacheck, P.W., and Halfon, N. Changing trends of childhood disability, 2001-2011. *Pediatrics*. 2014 Sep;134(3):530-8. doi: 10.1542/peds.2014-0594
- 27 Halfon, N., Houtrow, A., Larson, K., and Newacheck, P.W. The changing landscape of disability in childhood. *Future Child*. 2012 Spring ;22(1):13-42.