# How Collaborative Care Reduces Reliance on Opioids for Musculoskeletal Pain

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### Manual Therapy Can Reduce Use of Opioids for Musculoskeletal Pain

In the past 10 years, evidence has demonstrated a reduced need for opioids/medication when manual therapy is used to manage low back, neck, shoulder and other musculoskeletal (MSK) or spine, muscle and joint pain.

For example:

- Patients with noncancer spinal pain who received chiropractic care were 52% less likely to obtain a prescription for opioids than patients who did not receive chiropractic care (and 71% less if patients received chiropractic care within 30 days of their initial visit).<sup>1</sup>
- After receiving care from a MSK expert, like a chiropractor, at one Primary Care for Low Back Pain (RCLBP) Clinic site, 83% of patients surveyed now relied less on medication, including opioids, to help manage their low back pain.<sup>2</sup>
- After a course of chiropractic care at a publicly-funded multidisciplinary inner-city facility, 59% of the patients no longer required opioids.<sup>3</sup>

## Evidence-Based Research to Support Manual Therapy as Part of a Multimodal, Collaborative Approach, and Guideline Adoption

There's growing evidence-based research to support manual therapy as part of a multimodal, collaborative approach to address MSK conditions. In response, clinical practice guidelines and medical directives are now recommending collaboration, as well as non-pharmacological treatment as the first line of care, including education, exercise and manual therapy, such as:

- The Canadian Guideline for Opioid Therapy and Chronic Noncancer Pain, which recommends co-ordinated multidisciplinary collaborations between physicians and other health care professionals, such as chiropractors.<sup>4</sup>
- The Ontario Medical Association (OMA)'s Prescription for Ontario: Doctors Five-point Plan for Better Health Care states: "Patients do better when they have a team of care providers."
- Canadian Family Medicine PEER simplified guideline for pain recommends, after physical activity, spinal
  manipulation as the evidence-based effective treatment of chronic low back pain, along with NSAID, SNRI and TCA
  medications.<sup>6</sup>
- Health Quality Ontario (HQO) suggests making better use of non-medical treatments to manage acute and
  chronic pain will reduce the number of people who use opioids for the long-term. Its Quality Standard on Opioid
  Prescribing for Chronic Pain also recommends spinal manipulation in conjunction with an active physical therapy
  or exercise program.<sup>7</sup>

### Evidence for Manual Therapy Summary

In the evidence table below, manual therapy is defined as treatment programs involving a variable combination of mobilization, exercise therapy and/or soft tissue therapies, with or without manipulation.

	Condition	Management options	Quality of evidence
Low back <sup>2,8,19</sup>	Acute LBP (class la/lla/llc)	Manual therapy, education, self-management, usual medical care	Low
	Chronic LBP (class lb/llb/lld)	Spinal manipulative therapy, non-thrust SMT or myofascial therapy	High
		Manual therapy with or without SMT	Moderate
	Acute/chronic LBP with or without sciatica	Manual therapy with exercise	Low to high
	Chronic LBP in older populations	Manual therapy with or without exercise	Moderate
Neck <sup>19</sup>	Acute neck pain- associated disorders (NAD) grade I/II	Manipulation/mobilization	Low
		Manipulation/mobilization with massage, assisted stretching, heat/cold therapy	Moderate
	Acute whiplash- associated disorders (WAD) grade I/II	Manual therapy, education, exercises	Moderate
	Chronic/persistent NAD & WAD grade I/II	Manual therapy, heat, exercise	Low
	Chronic/persistent NAD & WAD grade III	Manual therapy, exercise	Low
Shoulder <sup>5,10,15</sup>	Non-specific pain     Shoulder impingement syndrome     Rotator cuff associated disorders	Manual therapy with exercise	Low to moderate

Acute/chronic rotator cuff associated disorders | Manual therapy and exercise

Adhesive capsulitis

Source: CEP-developed Manual Therapy as an Evidence-based Referral for Musculoskeletal Pain clinical tool.

Moderate

### **Helping to Address the Opioid Crisis**

To help address the opioid crisis, the Ontario Chiropractic Association (OCA) worked collaboratively with focus groups, comprised of physicians and nurse practitioner (NP)s to develop its *Opioid and Pain Reduction Collaborative* (the Collaborative).

This initiative provides resources to help manual therapists, including chiropractors, physiotherapists and registered massage therapists, co-ordinate a care plan with a prescribing health care professional to manage their shared patient's chronic back, shoulder or neck pain. While a manual therapist works within their professional scope of practice to treat their patient's MSK pain, their prescribing MD/NP tapers their opioid dosage at a pace aligned with their manual therapy.

### The Collaborative's long-term goals are to help:

- 1. Foster more collaboration between manual therapists and prescribing health care professionals to concurrently treat patients' MSK pain, while tapering their opioid dosage.
- 2. Expand formal referral patterns from prescribing professionals to manual therapists for MSK pain, before prescribing opioids.
- 3. Reduce the number of people who depend on opioids to manage their chronic back, shoulder or neck pain and opioid-related fatalities across Canada.

### Centre for Effective Practice (CEP)'s Manual Therapy as an Evidence-based Referral for Musculoskeletal Pain Clinical Tool

The Collaborative's core resource is the Manual Therapy as an Evidence-Based Referral for Musculoskeletal Pain clinical tool, which the OCA hired the Centre for Effective Practice (CEP) to develop. It's designed to provide MDs and NPs with the best available evidence. To inform the tool's development, the CEP worked with two physicians, several chiropractors and a patient with lived experience.

This clinical tool includes the following sections:

- Multimodal treatment for MSK pain overview
- Clinical best practices
- Yellow flags to help identify patients at greater risk for development of chronicity
- Process to identify manual therapy as an option
- Red flags to identify absolute contraindications
- Evidence for manual therapy, including technique definitions
- Appropriate condition mapped to clinician overview
- Resource list

This tool can be accessed at https://cep.health/clinical-products/manual-therapy/ or:

### The Link Between Musculoskeletal Pain and Opioid Dependency

- More than 27% of Canadians suffer from MSK conditions every year, particularly low back pain.<sup>8</sup>
- Low back pain is the #1 reason for an initial opioid prescription.9
- Studies show use of opioids for chronic, noncancer pain provides limited benefits and a higher incidence of adverse events, such as nausea, constipation, dizziness, drowsiness, pruritus, and dry mouth.<sup>10</sup>
- Spinal pain has been described as a common "gateway" to opioid use and it has been found that more than 50% of regular opioid users have back pain.<sup>11</sup>

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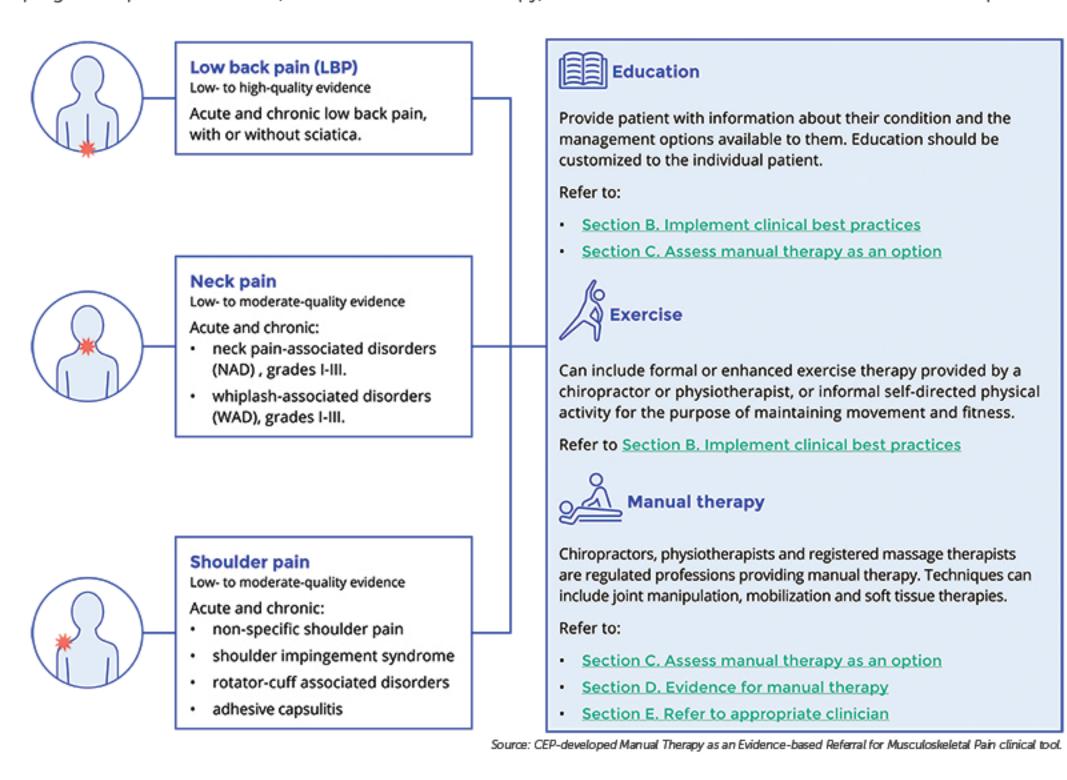
### Results

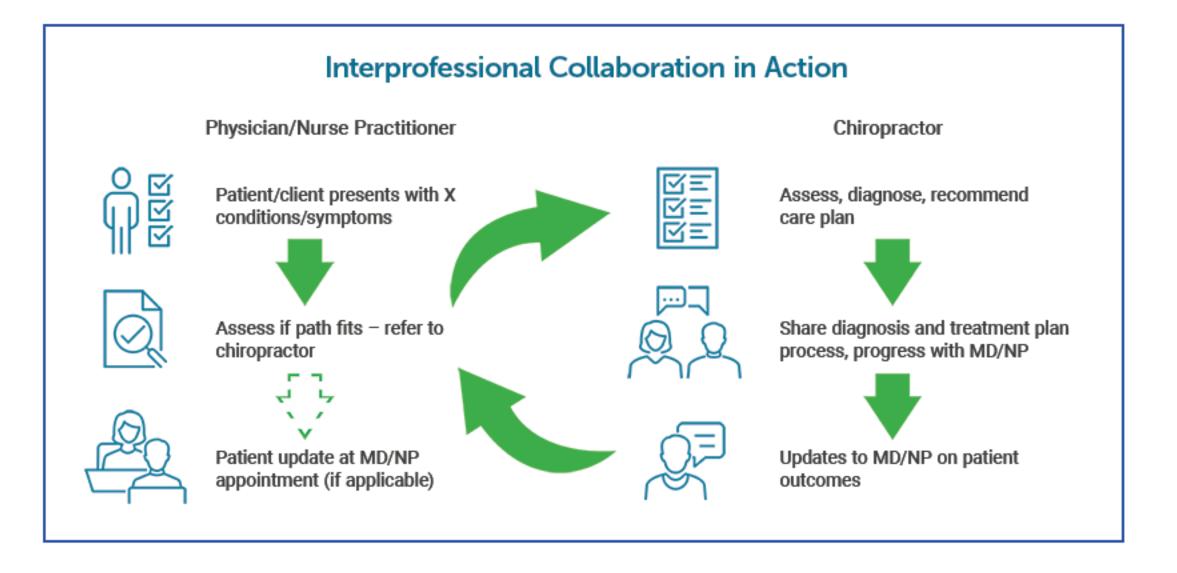
Since its June 2020 launch, the CEP-developed tool has been:

- Downloaded more than 7,500 times.
- Presented to and shared with 36+ Nurse Practitioners' Association of Ontario (NPAO) members (Oct. 2021); 72+ medical and allied health professionals for the University Health Network (UHN)'s project ECHO (March 2022); and 700+ Canadian chiropractors via six presentations in total to the Canadian Chiropractic Association (CCA), British Columbia Chiropractic Association (BCCA) and OCA members (May 2022 - March 2023).
- Promoted via articles in CACHE, a UHN and University of Toronto publication (Oct. 2022) and World Federation of Chiropractic (WFC) Quarterly World Report (Oct. 2022).
- Incorporated into the Centre for Addiction and Mental Health (CAMH)'s Opioid De-Implementation Pathway.

### Multimodal Treatment for Musculoskeletal Pain

For low back, neck and shoulder pain, current high-quality clinical practice guidelines (CPGs) recommend a multimodal program of patient education, exercise and manual therapy, tailored to the needs and abilities of the individual patient.





<sup>1</sup> Emary, P.C., Brown, A.L., Oremus, M., Mbuagbaw, L., Camerson, D. F, DiDonato, J., and Busse, J. (2022). Association of Chiropractic Care With Receiving an Opioid Prescription for Noncancer Spinal Pain Within a Canadian Community Health Center: A Mixed Methods Analysis. J Manipulative Physiol Ther. 45(4). | <sup>2</sup> Primary Care Low Back Pain Pilot Evaluation: Final Report. Centre for Effective Practice. Toronto: Ontario. March 2017. | <sup>3</sup> Passmore, S., Malone, Q., Manansala, C., Ferbers, S., Toth, A. and Olin, G.M. (2022). A retrospective analysis of pain changes and opioid use patterns temporally associated with a course of chiropractic care at a publicly funded inner-city facility. JCCA. Canadian Chiropractic Association. 66(2). | <sup>4</sup> Busse, J.W., Craigie, S., Juurlink, D.N., Buckley, D.N., Wang, L., Couban, R.J., Agoritsas, T., Akl E.A., Carrasco-Labra, A., Cooper, L., Cull C., da Costa, B.R., Frank, J.W., Grant, G., Iorio, A., Persaud, N., Stern S., Tugwell, P., Vandvik, P.O. and Guyatt G.H. (2017). Guideline for opioid therapy and chronic noncancer pain. CMAJ. 189 (18). | <sup>5</sup> Ontario Medical Association (OMA), Prescription for Ontario: Doctor's 5-Point Plan for Better Health Care, 2021. | <sup>6</sup> College of Family Physicians of Canada. Canadian Family Medicine: PEER simplified guideline for pain. March 2022. | <sup>7</sup> Health Quality Ontario. Quality Standards: Opioid Prescribing for Chronic Pain. 2018. | <sup>8</sup> Kopec, J.A., Cibere, J., Sayre, E.C., Li, L.C., Lacaille, D., and Esdaile, J.M. (2019). Descriptive epidemiology of musculoskeletal disorders in Canada: data from the global burden of disease study. Osteoarthritis and Cartilage. 27 (S259). | <sup>9</sup> Busse J, Wang L, Kamaleldin M, et al. (2018). Opioids for chronic noncancer pain: a systematic review and meta-analysis. JAMA. 320 (23) | <sup>12</sup> Deyo, R.A., Von Korff, M. and Duhrkoop, D. (2015). Opioids for low back pain. BMJ.350 (g6380).

