

Manual Therapy as an Evidence-Based Referral for Musculoskeletal Pain

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Introduction

Musculoskeletal (MSK) pain conditions are the biggest cause of disability internationally and a major societal burden. However, there is little guidance to assist primary care providers in implementing non-pharmacological treatments such as manual therapy in addition to, or as an alternative for, pharmacological treatment. This tool is designed to increase primary care provider confidence in implementing an evidence-based multimodal program of patient education, exercise and manual therapy for MSK pain.^{1–10} It will guide providers in the referral for manual therapy by a chiropractor, physiotherapist or registered massage therapist (RMT), and the evaluation of patient outcomes.

Section A. Multimodal treatment for MSK pain

Non-pharmacological treatment for MSK pain should begin with patient education and exercise. For low back, neck and shoulder pain, current highquality clinical practice guidelines (CPGs) also recommend various manual therapies tailored to the needs and abilities of the individual patient. 24,69



Low back pain (LBP)

Low-to high-quality evidence

Acute and chronic low back pain, with or without sciatica.



Neck pain

Low-to moderate-quality evidence

Acute and chronic:

- neck pain-associated disorders (NAD), grades I-III.
- whiplash-associated disorders (WAD), grades I-III.



Shoulder pain

Low-to moderate-quality evidence

Acute and chronic:

- non-specific shoulder pain
- shoulder impingement syndrome
- rotator cuff-associated disorders
- adhesive capsulitis



Patient education

Provide patient with information about their condition and the management options available to them. Education should be customized to the individual patient.

Refer to:

- Section B. Implement clinical best practices
- Section C. Assess manual therapy as an option



Exercise

Can include formal or enhanced exercise therapy provided by a chiropractor or physiotherapist, or informal self-directed physical activity for the purpose of maintaining movement and fitness.

Refer to Section B. Implement clinical best practices



Manual therapy

Chiropractors, physiotherapists and registered massage therapists are regulated professions providing manual therapy. Techniques can include joint manipulation, mobilization and soft tissue therapies.

Refer to:

- Section C. Assess manual therapy as an option
- Section D. Evidence for manual therapy
- Section E. Refer to appropriate clinician

Section B: Implement clinical best practices



Pain and function evaluation

Perform the same outcome evaluation measures before and after the patient has completed their course of treatment to determine effect on function and pain. Clinically meaningful improvement in function and/or pain has been defined as a 30% improvement in scores.¹¹

The treatment is ended as soon as the agreed-upon treatment goals have been achieved, or if maximum therapeutic benefit has been reached (improvement has plateaued and is unlikely to improve further).⁶ If the patient's function or pain has not improved, or has gotten worse, consider specialist referral.

Validated measures

- Brief Pain Inventory (BPI)
- Neck Disability Index (NDI)
- Bournemouth Disability Questionnaire
- RAND 36

- Revised Oswestry Disability Index
- Roland Morris Disability Questionnaire



Patient education

Patient education is an important part of the treatment program for MSK pain and should be individualized based on patient needs. 1,9,12,15 Materials should be provided in the patient's preferred format (printed materials, videos or multimedia). Education should include information and reassurance about:

- · The nature of their symptoms
- · The low risk for serious underlying disease
- The management plan, including prognosis and psychosocial aspects
- The importance of resuming or continuing work or usual activities
- The importance of the patient's active engagement in care, including self-monitoring of symptoms, identifying causes of pain exacerbation, relaxation techniques and modification of negative self-talk. For self-management resources, see <u>patient resources</u> in Section F.



When discussing non-pharmacological treatment options with patients, use motivational interviewing techniques, as appropriate. If patients are reluctant to try something new, try the Elicit-Provide-Elicit technique:

Elicit the patient's thoughts/feelings:

"How do you feel about trying some exercise or manual therapies for your pain?"

Provide information (a common patient concern is that these therapies will increase pain):

"If I understand correctly, you are concerned that these therapies will increase your pain. However, they can actually help decrease pain over time."

Elicit the patient's opinion:

"What do you think about this?"

Yellow flags 10

A patient with a positive yellow flag may be at greater risk for development of chronicity, and will benefit from additional education and reassurance. Yellow flags can be assessed at any time before, during or after course of treatment.

| Questions to ask | Listen/look for | | | |
|---|--|--|--|--|
| Do you think your pain will improve or become worse? | Belief that pain and activity are harmful or potentially severely disabling (e.g. catastrophizing). | | | |
| Do you think you would benefit from activity, movement or exercise? | Fear and avoidance of activity or movement. | | | |
| How are you emotionally coping with your pain? | Tendency to low or negative mood and withdrawal from social interaction. | | | |
| What treatments or activities do you think will help you recover? | Unrealistic expectations of treatment. Expectation of passive treatment(s) rather than a belief that active participation will help. | | | |
| If appropriate, use the GAD-7 and PHO-9 to set | haseline scores for denression/anxiety | | | |

If appropriate, use the <u>GAD-7</u> and <u>PHQ-9</u> to set baseline scores for depression/anxiety.



Recommend general activity and exercise therapies as appropriate. For low back, neck and shoulder exercises, see <u>patient resources in Section F.</u> Chiropractors and physiotherapists may provide a planned, structured and repetitive physical activity program for the purpose of conditioning any part of the body.

- If appropriate, start low and go slow (e.g. 5 min every other day) and aim for a moderate level of intensity.
- Encourage graded activity add 10 min every 3-4 weeks, toward a minimal goal of 30 min of exercise 5 days a week.
- · Recommend combined home and group physical activities to help increase activity levels.
- Pick a low impact physical activity, such as walking, Pilates, Tai Chi, yoga or aquatic therapy.

Section C: Assess manual therapy as an option

The decision to proceed with manual therapy should be based on patient preference, functional ability and absence of absolute contraindications. Patient preference may be influenced by cost, accessibility and personal factors.



Talking tips

What is manual therapy?

"Manual therapy is movement of the joints and muscles by a healthcare professional such as a chiropractor, physiotherapist or registered massage therapist (RMT) with the aim of relieving pain, increasing joint range and improving function." 16,17

Are there side effects to manual therapy?

"You may experience minor-to-moderate short-lived (<48 hours) episodes of muscle stiffness or soreness after treatment."

How many sessions will I need?

"If manual therapy is effective, most patients respond within 4-8 weeks with minimum 1 treatment per week. However, the frequency and duration of your treatment may be influenced by individual factors." 6

Will manual therapy cure my pain?

"There is no cure-all for this kind of pain. A multimodal program including manual therapy may improve function, pain and quality of life, allowing you to resume or continue your regular daily activities."

Absolute contraindications (Red flags) 4,8,14,15,17

| | Indication | Investigation |
|--------------|---|--------------------------|
| Neurological | All conditions: diffuse motor/sensory loss, progressive neurological deficits Low back: cauda equina syndrome Neck: cervical cord compression, demylinating process, progressive neurological deficts, sudden and intense onset of headache Shoulder: significant weakness not due to pain | MRI |
| Infection | All conditions: fever, IV drug use, immune suppressed Neck: meningism Shoulder: septic joint | X-ray and MRI |
| Fracture | All conditions: trauma, osteoporosis risk/ fragility fracture Low back: presence of a contusion or abrasion which might indicate spinal fracture Shoulder: unexplained deformity and/or swelling | X-ray, may require CT |
| Tumour | All conditions: history of cancer, unexplained weight loss, significant night pain, severe fatigue | X-ray and MRI |
| Inflammation | Low back: chronic low back pain > 3 months, age of onset <45, morning stiffness > 30 minutes, improves with exercise, disproportionate night pain Neck: rheumatoid arthritis, polymyalgia rheumatica, giant cell arteritis Shoulder: unexplained deformity, swelling or erythema of the skin | Rheumatology consult |

How much does manual therapy cost?

"Although manual therapy is generally not covered by OHIP, most Extended Health Care (EHC) plans cover chiropractic, physiotherapy, and/or massage therapy. Talk to you employer if you are unsure about your coverage."

As part of the Ministry of Health's Low Back Pain Strategy, two provincial models of care are available to eligible patients with low back pain¹⁸:

Primary Care Low Back Pain Program

Select inter-professional primary care teams in Ontario offer a low back pain program to their patients. In most cases, a physician referral from within the team is required.

For more information and a list of teams offering this program, go to https://chiropractic.on.ca/helping-ontarians/programs-initiatives/primary-care-low-back-pain-program

Rapid Access Clinics

Rapid Access Clinics (RAC) for low back pain are being implemented across Ontario to improve patient care and access to low back pain assessment, education and management. Referrals are available to eligible patients whose primary care provider has enrolled in the program.

For more information, go to http://www.isaec.org/

OHIP-funded physiotherapy clinics

Individuals with a valid Ontario health card who meet one or more of the following criteria are eligible to access OHIP-funded physiotherapy:

- 65 years and older
- · 19 years and under
- After an overnight hospital stay for a condition requiring physiotherapy
- a recipient of the Ontario Works or the Ontario Disability Support Program

For a directory of these clinics, go to https://www.health.gov.on.ca/en/public/programs/physio/pub_clinics.aspx

Relative contraindications

Generally, these types of conditions contraindicate the relevant anatomy and do not necessarily contraindicate therapy for other areas.⁶

- Local open wound or burn
- Prolonged bleeding time/ hemophilia
- Pacemaker (contraindicated for electrotherapy)
- Joint infection*
- Tumour*

- Recent/healing fracture
- Increasing neurological deficit*
- Spinal internal fixation or artificial joint implants will require special consideration by the manual therapist.

*Does not prohibit treatment, but warrants investigation via imaging or specialist referral to rule out more serious pathology. See Absolute contraindications (Red flags).

Section D: Evidence for manual therapy

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.

For classification of low back and neck conditions, see Appendix A.

| | Condition | Management options | Quality of evidence |
|-----------------------------|---|--|---------------------|
| Low back ^{2,7,19} | 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 ²⁰ | Acute neck pain-associated disorders (NAD) | Manipulation/mobilization | Low |
| | grade I/II | 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 ^{4,10,12} | Acute/chronic: | Manual therapy with exercise | Low to moderate |
| | Acute/chronic rotator cuff associated disorders | Manual therapy and exercise | Moderate |

Technique definitions^{17,21-23}

| Assisted stretching | Active or passive muscle lengthening with assistance of manual therapy clinician. | | | |
|--|--|--|--|--|
| Heat/cold therapy | Local application of heat or cold over protected body part. | | | |
| Joint mobilization (non-thrust manipulation) | Techniques incorporating a low velocity and small or large amplitude oscillatory movement within a joint's passive range of motion. | | | |
| Manipulation (adjustment) | A passive, high velocity, low amplitude thrust applied to a joint beyond its physiological limit of motion but within its anatomical limit. Includes spinal manipulative therapy (SMT). | | | |
| Manual traction | A therapeutic method to relieve pain by stretching and realigning the joints. | | | |
| Soft-tissue therapies | Mechanical therapy in which muscles, tendons and ligaments are passively pressed or kneaded by hand or with mechanical devices. Includes myofascial therapy, relaxation massage, clinical therapeutic massage, movement re-education and energy work, Active Release Therapy (ART), progressive muscle relaxation and range of motion therapy. | | | |

Section E: Refer to appropriate clinician

Chiropractors, physiotherapists and registered massage therapists (RMT) can perform all or some of the manual therapy techniques recommended as part of a multimodal program for low back, neck and shoulder pain. However, manipulation or spinal manipulative therapy (SMT) can only be performed by chiropractors or trained physiotherapists rostered with the College of Physiotherapists to perform manipulation (rostered physiotherapists). See Appendix B for required credentials.

| | Chiropractor | Rostered physiotherapist | Physiotherapist | with RMT |
|---|--------------|--------------------------|-----------------|----------|
| Low back pain | | | | |
| Acute LBP (class la/lla/llc)* | ~ | ✓ | | ✓ |
| Chronic LBP (class lb/llb/lld) | ~ | ✓ | | |
| Acute/chronic LBP with or without sciatica | ~ | ~ | | ✓ |
| Chronic LBP in older populations | ~ | ~ | ✓ | ✓ |
| Neck | | | | |
| Acute/chronic NAD**, grade I/II | ~ | ✓ | ~ | |
| Acute/chronic WAD***, grade I/II | ~ | ~ | ✓ | ✓ |
| Chronic/persistent NAD & WAD grade III | ~ | ✓ | ✓ | ✓ |
| Shoulder pain | | | | |
| Acute/chronic non-specific pain | ~ | ✓ | ~ | ✓ |
| Acute/chronic shoulder impingement syndrome | ~ | ✓ | ✓ | ✓ |
| Acute/chronic adhesive capsulitis | ~ | ~ | ✓ | ✓ |
| Acute/chronic rotator cuff-associated disorders | ~ | ~ | ✓ | ~ |

A qualified clinician will meet the following criteria:24,25,26

- In good standing in the appropriate provincial regulatory college.
- Willing and able to provide proof of credentials, such as degrees and proof of registration.
- Experience in treating patients with low back, neck or shoulder pain.
- Willing to work collaboratively with family physician and other health care professionals as required to provide best patient care.

For detailed patient/provider resource on selecting a clinician, see Appendix B.



Chiropractor

Scope of practice:27

Assess the spine, nervous system and joints. Diagnose, prevent and treat dysfunctions/ disorders arising from the spine or joints, and resultant effects on the nervous system.

Find a chiropractor:

College of Chiropractors of Ontario



Physiotherapist

Scope of practice:28

Assess neuromuscular, musculoskeletal and cardio-respiratory systems. Diagnose diseases/disorders associated with physical dysfunction, injury or pain.

Find a physiotherapist:

College of Physiotherapists of Ontario



Registered Massage Therapist (RMT)

Scope of practice:29

Assess the soft tissue and joints of the body. Treat or support prevention of physical dysfunction and pain of the soft tissues and joints.

Find an RMT:

College of Massage Therapists of Ontario

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^{***}WAD = Whiplash-associated disorders

Section F: Resources

CEP Clinical Tools

- [i] CORE Neck Pain and Headache
 https://cep.health/clinical-products/core-neck-tool-and-headache-navigator/
- [ii] CORE Back tool https://cep.health/clinical-products/low-back-pain/
- [iii] Chronic Non-Cancer Pain https://cep.health/clinical-products/chronic-noncancer-pain/
- [iv] Opioid Manager

 https://cep.health/clinical-products/opioidmanager/
- [v] Opioid Tapering Template https://cep.health/clinical-products/opioid-taperingtemplate/

Supporting material

- [vi] Brief Pain Inventory (BPI) http://www.npcrc.org/files/news/briefpain_long.pdf
- [vii] Bournemouth Questionnaire
 http://oml.eular.org/sysModules/obxOml/docs/ID_45/
 bournemouth%20questionnaire_english%202.PDF
- [viii] Neck Disability Index (NDI) https://www5.aaos.org/uploadedFiles/NDI.pdf
- [ix] RAND-36 Health Survey
 https://www.wsib.ca/sites/default/files/2019-03/
 mtbi_rand.pdf
- [X] The Revised Oswestry Disability Index https://brentwoodchiropractic.ca/wp-content/ uploads/2018/03/Form-LowBack.pdf
- [xi] Roland Morris Back Disability Index (available in 47 languages)
 http://www.rmdq.org/Download.htm
- [xii] GAD-7 https://www.integration.samhsa.gov/clinicalpractice/GAD708.19.08Cartwright.pdf
- [xiii] PHQ-9
 https://www2.gov.bc.ca/assets/gov/health/
 practitioner-pro/bc-guidelines/depression_patient_
 health_questionnaire.pdf

Patient resources

- [xiv] Personal Action Planning for Patient Self-Management (targeted to low back pain but applicable to neck and shoulder conditions) http://www.health.gov.on.ca/en/pro/programs/ecfa/docs/lb tk planning c.pdf
- [xv] Self-Management Resource Centre
 https://www.selfmanagementresource.com/
 resources/evaluation-tools/english-evaluation-tools

- [xvi] Positive Coping with Health Conditions https://psychhealthandsafety.org/pcwhc/
- [xvii] HQO LBP Patient Guide
 https://www.hqontario.ca/Portals/0/documents/
 evidence/quality-standards/qs-low-back-painpatient-guide-en.pdf
- [xviii] Neck Pain Exercise Sheet
 https://www.versusarthritis.org/media/3092/neckpain-exercise-sheet.pdf
- [xix] Shoulder Pain Exercise Sheet https://www.csp.org.uk/system/files/5_shoulder_ pain.pdf
- [xx] ISAEC Low back pain Positions of Relief, Stretches and Exercises http://www.isaec.org/isaec-exercise-videos.html
- [xxi] Ontario Chiropractic Association (OCA) Self Management & Patient Education Resources https://chiropractic.on.ca/public/self-management/
- [xxii] Canadian Chiropractic Guideline Initiative Exercise Videos https://staging.chiropractic.ca/guidelines-bestpractice/exercise-videos/

Other resources for providers and patients

- [xxiii] Ontario Chiropractic Association https://www.chiropractic.on.ca
- [xxiv] College of Chiropractors of Ontario https://www.cco.on.ca/
- [xxv] Ontario Physiotherapy Association (OPA) https://opa.on.ca/
- [xxvi] College of Physiotherapists of Ontario https://www.collegept.org/
- [xxvii] Registered Massage Therapists' Association of Ontario https://www.rmtao.com/
- [xxviii] College of Massage Therapists of Ontario https://www.cmto.com/
- [xxix] The Inter-professional Spine Assessment and Education
 Clinics (ISAEC)
 http://www.isaec.org/
- [xxx] Publicly Funded Physiotherapy: Clinic Location http://www.health.gov.on.ca/en/public/programs/ physio/pub_clinics.aspx
- [xxxi] Primary Care Low Back Pain (PCLBP) Program
 https://chiropractic.on.ca/helping-ontarians/
 programs-initiatives/primary-care-low-back-painprogram/
- [xxxii] Toronto Academic Pain Medicine Institute (TAPMI) http://tapmipain.ca/

References

- [1] Lin I, Wiles L, Waller R, Goucke R, Nagree Y, Gibberd M, et al. What does best practice care for musculoskeletal pain look like? Eleven consistent recommendations from high-quality clinical practice guidelines: systematic review. Br J Sports Med. 2019 Mar 2;bjsports-2018-099878.
- [2] Low back pain and sciatica in over 16s: assessment and management [Internet]. National Institute for Health and Care Excellence; 2016. Available from: https://www.nice.org.uk/guidance/ng59
- [3] Wong JJ, Côté P, Sutton DA, Randhawa K, Yu H, Varatharajan S, et al. Clinical practice guidelines for the noninvasive management of low back pain: A systematic review by the Ontario Protocol for Traffic Injury Management (OPTIMa) Collaboration. Eur J Pain. 2017 Feb;21(2):201–16.
- [4] Côté P, Wong JJ, Sutton D, Shearer HM, Mior S, Randhawa K, et al. Management of neck pain and associated disorders: A clinical practice guideline from the Ontario Protocol for Traffic Injury Management (OPTIMa) Collaboration. Eur Spine J. 2016 Jul;25(7):2000–22.
- [5] Steuri R, Sattelmayer M, Elsig S, Kolly C, Tal A, Taeymans J, et al. Effectiveness of conservative interventions including exercise, manual therapy and medical management in adults with shoulder impingement: a systematic review and meta-analysis of RCTs. Br J Sports Med. 2017 Sep;51(18):1340-7.
- [6] Globe G, Farabaugh RJ, Hawk C, Morris CE, Baker G, Whalen WM, et al. Clinical Practice Guideline: Chiropractic Care for Low Back Pain. J Manipulative Physiol Ther. 2016 Jan;39(1):1–22.
- [7] Busse J. The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain. Cancer Pain. 2017;105.
- [8] Bussières AE, Stewart G, Al-Zoubi F, Decina P, Descarreaux M, Haskett D, et al. Spinal Manipulative Therapy and Other Conservative Treatments for Low Back Pain: A Guideline From the Canadian Chiropractic Guideline Initiative. J Manipulative Physiol Ther. 2018 May;41(4):265–93.
- [9] Blanpied PR, Gross AR, Elliott JM, Devaney LL, Clewley D, Walton DM, et al. Neck Pain: Revision 2017: Clinical Practice Guidelines Linked to the International Classification of Functioning, Disability and Health From the Orthopaedic Section of the American Physical Therapy Association. J Orthop Sports Phys Ther. 2017 Jul;47(7):A1–83.
- [10] Hawk C, Minkalis AL, Khorsan R, Daniels CJ, Homack D, Gliedt JA, et al. Systematic Review of Nondrug, Nonsurgical Treatment of Shoulder Conditions. J Manipulative Physiol Ther. 2017 Jun;40(5):293–319.
- [11] Chronic Non-Cancer Pain [Internet]. Centre for Effective Practice; 2018. Available from: https://cep.health/clinical-products/chronic-non-cancer-pain/
- [12] Hopman K, Krahe L, Lukersmith S. Clinical Practice Guidelines for the Management of Rotator Cuff Syndrome in the Workplace [Internet]. The University of New South Wales; 2013 [cited 2019 Nov 1]. Available from: https://rcs.med.unsw.edu.au/sites/default/files/rcs/page/ RotatorCuffSyndromeGuidelines.pdf
- [13] Quality Standards: Care for Adults With Acute Low Back Pain [Internet]. Health Quality Ontario;2019. Available from: https://www.hqontario.ca/evidence-to-improve-care/quality-standards/view-all-quality-standards/low-back-pain
- [14] Clinically Organized Relevant Exam (CORE) Back Tool [Internet]. Centre for Effective Practice; 2016. Available from: https://cep.health/clinical-products/low-back-pain/
- [15] Clinically Organized Relevant Exam (CORE) Neck Tool and Headache Navigator [Internet]. Centre for Effective Practice; 2016. Available from: https://cep.health/clinical-products/core-neck-tool-and-headache-navigator/

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- [16] Page MJ, Green S, Kramer S, Johnston RV, McBain B, Chau M, et al. Manual therapy and exercise for adhesive capsulitis (frozen shoulder). Cochrane Musculoskeletal Group, editor. Cochrane Database Syst Rev [Internet]. 2014 Aug 26 [cited 2019 Aug 9]; Available from: http://doi.wiley.com/10.1002/14651858.CD011275
- [17] Position Statement: Manipulation [Internet]. Canadian Physiotherapy Association; 2007. Available from: https://physiotherapy.ca/sites/default/files/positionstatements/manipulation_en.pdf
- [18] Government of Ontario, Ministry of Health and Long-Term Care. Ontario's Action Plan for Health Care - Low Back Pain Strategy [Internet]. 2016 [cited 2020 Mar 3]. Available from: http://www.health.gov.on.ca/en/pro/programs/ecfa/action/primary/lower_back.aspx
- [19] de Luca KE, Fang SH, Ong J, Shin K-S, Woods S, Tuchin PJ. The Effectiveness and Safety of Manual Therapy on Pain and Disability in Older Persons With Chronic Low Back Pain: A Systematic Review. J Manipulative Physiol Ther. 2017 Sep;40(7):527–34.
- [20] Bussières AE, Stewart G, Al-Zoubi F, Decina P, Descarreaux M, Hayden J, et al. The Treatment of Neck Pain-Associated Disorders and Whiplash-Associated Disorders: A Clinical Practice Guideline. J Manipulative Physiol Ther. 2016 Oct;39(8):523-564.e27.
- [21] Ontario Chiropractic Association. What Is Chiropractic? [Internet]. Ontario Chiropractic Association. 2019 [cited 2019 Oct 24]. Available from: https://chiropractic.on.ca/chiropractic-care/ about-chiropractic-care/what-is-chiropractic-care/
- [22] Classifying health workers: Mapping occupations to the international standard classification [Internet]. World Health Organization; 2008 [cited 2019 Nov 26]. Available from: https://www.who.int/hr/statistics/Health_workers_classification.pdf
- [23] Sherman KJ, Dixon MW, Thompson D, Cherkin DC. Development of a taxonomy to describe massage treatments for musculoskeletal pain. BMC Complement Altern Med [Internet]. 2006 Dec [cited 2020 Feb 28];6(1). Available from: http://bmccomplementalternmed.biomedcentral.com/articles/10.1186/1472-6582-6-24
- [24] Soft Tissue Therapy: Guidance for Selecting a Clinician. The Inter-professional Spine Assessment and Education Clinics (ISAEC); 2015.
- [25] Exercise Therapy: Guidance for Selecting a Clinician. The Inter-professional Spine Assessment and Education Clinics (ISAEC); 2015.
- [26] Manipulation: Guidance for Selecting a Clinician. The Inter-professional Spine Assessment and Education Clinics (ISAEC); 2015.
- [27] Chiropractic Act, 1991, S.O. [Internet]. Sect. 21 1991. Available from: https://www.ontario.ca/laws/statute/91c21
- [28] Physiotherapy Act, 1991, S.O. [Internet]. Sect. 37 1991. Available from: https://www.ontario.ca/laws/statute/91p37
- [29] Massage Therapy Act, 1991, S.O. [Internet]. Sect. 27 1991. Available from: https://www.ontario.ca/laws/statute/91m27
- [30] Haldeman S, Johnson CD, Chou R, Nordin M, Côté P, Hurwitz EL, et al. The Global Spine Care Initiative: classification system for spine-related concerns. Eur Spine J Off Publ Eur Spine Soc Eur Spinal Deform Soc Eur Sect Cerv Spine Res Soc. 2018;27(Suppl 6):889–900.
- [31] Guzman J, Hurwitz EL, Carroll LJ, Haldeman S, Côté P, Carragee EJ, et al. A new conceptual model of neck pain: linking onset, course, and care: the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. Spine. 2008 Feb 15;33(4 Suppl):S14-23.

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