

# Interventions to optimize healthcare utilization in the diagnosis and management of musculoskeletal disorders: a scoping review protocol.

Simon Décary<sup>1,2</sup>, Allyson Jones<sup>3</sup>, Pierre Frémont<sup>4</sup>, Kadija Perreault<sup>4</sup>, Hervé Zomahoun<sup>1</sup>, Luc J. Hébert<sup>4</sup>, France Légaré<sup>1,2</sup>.



1- Canada Research Chair in Shared Decision Making and Knowledge Translation, Centre de recherche sur les soins et les services de première ligne de l'Université Laval (CERSSPL-UL), Quebec (Quebec), G1J 0A4, Canada; 2-Department of Family Medicine and Emergency Medicine, Pavillon Ferdinand-Vandry, 1050, Avenue de la Médecine, Université Laval, Quebec (Quebec), G1V 0A6, Canada; 3- Faculty of Rehabilitation Medicine, University of Alberta, Edmonton (Alberta), T6G 2G4, Canada; 4- Department of Rehabilitation, Pavillon Ferdinand-Vandry, 1050, Avenue de la Médecine, Université Laval, Quebec (Quebec), G1V 0A6, Canada. **Contact:** [decary.simon@gmail.com](mailto:decary.simon@gmail.com)

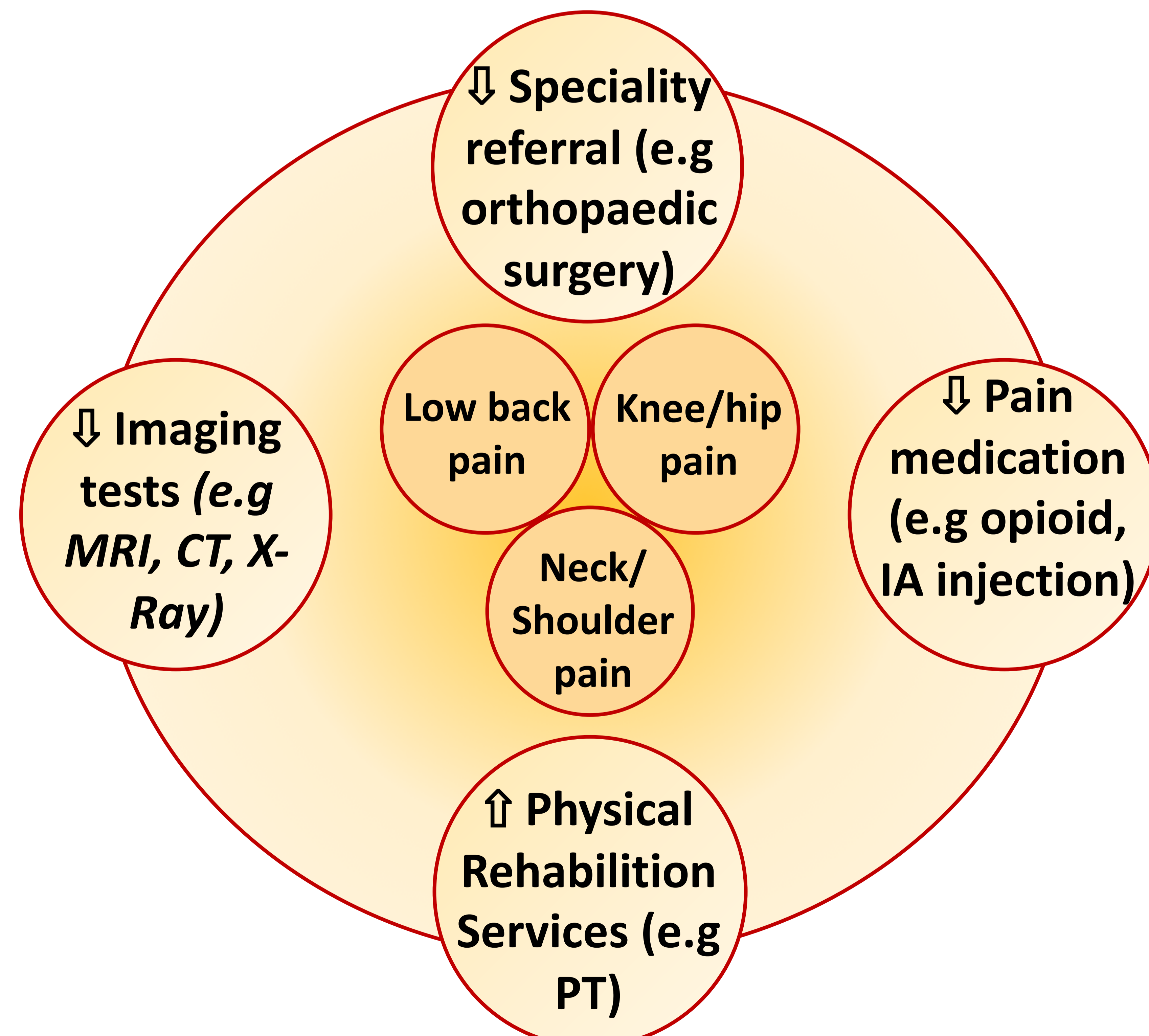
## ▶ CONTEXT

- ❖ Musculoskeletal disorders (MSD) are a leading cause of disabilities worldwide.
- ❖ Primary care clinicians often overuse low-value options and underuse high-value options in the diagnosis and management of MSD.

## ▶ OBJECTIVE

To systematically map the literature concerning interventions designed to optimize healthcare utilization in the diagnosis and management of MSD.

## ▶ Conceptual framework to optimize healthcare utilization in the diagnosis and management of musculoskeletal disorders



MRI: magnetic resonance imaging; CT: computed tomography; IA: intra-articular; PT: physiotherapy.

## ▶ METHODS

- ❖ Five-stages framework for scoping review (Levac et al. 2010).
- ❖ Two main concepts : “healthcare utilization” and “musculoskeletal disorders”.

**Population:** Healthcare professionals and their patients consulting for a MSD.

**Interventions:** 1- targeted at healthcare workers, 2- targeted at patients, 3- targeted at organisations.

**Comparator:** Usual referral practice or comparison of two interventions.

**Outcomes:** Healthcare utilization: reduction, appropriateness, no change or increase in the use, referral count or rate of 1- imaging tests, 2- specialty referral, 3- pain medication prescription, 4- physical rehabilitation services.

**Settings:** 1- primary care settings (e.g family medicine clinics), 2- secondary care settings (e.g outpatients clinics), 3- emergency settings.

**Designs:** 1- controlled trials, 2- interrupted time series, observational cohort, 3- published study protocols.

- ❖ **Search strategy:** Sensitive search strategy and systematic search in the following databases: MEDLINE/PubMed, EMBASE, CINAHL, Cochrane Central, Web of Knowledge, ClinicalTrials and PEDro databases.
- ❖ **Eligibility criteria:** based on PICOS. Studies reporting on other musculoskeletal pain conditions (e.g rheumatoid arthritis, cancer), pediatric population and other study designs (e.g diagnostic accuracy) will be excluded.
- ❖ **Study selection:** Two independent reviewers will screen articles and apply eligibility criteria.
- ❖ **Data extraction:** number of studies, year of publication, countries where studies were conducted, musculoskeletal disorders (1- Low back pain, 2- Knee/Hip pain, 3- Neck/Shoulder pain, 4- Other body regions), healthcare utilization outcomes, study design, type of intervention, study populations.
- ❖ **Synthesis of results:** narrative synthesis based on the conceptual framework.

## ▶ CONCLUSION

Results will provide insights concerning the extent and scope of evidence on interventions to optimize healthcare utilization in the diagnosis and management of MSD and will orientate future research.