

Development and implementation of a knowledge translation intervention to improve the management of shoulder pain in primary care

Background: Shoulder pain (SP) has a lifetime prevalence of up to 67%¹ and is hard to rehabilitate with half of patients still symptomatic 6 months after the initial onset of symptoms. A rapid and optimal initial management of patients suffering from SP is essential. Patients usually consult their family physician (FP) when seeking care² and several studies report that management provided in primary care (PC) by FP is often inappropriate and relies on the unnecessary use of expensive diagnostic imaging (DI).³ Inappropriate reference to specialists such as orthopedic surgeons are also common.² Our research group has developed an evidenced-based clinical practice guideline (CPG) for the management of adults and workers suffering from rotator cuff (RC) disorders. The next step is to develop and implement a knowledge translation (KT) intervention designed to facilitate uptake of the CPG.

Goals:

1- To identify:

- a.** the existent evidence-practice gaps in the management of shoulder pain in adults and workers in primary care.
- b.** the barriers and facilitators to the implementation of the recommendations from the CPG in family physicians' practice.

2- To identify relevant primary care recommendations from our CPG for adults and workers suffering from rotator cuff disorders as well as from a systematic review of published CPGs for other common shoulder disorders.

3- Based on results from objectives 1 and 2, to develop a comprehensive theory and stakeholder informed KT intervention for the management of shoulder pain in primary care

4- To assess implementation outcomes in a group of FP in terms of: **a.** Change in knowledge and confidence with managing shoulder disorders. **b.** Rates of DI tests, medication prescriptions and references to specialists.

Methods/Expertise:

The KT process will be based on the Knowledge-to-Action framework.⁴ We have secured the collaboration of Dre France Légaré, Dr Décary, Dre Macdermid and Dr Zidarov who are expert to KT methodology. The development of the KT intervention will be guided by an interdisciplinary expert group of knowledge users. Interdisciplinary members involved in the CPG development will be involved in the development and implementation of the KT intervention. 1- Evidence-practice gaps will be identified through literature review, chart audits and focus groups of FP. Barriers and facilitators to practice change will be identified through theory-informed focus groups of FP. This information will be used in iterative stakeholder consultations to select the final strategies for implementation intervention. 2- Relevant to PC recommendations from our CPG for the management of RC disorders and from literature synthesis of CPG for other shoulder disorders will be identified. Based on the identified recommendations, quality indicators will be created

and prioritized by the expert group of knowledge users. These quality indicators will be used as an outcome measure in the evaluation of the implementation of the KT intervention. 3- The expert group of knowledge users will use the results from steps 1 and 2 to develop a comprehensive theory and stakeholder informed KT intervention for the management of shoulder pain. 4- Evaluation of the implementation of the KT intervention will be completed using a case-control before-after study with FP recruited from University Family Medicine Clinics. Both groups will include 50 FP from 8 different University Family Medicine Clinics. Questionnaires evaluating confidence to manage and knowledge about SP will be filled by FP before, immediately after, 3 and 6 months after intervention and at corresponding time points for the control group. Requests for DI, medication prescriptions and references to other medical specialists will be compared 6 months before and after intervention with chart audits and for the same two 6 months periods for the control group.

Expected outcomes: This is the first time in the Canadian context that a KT CPG intervention is assessed for SP management in PC. The broader implementation of this KT intervention will likely lead to more efficient SP management to improve patient outcomes, reduce chronicity of SP and promote a more efficient use of health care resources.

1. Luime et al. 2004
2. Laslett et al. 2014
3. Auclair et al. 2017
4. Graham et al. 2006