



Specific rehabilitation  
interventions for physical  
impairment to avoid chronification  
of non-specific back pain in adults

## EXECUTIVE SUMMARY

of the abridged ETMI Report

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## ISSUS

Non-specific back pain is a frequent reason for consultations with front-line physicians. Contrary to specific back pain, which is caused by a pathology or a trauma, non-specific back pain is usually of multifactorial origin. Depending on the pain's location, non-specific back pain can affect the upper back (cervical pain/neck pain), mid back (back pain), and/or the lower back (low back pain/lumbago). Low back pain is the most frequent form and leads to high rates of morbidity and disability. If the pain is not treated within the first days of an acute episode (less than six weeks), low back pain can evolve into a chronic condition with functional limitations and in some cases, psychosocial problems. To avoid moving toward chronicity and the development of disabilities, it is crucial to treat patients with non-specific back pain rapidly.

## CONTEXT

The evaluation of the services offered to people with chronic pain within the territory of the *CIUSSS de la Capitale-Nationale* led to the identification of certain problems such as: The limited availability of front-line services, restricted accessibility to specialized services due to lengthy delays and the high cost of professional services in private clinics. Although the *Institut de réadaptation en déficience physique de Québec (IRD PQ)* already offers specialized and superspecialized services, there is no efficient and adapted management of primary care for patients with non-specific back pain. To close this gap, Management of the Cognitive Impairment Autism Spectrum Disorder and Physical Impairment Program want to determine the most efficient methods of intervention in primary care to avoid chronification of non-specific back pain in adults, for the organization of care and services, as well as for the professionals involved in this process.

## OBJECTIVE

The objective of this short ETMI is to identify: 1) the rehabilitation methods that are thought to be the most effective, and 2) the specific service offering (primary care) to be implemented to avoid the chronification of non-specific back pain in adults.

For more information, please see the report at: [https://www.ciuiss-capitalenationale.gouv.qc.ca/sites/d8/files/docs/MissionUniversitaire/ETMISSS/ETMI-ABREGEE-MAUX-DOS\\_FINAL.pdf](https://www.ciuiss-capitalenationale.gouv.qc.ca/sites/d8/files/docs/MissionUniversitaire/ETMISSS/ETMI-ABREGEE-MAUX-DOS_FINAL.pdf)

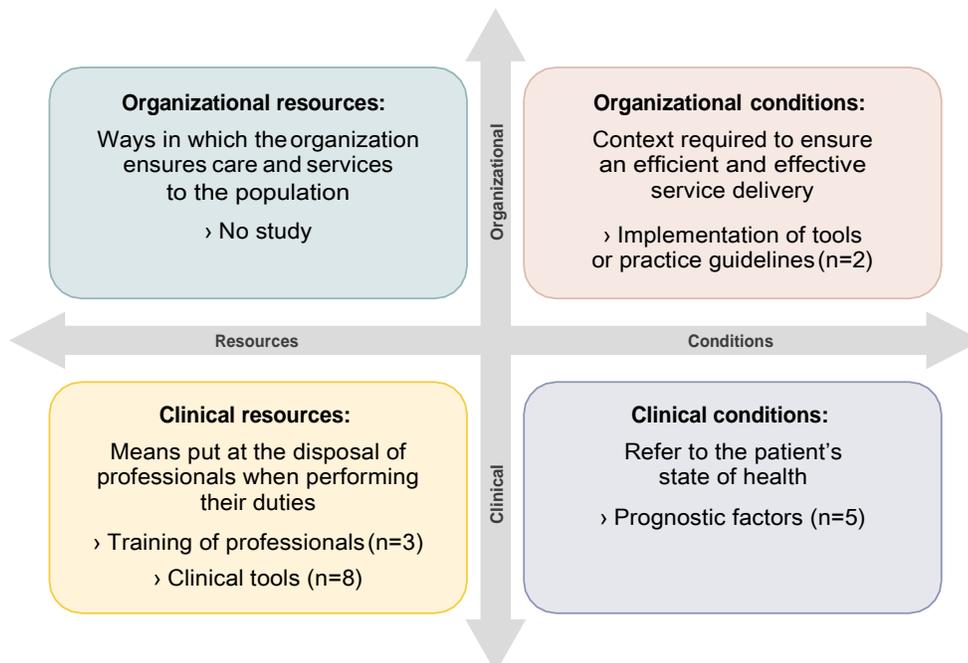
## METHODOLOGY

On one hand, research and literature have enabled the identification of a relevant and recent document presenting efficient methods of intervention for the management of non-specific back pain: *Prise en charge du patient présentant une lombalgie commune [Treatment of a Patient Presenting With Common Back Pain]*, by La Haute Autorité de Santé - HAS (2019). On the other hand, a literature review using a systematic approach was performed to identify models of service offerings to implement to avoid chronification of non-specific back pain in primary care. The methodological quality and credibility of the selected papers have been evaluated, and relevant collected data have been synthesized and analyzed.

## RESULTS

The HAS (2019) Fact Sheet presents recommendations based on a systematic literature review and on the work of a multidisciplinary team of experts in the field. Several non-medicinal interventions were evaluated for the treatment of people suffering from non-specific back pain, and each recommendation is presented according to its level of evidence.

As for the resources and conditions required to set up a service offering for patients with non-specific back pain, 25 documents were selected from the literature review. The synthesis and analysis of data from 15 preliminary studies, 5 systematic reviews and 6 grey literature papers led to the identification of different clinical resources, as well as clinical and organizational conditions to avoid chronification of non-specific back pain. Data collected was organized and analyzed according to the following analytical framework:



**Analytical framework inspired** by Renaud-Gagnon, Demers et Gilbert (2017), Lévesque, Descôteaux, Demers et Bengeri (2014) and St-Amand et Renard(2003)

## FINDINGS

### Intervention methods to avoid chronification of back pain

Different methods of non-medicinal interventions are recommended to avoid chronification of back pain. These interventions include physical therapy and rehabilitation treatment, self-management, and education for patients, returning to daily activities, cognitive-behavioural psychological interventions, sports activities, and a multidisciplinary rehabilitation program. Globally, the key messages from the *HAS (2019)* can be summarized as follow:

- › Reassuring information must be given to the patient. In 90% of cases, non-specific back pain goes away in less than four to six weeks.
- › Progressive and early return to physical activity is the main way to enable favorable progress and to avoid a relapse.
- › Early detection of patients who are at risk for chronicity is recommended.
- › In the absence of improvement following treatment by a multidisciplinary team, it is suggested to include a specialized physician, and if necessary, an occupational physician (according to Quebec terminology, a specialist in preventive medicine).
- › Biopsychosocial management of patients must be patient-centered and be based on a shared medical decision.

### Resources and conditions required to set up a service offering to avoid chronification of back pain

#### Clinical resources:

- › Training on risk stratification (treating according to the chronicity risk profile) enables professionals to give more adapted care while reducing cessation of work and functional disability in patients.
- › The *STarT Back tool* has excellent predictive quality for disability.
- › The *Orebro tool* has excellent predictive quality for absenteeism from work.
- › The *Expanded Chronic Pain Risk Score* has excellent predictive capacity for pain.
- › **Practical guides** and **algorithms** on treating back pain can steer professionals in their daily practice.

**Organizational conditions:**

- › **Seven care pathways** have been identified, including three based on risk stratification, two on the implementation of specialized clinics for the management of patients who are at risk for chronification, one involving the creation of the position of Care Coordinator who will refer patients to specialized services within the community, and another presenting a theoretical model promoting the involvement of a clinical team to support the attending physician.
- › An **active, multifaceted implementation strategy of a practical guideline**, including outreach visits by trained physiotherapists, the production of quality reports and including the *STarT Back* tool in the patient's electronic record has helped to reduce the number of referrals to specialized care.

**Clinical conditions:**

The prognostic factors that are most associated with the risk of chronification of non-specific back pain in adults are **psychological** (anxiety, depression, etc.), **cognitive and behavioral** (avoidance of activities or movement).

## REFERENCES

- Haute Autorité de Santé – HAS, 2019. Prise en charge du patient présentant une lombalgie commune. France, HAS, 178p.
- Levesque, J-F., Descôteaux, S., Demers, N. & Benigeri, M. (2014). Mesurer les caractéristiques organisationnelles des soins de santé de première ligne : une étude de repérage des items utilisés dans les questionnaires internationaux. Institut National de santé publique, Gouvernement du Québec, 147p.
- Renaud-Gagnon, L., Demers, P. & Gilbert, M. (2017). Guide d'accompagnement pour le déploiement d'une offre de service de 1<sup>re</sup> ligne en santé mentale adulte (SMA). Montréal, Centre national d'excellence en santé mentale, 36p.
- St-Amant, G & Renard, L. (2003). Aspects théoriques d'un cadre de développement des capacités organisationnelles. Documents de travail, 29p.

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