

CADTH RAPID RESPONSE REPORT: REFERENCE LIST

Activity Pacing Interventions for Chronic, Non-Cancer Pain: Clinical Effectiveness and Guidelines

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Research Questions

1. What is the clinical effectiveness of activity pacing programs or interventions for chronic, non-cancer pain?
2. What are the evidence-based guidelines regarding activity pacing for chronic, non-cancer pain?

Key Findings

One randomized controlled trial and one non-randomized study were identified regarding the clinical effectiveness of activity pacing programs or interventions for chronic, non-cancer pain. No evidence-based guidelines were identified regarding activity pacing for chronic, non-cancer pain.

Methods

A limited literature search was conducted by an information specialist on key resources including PubMed, the Cochrane Library, the University of York Centre for Reviews and Dissemination (CRD) databases, the websites of Canadian and major international health technology agencies, as well as a focused Internet search. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine’s MeSH (Medical Subject Headings), and keywords. The main search concepts were activity pacing and chronic pain. No filters were applied to limit the retrieval by study type. The search was also limited to English language documents published between January 1, 2015 and January 29, 2020. Internet links were provided, where available.

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

Population	Adults living with chronic non-cancer pain, excluding pregnant patients
Intervention	Activity pacing intervention (individualized program)
Comparators	Pharmacological interventions No treatment (no pacing of activity) Usual care (if usual care is pharmacological interventions only)
Outcomes	Clinical effectiveness (pain reduction, functional performance, quality of life, disability level, safety, global impression of recovery, adverse events)
Study Designs	Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies, evidence-based guidelines

Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports and systematic reviews are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

One randomized controlled trial¹ and one non-randomized study² were identified regarding the clinical effectiveness of activity pacing programs or interventions for chronic, non-cancer pain. No evidence-based guidelines were identified regarding activity pacing for chronic, non-cancer pain.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

No literature identified.

Randomized Controlled Trials

1. Racine M, Jensen MP, Harth M, Morley-Forster P, Nielson WR. Operant learning versus energy conservation activity pacing treatments in a sample of patients with fibromyalgia syndrome: a pilot randomized controlled trial. *J Pain*. 2019 Apr;20(4):420-439.
[PubMed: PM30326271](#)

Non-Randomized Studies

2. Racine M, Sanchez-Rodriguez E, de la Vega R, et al. Pain-related activity management patterns as predictors of treatment outcomes in patients with fibromyalgia syndrome. *Pain Med*. 2019 Oct 18.
[PubMed: PM31626301](#)

Guidelines and Recommendations

No literature identified.

Appendix — Further Information

Systematic Reviews and Meta-analyses

Unclear Comparators

- Guy L, McKinstry C, Bruce C. Effectiveness of pacing as a learned strategy for people with chronic pain: a systematic review. *Am J Occup Ther*. 2019 May/Jun;73(3):7303205061-7303205010.
[PubMed: PM31120836](#)
- Dorsey J, Bradshaw M. Effectiveness of occupational therapy interventions for lower-extremity musculoskeletal disorders: a systematic review. *Am J Occup Ther*. 2017 Jan/Feb;71(1):7101180031-7101180011.
[PubMed: PM28027040](#)

Randomized Controlled Trials

Mixed Intervention

- Kos D, Duportail M, Meirte J, et al. The effectiveness of a self-management occupational therapy intervention on activity performance in individuals with multiple sclerosis-related fatigue: a randomized-controlled trial. *Int J Rehabil Res*. 2016 Sep;39(3):255-262.
[PubMed: PM27182847](#)

Unclear Comparator – Usual Care Not Specified

- Murphy SL, Kratz AL, Kidwell K, Lyden AK, Geisser ME, Williams DA. Brief time-based activity pacing instruction as a singular behavioral intervention was not effective in participants with symptomatic osteoarthritis. *Pain*. 2016 Jul;157(7):1563-1573.
[PubMed: PM26963847](#)

Non-Randomized Studies

Unclear Comparator

- Thompson DP, Antcliff D, Woby SR. Symptoms of chronic fatigue syndrome/myalgic encephalopathy are not determined by activity pacing when measured by the chronic pain coping inventory. *Physiotherapy*. 2018 Mar;104(1):129-135.
[PubMed: PM28843450](#)