# The Impact of Timing of Physical Therapy for Acute Low Back Pain on Health Services Utilization: A Systematic Review

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## Background

- **Low back pain (LBP)** is disabling and costly.
- **Physical therapy (PT)** for acute LBP has been associated with improved outcomes and reduced future **health services utilization (HSU)**, such as advanced imaging, radiographs, spinal injections, lumbar surgery, medication use, physician visits, emergency or urgent care, and cost.
- **Timing of PT** for acute LBP may impact the extent to which resources are utilized.

## Purpose

To synthesize literature about the impact of early PT for acute LBP on subsequent HSU, compared to delayed PT or usual care.

## Methods

- **PRISMA guidelines** were followed.
- **Data Sources**: Peer-reviewed electronic databases (MEDLINE, CINAHL, and EMBASE) were searched from inception to May 2018.
- **Inclusion Criteria**:
  1. Participants: ≥ 18 years old, LBP within 6 months prior to index date.
  2. One group received early access to PT.
  3. Comparison groups received delayed PT or usual care.
  4. Studies assessed future HSU and cost.
- **Exclusion Criteria**:
  1. Participants had red flag conditions, neurological symptoms, or prior back surgery.
  2. Isolated PT intervention or interdisciplinary.
  3. Case report, editorial, or qualitative studies.

## Results

### Impact of Early PT vs. Delayed PT on HSU

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### Impact of Early PT vs. Usual Care on HSU

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### Definitions

- **Early PT**: all were within 30 days of index.
- **Delayed PT**: mixed.
- **Usual Care**: no PT received.

### Early vs. Delayed PT (6 studies):

- 5 studies: early PT ↓ future HSU.
- 1 study: no difference in physician visits.

### Early vs. Usual Care (5 studies):

- 1 study: early PT ↓ future opioid prescriptions.
- 3 studies: early PT ↑ HSU.
- 1 study: no difference in HSU.

## Conclusions

- Early PT for acute LBP may be more cost-effective than delayed PT.
- Patients with acute LBP who participate in early PT may be part of a care-seeking group that is more active in seeking care compared to patients who receive usual care.

## Clinical Relevance

- Early PT for acute LBP has the potential to reduce HSU and cost, reduce opioid use, and improve health care efficiency.

## Acknowledgements / References

- Thank you to Leila Ledbetter, MLIS for her assistance with the database search.