



Active Rehabilitation of Work-Related Low Back Conditions

RON WILCOX, DC

INDUSTRIAL INSURANCE CHIROPRACTIC ADVISORY COMMITTEE

Active Rehabilitation of Work-Related Low Back Conditions

- ▶ Systematic review of the research pertaining to the subject
- ▶ Also: Shoulder, Carpel Tunnel, Epicondylitis, Documenting Functional Improvement
- ▶ All organized similarly

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Purpose

This document provides the following: concise summaries of published literature regarding effectiveness of commonly used approaches for rehabilitation of low back pain conditions; key management recommendations for active rehabilitation of occupational low back pain based on the committee's review and synthesis of evidence and practical application approaches; practical clinical resources including outcomes and progress tracking surveys and forms (useable without licensing/charge in practice for non commercial use).

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Development

This document was developed by the Industrial Insurance Chiropractic Advisory Committee (IICAC) of the Washington State Department of Labor and Industries. It offers a summary of current evidence for practitioners. It is not a practice guideline, standard of care, claim management standard, or a substitute for clinical judgment in an individual case. This practice resource does not change L&I coverage or payment.

A comprehensive search of available scientific literature on active rehabilitation procedures for low back conditions was conducted by the Policy, Practice, and Quality (PPQ) Subcommittee of the IICAC and department staff during Fall 2010. Literature was reviewed, assessed for relevance and quality and summaries were drafted by consensus of the subcommittee with expert content input from consultants in March 2011. It was posted for public comment and revision, and approved for distribution by the IICAC in April 2011. This resource is expected to be updated periodically by the IICAC. Interested parties may submit new published scientific report for consideration for future revisions.

This and other practice resources are available for download at the State of Washington Department of Labor & Industries website. Contact information for public input and submission of studies for future revisions is available there.

<http://www.lni.wa.gov/ClaimsIns/Providers/Treatment/IICAC/>

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PRACTICAL APPLICATION POINTS

- Acute and sub-acute conditions appear to respond better to light activity which may include light duty.
- Chronic pain (>3 months) appears to do better with more intense activities or programs.
- Any oversight, such as activity diary or in-office performance of exercises, is more effective than advice or consultation alone.
- Any activity, even walking, is better than doing nothing.
- No particular exercise regime has been shown to be any more effective than another.

Work-Related Low Back Conditions

Low back pain accounts for the majority of occupational injury claims. This resource focuses on active rehabilitation options for low back pain of “mechanical” origin (e.g., soft tissue strains and sprains, non-specific low back pain, and back pain accompanied by leg pain). It does not address diagnostic or pathophysiological/pain generator models. Proper clinical assessment to rule out “red flags” for serious non-mechanical causes of back pain, such as fracture and neoplasm should be completed prior to considering active rehabilitation. It is assumed that work-relatedness of the low back condition has been established. *Note: This resource does not summarize evidence on other management therapies (e.g. passive modalities, mobilization, ergonomic interventions) beyond reporting results when they were included in intervention/comparison groups in active rehabilitation trials.*

Case Definitions

- Work-related low back conditions typically are causally linked to a specific triggering mechanical event, task, or activity at work. This resource focuses exclusively on active rehabilitation options and assumes the back condition has been accepted as occupationally related.

Evaluation Summary

- Rule out non-mechanical causes of low back pain prior to considering active rehabilitation. Red flags include history of cancer, unexplained weight loss, immunosuppression, prolonged use of steroids, intravenous drug use, urinary tract infection, pain that is increased or unrelieved by rest, fever, significant trauma, bladder or bowel incontinence, and urinary retention (with overflow incontinence). Examination red flags include saddle anesthesia, loss of anal sphincter tone, substantial and/or progressive motor weakness in lower extremities, fever, unremitting vertebral tenderness, and neurologic findings persisting beyond one month.

Intervention Summary

- Most acute and sub-acute back conditions resolve successfully within days to weeks. Less intensive rehabilitation interventions (eg, in-office, short duration PT) are preferred initially for individuals at low risk of developing chronicity (e.g., availability of modified work, good recovery expectations, willingness to increase activity levels and return to normal activities including work, good response to conservative interventions). Studies indicate that intensive programs requiring prolonged patient attendance (eg, work hardening) may hinder recovery during this period.
- Chronic back pain (typically characterized as > 3 months duration) appears to be most responsive to various combinations of motivation, exercise, and pain control. A large variety of aerobic and conditioning approaches have been shown to be helpful as has cognitive self management.

Improvement Progress

- Achieving and monitoring functional progress is central to active rehabilitation. The best overall long term outcomes are associated with even small, but consistent, incremental increases in functional ability (e.g., mobility, return to usual activities including work)

Typical Active Rehabilitation Interventions and Response Thresholds

1-2 wks	3-6 wks	7-8 wks	Beyond 8 wks
<ul style="list-style-type: none"> • Emphasize that increasing activity a little each day speeds recovery . • Identify & address concerns about performing work activities. • Assess baseline functional status with standardized questionnaire. • Prescribe specific activities using a goal-oriented weekly activity diary. • Consider prescribing a specific exercise program, even walking. 	<ul style="list-style-type: none"> • Improvement is best assessed by increasing functional gains, ideally including ability to return to work. • Most low back conditions should achieve good functional and symptomatic response within this time frame. • Inadequate improvement is reflected primarily in inadequate return to normal activities and work. If not achieved, consider more intensive supervised exercise. Screen for underlying psychosocial concerns (e.g., fear avoidance, anxiety, depression) 	<ul style="list-style-type: none"> • Good Improvement: Back to light-regular work. Progressing & mastering in-clinic & mastering home exercises. Effectively implementing prescribed task/ergonomic changes. • Inadequate improvement: Inability to return to light/regular work. Consider specialist referral for clinical or occupational concerns 	<ul style="list-style-type: none"> • Good Improvement: Return to normal activities & function. Progressing back to full or near full duty work activities. • Inadequate improvement: Inability to return to modified or regular work. Consider consultation with occupational health specialist.

PROGRESS CHECKLIST

(Voluntary educational / practice aid. This is not an L&I documentation requirement.)

	Baseline	1-2 wks	3-6 wks	7-8 wks	Beyond 8 wks
ASSESSMENT / PROGRESS	Date: _____	Date: _____	Date: _____	Date: _____	Date: _____
	Leg Pain <input type="checkbox"/> Yes <input type="checkbox"/> No	Leg Pain <input type="checkbox"/> Yes <input type="checkbox"/> No	Leg Pain <input type="checkbox"/> Yes <input type="checkbox"/> No	Leg Pain <input type="checkbox"/> Yes <input type="checkbox"/> No	Leg Pain <input type="checkbox"/> Yes <input type="checkbox"/> No
	Baseline Function Score: _____	Function Score: _____	Function Score: _____	Function Score: _____	Function Score: _____
	Pain Interference 0 1 2 3 4 5 6 7 8 9 10 <i>None</i> <i>Unable to do any activities</i>	Pain Interference 0 1 2 3 4 5 6 7 8 9 10 <i>None</i> <i>Unable to do any activities</i>	Pain Interference 0 1 2 3 4 5 6 7 8 9 10 <i>None</i> <i>Unable to do any activities</i>	Pain Interference 0 1 2 3 4 5 6 7 8 9 10 <i>None</i> <i>Unable to do any activities</i>	Pain Interference 0 1 2 3 4 5 6 7 8 9 10 <i>None</i> <i>Unable to do any activities</i>
	Self-control of pain 0 1 2 3 4 5 6 7 8 9 10 <i>Complete control of pain</i> <i>No control of pain</i>	Self-control of pain 0 1 2 3 4 5 6 7 8 9 10 <i>Complete control of pain</i> <i>No control of pain</i>	Self-control of pain 0 1 2 3 4 5 6 7 8 9 10 <i>Complete control of pain</i> <i>No control of pain</i>	Self-control of pain 0 1 2 3 4 5 6 7 8 9 10 <i>Complete control of pain</i> <i>No control of pain</i>	Self-control of pain 0 1 2 3 4 5 6 7 8 9 10 <i>Complete control of pain</i> <i>No control of pain</i>
Work Status <input type="checkbox"/> Full Duty <input type="checkbox"/> Modified <input type="checkbox"/> None	Work Status <input type="checkbox"/> Full Duty <input type="checkbox"/> Modified <input type="checkbox"/> None	Work Status <input type="checkbox"/> Full Duty <input type="checkbox"/> Modified <input type="checkbox"/> None	Work Status <input type="checkbox"/> Full Duty <input type="checkbox"/> Modified <input type="checkbox"/> None	Work Status <input type="checkbox"/> Full Duty <input type="checkbox"/> Modified <input type="checkbox"/> None	Work Status <input type="checkbox"/> Full Duty <input type="checkbox"/> Modified <input type="checkbox"/> None
INTERVENTION OPTIONS	Function score: from standard survey (eg Roland, Oswestery) Pain Interference: ask, 'In past week, how much has pain interfered with your daily activities?' Self-control of pain: ask, 'In past week, how much have you been able to control/help/reduce your back pain on your own?'	Assess Functional Recovery <ul style="list-style-type: none"> Assess compliance with activity diary goals weekly. Make modifications as needed Recheck function score, pain interference, and ability to control back pain. These scores are sensitive to overall change/improvement. 	Assess Functional Recovery <ul style="list-style-type: none"> Functional score/pain interference Should approach pre-episode capacities Poor/worsening self control scores may reflect underlying psychosocial concern to screen for (anxiety, depression, fear avoidance) 	Continue to Increase Activity <ul style="list-style-type: none"> If progress is less than optimal consider more intensive active rehabilitation including supervised exercise Assess potential cognitive barriers (eg catastrophising, significant fear avoidance, low recovery expectation, depression) and consider appropriate intervention options such as structured multidisciplinary programs that emphasize activation 	
	Discuss Recovery <ul style="list-style-type: none"> Most recover in days to weeks Address concerns with work activity Address Activity <ul style="list-style-type: none"> Avoid prolonged rest, sitting Activity Diary – prescribe specific goals, exercises 	Incrementally Increase Activity <ul style="list-style-type: none"> Goal to maintain normal activities & routines (including work) Revise goals on Activity Diary – increase intensity, frequency, duration as appropriate If referral is made for PT/OT, communicate regularly with therapist to assure care minimizes passive approaches and emphasizes active ones 			
					Patient Name: _____

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- ▶ Created to keep AP's current and informed
- ▶ New Conditions:
 - ▶ Foot/Ankle

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Low Back Vignette