



• **FACT SHEET No. 5**

Interdisciplinary Approaches in Management of Musculoskeletal Pain

Introduction

Interdisciplinary care is defined as treatment provided by multiple providers from different disciplines that integrate care as a team, through frequent communication and common goals.

Epidemiology and Economics

- Interdisciplinary approaches demonstrate greater long-term improvement in comparison to no treatment and single-modality methods.
- Interdisciplinary approaches are significantly more cost-effective than implantation of spinal cord stimulators or implantable drug devices, conservative care, and surgery, even for selected patients.
- Interdisciplinary approaches result in varying degrees of pain reduction, ranging from 14% to 60%, with an average of 20% to 30%. These figures are comparable to the conventional medical management of chronic pain with opioids, which yields an average pain reduction of 30%.
- Interdisciplinary approaches result in approximately a 65% increase in physical activity. In contrast, only a 35% increase is reported in patients receiving conventional medical care.
- Return-to-work rates range from 29% to 86%, with a mean of 66%, whereas conventional medical treatments consistently yield lower rates, from 0% to 42%, with a mean rate of 27%.
- Interdisciplinary approaches, compared to unimodal programs or no treatment, yield the following results: return to work, 68% versus 32%; pain reduction, 37% versus 4%; medication reduction, 63% versus 21%; and increases in activity, 53% versus 13%, respectively.
- There is preliminary evidence that participants with acute low back pain at high risk for developing chronic low back pain disability (CLBPD), who receive an interdisciplinary early intervention treatment program, display significantly more symptom improvement, as well as cost savings, relative to participants receiving standard care. The addition of a work transition component to an early intervention program for the treatment of ALBP did not significantly contribute to improved work outcomes.

Clinical Features

The biopsychosocial approach views pain and disability as a complex and dynamic interaction among physiological, psychological, and social factors that perpetuates—and may even worsen—the patient’s clinical presentation. Psychosocial factors such as abuse, mood disorder, employment disability, poor coping skills, and other psychosocial problems are commonly found in patients with chronic musculoskeletal pain referred to interdisciplinary teams. Chronic pain affects multiple domains of life, and patients with chronic pain therefore require multidimensional assessment and treatment, which is best implemented by an interdisciplinary team.

Interdisciplinary team approaches are outcomes-focused, coordinated, patient centered and goal-oriented

focusing on patient education and cognitive-behavioral changes.

- Treatment should include both individual treatment, where better customization of individual treatment can be achieved, as well as support of a group setting.
- Short- and long-term treatment goals should be discussed and reviewed regularly on an individual basis, with clear discharge plans after completion of formal training.
- Attributes of a well-functioning interdisciplinary team include clinicians working in a collaborative, integrative environment with ongoing open communication between staff as well as appropriate consensus building and conflict resolution
- Common values and group goals are shared by all team members in their interaction with patients, and include promotion of a self-management perspective, relaxation skills training, cognitive restructuring, behavioral activation (i.e., goal setting and pacing strategies), problem solving, skills training, habit reversal (i.e., unlearning maladaptive pain behaviors), and maintenance and relapse prevention
- Such programs can benefit those “who have impairments associated with pain that impact their activity and participation.” They are designed to measure and improve the function of individuals with pain and encourage them to use health care systems and services appropriately.
- The core team typically comprises a pain management physician, a psychologist, a nurse specialist, a physical and occupational therapist, a vocational counselor, and a pharmacist.

Diagnosis and Treatment

- In patients with nonradicular low back pain who do not respond to usual, noninterdisciplinary interventions, it is recommended that clinicians consider intensive interdisciplinary rehabilitation with a cognitive/behavioral emphasis (strong recommendation, high-quality evidence). Chronic back pain is a complex condition that involves biologic, psychological, and environmental factors. For patients with persistent and disabling back pain despite recommended noninterdisciplinary therapies, clinicians should counsel patients about interdisciplinary rehabilitation (defined as an integrated intervention with rehabilitation plus a psychological and/or social/occupational component) as a treatment option.(Chou)
- In patients with nonradicular low back pain, common degenerative spinal changes, and persistent and disabling symptoms, it is recommended that clinicians discuss risks and benefits of surgery as an option (weak recommendation, moderate-quality evidence). It is



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recommended that shared decision-making regarding surgery for nonspecific low back pain include a specific discussion about intensive interdisciplinary rehabilitation as a similarly effective option, the small to moderate average benefit from surgery versus noninterdisciplinary nonsurgical therapy, and the fact that the majority of such patients who undergo surgery do not experience an optimal outcome (defined as minimum or no pain, discontinuation of or occasional pain medication use, and return of high level function).(Chou)

- The initial screening of the patient by a member of the core team determines which members of the team will be needed for a complete assessment of the patient.
- The assessment should include all major outcome domains—pain, physical functioning, and psychological, social, and vocational functioning—using reliable and valid instruments that preferably are sensitive to change.
- After this evaluation, the entire core team develops a comprehensive treatment plan.
- The team tailors the care plan according to the individual needs of the patient, with a focus on achieving measurable treatment goals that are established with the patient.
- Therapeutic goals for patients with musculoskeletal pain are generally multifaceted. Some of the most common goals are to (1) reduce pain, (2) improve function, (3) permit return to work, (4) resolve medication issues, and (5) reduce health care utilization.

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