

Time to Align Coverage with Evidence for Treatment of Back Pain



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Despite improved knowledge about the benefits and harms of treatments for chronic back pain in the past several decades, there is a large and consequential mismatch between treatments found safe and effective and those routinely covered by health insurance. As a result, care for back pain has, if anything, deteriorated in recent decades—expenses are higher, harms are greater, and use of ineffective treatments is more common. Deficiencies in health care delivery processes and payment models are centrally involved in the failure to improve care for back pain. A key step for accelerating progress is changing insurance coverage policies to facilitate use of the safest and most helpful approaches while discouraging riskier and less effective treatments. Relatively simple changes in reimbursement policies may minimize harm and improve quality of life for many patients with chronic back and similar pain syndromes. Such changes might also reduce health care expenditures because the costs of treatments currently covered by insurance and their associated harms may well outweigh the costs of the relatively safe and effective treatments recommended by current guidelines but poorly covered by insurance. There is no justification for continuing the status quo—patients and clinicians deserve better.

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When we began our careers, devoted largely to improving care for back pain, there was scant evidence to support improvement strategies. Now, more than 30 years later, the evidence base is stronger and provides guidance for improving care. We now know that psychological and social factors as well as physical factors affect patient outcomes; remaining active promotes recovery; chronic pain can cause morphologic and physiologic changes in the brain; and multiple non-

pharmacological treatments such as acupuncture, cognitive behavioral therapy, and yoga are useful options recommended by respected guidelines.

We have also learned that some common tests and treatments are ineffective, wasteful, or potentially harmful. The expansion of opioid prescribing for chronic back pain over the past 2 decades contributes to tens of thousands of avoidable deaths and addictions annually.¹ Inappropriate use of costly spine imaging has led to unwarranted tests and procedures to follow-up findings of dubious clinical relevance.² Although trials of epidural steroid injections and spinal fusion surgery demonstrate little advantage over non-invasive care for those who have back pain without leg pain, extensive use of these procedures for back pain continues.^{3, 4}

Although patients often cannot judge the technical quality of their care, they have reported lower levels of satisfaction with care from medical doctors than from chiropractors^{5–7} and physical therapists.⁶ Patients' reasons for lower satisfaction with medical care included not receiving clear explanations about the cause of the pain or effective treatment options. Another concern was the caring aspects of management such as feeling the physician listened, took their pain seriously, and cared about what happened to them after the visit.^{6, 7}

Thus, there are significant deficiencies in both the technical and caring aspects of back pain management. Despite an expanding knowledge base, clinician-friendly guidelines, and recommendations for communicating with patients, care for back pain is, if anything, worse than when our careers began. Expenses are higher, harms are greater, and use of ineffective treatments is more common.^{8, 9} The health care system seems unable to make the changes necessary to substantially improve care and reduce back-related suffering and dysfunction. This failure has come at a high cost in reduced worker productivity, greater disability compensation, and ineffective medical care, as well as patient suffering.

High-profile policy initiatives, such as the 2011 Institute of Medicine (IOM) Report "Relieving Pain in America,"¹⁰ have attempted to address this problem. The report identified multiple barriers to improving care and concluded "addressing the nation's enormous burden of pain will require a cultural transformation in the way pain is understood, assessed, and treated." To overcome existing barriers, the report recommended creating a national strategy for pain prevention,

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treatment, management, and research; improving education on pain management for health professionals; revising reimbursement policies to foster coordinated and evidence-based pain care; and developing programs to transform patient and public understanding of pain. A recent *Lancet* article by 31 international back pain experts identified similar barriers to improving care for back pain in other high-income countries.¹¹ Given the minimal impact of the 7-year old IOM recommendations, it seems unrealistic to expect that the *Lancet* recommendations will have much impact without addressing the barriers to implementation.

The barriers to change identified in the IOM and *Lancet* reports make it clear that deficiencies in our health care delivery and payment models are centrally involved in the continued failure to improve care for back pain. A recent study found a wide variation in coverage of non-pharmacologic treatments for low back pain possibly driven by the absence of best practices, difficulties developing and revising coverage policies, and payers' economic incentives.¹² Rather than an integrated and coordinated evidence-based approach to addressing clinical problems, we have a large, disorganized, and ever-changing group of stakeholders with diverse beliefs and interests and little incentive or capacity to coordinate their efforts. This has resulted in some ineffective or harmful treatment options being readily available and covered by insurance, while safer and more effective treatments are often unfamiliar to clinicians, not covered by insurance, and unavailable to patients.

A critical first step for accelerating progress is changing insurance coverage policies to promote the use of the safest and most helpful approaches for back pain while discouraging use of riskier and less effective treatments. Such action by payers could have a dramatic beneficial effect on clinical practice and patient outcomes. Concomitant physician and patient education would support shared decision-making and patient satisfaction.

Payers may be understandably uncomfortable making significant coverage changes without evidence that newly covered treatments are safe and effective, and will not substantially increase their costs. Recent American College of Physicians guidelines for back pain recommend several non-pharmacological treatments as first-line care for chronic low back pain, based on extensive review of the evidence for effectiveness and safety.¹³ These treatments include some often not covered by insurance, such as acupuncture, massage, yoga, and mindfulness. While there is only modest evidence for the cost-effectiveness of these treatments, a recent economic analysis found that acupuncture, mindfulness, cognitive behavioral therapy, and yoga were intermediate or high-value treatments for chronic back pain.¹⁴ Furthermore, the analysis found that the additional cost of implementing mindfulness, yoga, or tai chi for a large population would increase per member per month costs by less than \$0.23, about 5% of the costs of analgesic and anti-inflammatory medications. Although some of these

treatments may be used in the long term for recurring pain, they are safer and generally less expensive than spine surgery, a course of epidural steroid injections, and the sequelae of long-term opioid prescriptions.

For their part, clinicians may be reluctant to prescribe treatments whose mechanisms of action seem unfamiliar because they derive from a biopsychosocial concept of chronic pain rather than from the predominantly biomedical paradigm emphasized in medical education. However, a growing body of evidence suggests that chronic non-cancer pain may often be perpetuated by changes in the central nervous system (CNS) (central sensitization) more than by peripheral nociceptive stimulation.¹⁵ Though our understanding of this phenomenon is evolving, "mind-body" treatments may address these CNS changes in ways that surgery, injections, and analgesics do not. As the interconnectedness of mind and body becomes more widely understood, clinicians and their patients will be better prepared for productive discussions of treatment options including psychosocial components. This will provide clinicians with new clinical strategies to reduce the suffering of their patients with pain.

Because there is no clear evidence that any of the mind-body treatments found helpful for back pain are more effective than others and we lack a reliable strategy for identifying the best treatment for each patient, offering patients a choice of several options may be the best strategy. Expanded coverage for these treatment options will provide patients and clinicians more and safer choices. Accessibility of these treatments is often limited, so the benefits of better insurance coverage may initially be limited. However, improved coverage will provide an incentive for more clinicians to deliver these services.

Despite the barriers, some efforts at system change are underway and may help to clarify the effects of changes in insurance incentives. The Virginia Mason Medical Center in Seattle collaborated with a major insurance carrier to increase the use of physical therapists for treating back pain and to decrease the use of spinal imaging. It appears that there were resulting cost savings and improved patient outcomes.^{16, 17} The Oregon Health Authority has instituted changes to its Medicaid program that now covers cognitive behavioral therapy, physical therapy, spinal manipulation, acupuncture, yoga, and massage, and greatly limits coverage of opioids for back pain.¹⁸ Evaluation is underway, but results are not yet available.

Over the past 30 years, we have come to believe that relatively simple changes in reimbursement policies may save lives and reduce the suffering of many patients with chronic back and other pain syndromes. The costs of treatments currently covered by insurance along with costs of their associated harms may well outweigh the costs of safer and effective treatments that are recommended by current guidelines but not covered by insurance or that are inaccessible due to a paucity of providers. There is no justification for continuing the status quo—patients and clinicians deserve better.

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Compliance with Ethical Standards:

Conflict of Interest: Dr. Deyo receives royalties for authoring topics on back pain for UpToDate. All remaining authors declare that they do not have a conflict of interest.

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