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Tailoring Chronic Pain Care by Brief Assessment of Impact and Prognosis

Michael Von Korff, ScD

Group Health Research Institute, Seattle, Washington.

In 2011, an Institute of Medicine report, *Relieving Pain in America*, called for a cultural transformation of pain care.¹ The report concluded that “healthcare providers should increasingly aim at tailoring pain care to each person's experience, and self-management of pain should be promoted.”^{1(p1)} Medical treatments are often less than adequate for patients with chronic musculoskeletal pain. Ordering more diagnostic tests of uncertain value, prescribing more prescription analgesics with poorly understood risks and benefits, and providing more surgical procedures, nerve blocks, and epidural injections will not achieve the aims of improved patient outcomes, increased patient satisfaction, and more prudent use of finite health care resources.^{2,3} Rather, we need to help patients with chronic pain resume valued life activities by placing more emphasis on improving quality of life and less on interventions that afford only short-term pain relief with appreciable risks and costs.

Although many interventions for chronic musculoskeletal pain offer modest benefit across patients, there can be profound individual differences in what helps patients effectively manage chronic pain. Patients need care that helps them find safe and effective ways of managing their pain, so they are able to sustain quality of life and valued activities.

Transforming chronic pain care will require more attention to individual patient differences in how and how much pain affects quality of life. An effective strategy to individualize care is to stratify patients by the impact of pain on daily activities and prognostic risk of an unfavorable outcome and to target care accordingly. The risks of poor outcomes are greater among patients with musculoskeletal pain who report more intense pain, greater interference with life activities, pain at multiple body sites, more persistent pain, and negative affect or fears related to their pain condition.^{4,5} Higher-risk patients with an unfavorable prognosis can be helped by care tailored to their needs. For example, psychologically informed physical therapy that addresses obstacles to resuming life activities has been found to improve long-term outcomes among patients with back pain with greater pain impact and a less favorable prognosis.^{6,7} To tailor care by impact and prognostic risk, we need brief assessment tools that are suitable for routine use in primary care clinics. Such tools could target appropriate interventions to patients with the greatest needs, whereas most patients, who are expected to improve and resume normal activities with the passage of time, are likely to be well served by routine primary care that provides diagnostic triage, acute pain management, and guidance regarding self-care.

The evaluation by Mallen et al⁸ of an ultrabrief prognostic risk tool sought to provide an assessment appropriate for the diverse patients with musculoskeletal pain seen in primary care settings. As the authors note, most tools for prognostic assessment of musculoskeletal

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Correspondence: Dr Von Korff, Group Health Cooperative, Seattle, Group Health Research Institute, 1730 Minor Ave, Ste 1600, Seattle, WA 98101 (vonkorff.m@ghc.org).

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pain conditions were designed for specific anatomically defined pain conditions (eg, back, shoulder, or knee pain), yielding a proliferation of site-specific prediction models. A proliferation of scales and prediction models makes application of risk stratification in primary care settings cumbersome. Instead, the authors used generic questions regarding musculoskeletal pain prognosis, assessed at the point of initial care, and incorporated physician judgment into their prognostic model. They followed up study patients for a 6-month period to determine whether accurate prediction of long-term patient-reported pain outcomes was achieved. Their results pose key questions for future research on prognostic assessment of musculoskeletal pain and risk-stratified care.

They found that a generic 3-item prognostic risk tool, in tandem with physician prediction of expected outcome, performed reasonably well in stratifying prognostic risk. Whether condition-specific or generic questions have greater predictive validity and clinical utility are key questions for future research. However, their results suggest that a brief, generic prognostic assessment may be adequate for tailoring care for diverse patients with musculoskeletal pain. The 3 items identified by Mallen et al (pain interference, pain at multiple body sites, and pain duration) have been found to have prognostic value in prior research for diverse pain conditions.^{4,5} Simple, generic questions could make routine prognostic evaluation of diverse patients with musculoskeletal pain more practical and efficient.

This is one of the few studies to assess the predictive validity of a brief assessment administered by the primary care physician at the time of the initial clinical encounter. Future research should seek to replicate the findings and determine whether it is possible to improve prediction of pain outcomes. A possible next step would be to determine whether site-specific prognostic assessments sustain comparable predictive validity when used to predict outcomes for diverse patients with musculoskeletal pain. This study sets a high standard for clinical relevance by integrating brief assessment into the clinical encounter while combining physician prognostic judgment and patient-reported information to predict long-term pain outcomes.

Mallen et al found that the predicted risk of an unfavorable outcome tempered somewhat overly optimistic physician expectations for improvement. More accurate identification of patients at high risk of an unfavorable outcome could improve targeting of interventions over physician prognostic judgment alone. Overly optimistic reassurance that musculoskeletal pain will be improved within a few days or weeks may not help patients who need support and guidance to find more effective ways to manage chronic pain. A realistic appraisal of the likely course of musculoskeletal pain may encourage the patient and physician to discuss factors that influence long-term pain management. These factors may include issues such as depressed mood, avoiding activities for fear of injury, troubling thoughts about the causes and consequences of pain, and life circumstances that affect motivation to resume activities. A brief prognostic assessment can provide a basis for integrating how physical, psychological, and social factors combine to influence long-term pain outcomes.

Prospective studies have found that long-term pain outcomes are uncertain.⁵ Even among patients with severe, persistent pain, many have surprisingly favorable long-term outcomes. Individualizing care by prognostic risk may avoid inappropriate labeling of patients with chronic pain as hopeless or unlikely to improve. Chances of improvement can be increased by evidence-based interventions that support effective chronic pain management. Simple questions to assess prognosis, such as those studied by Mallen et al, are an important part of “tailoring pain care to each person’s experience.” Further research and application in clinical

practice are warranted to better understand the role of risk stratification in improving care of patients with common musculoskeletal pain conditions.

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