

Coping with muscular madness

Back pain is a common, yet complex, condition. Preventing it from becoming chronic is the key to managing costs.

BY ANDREA DAVIS

In a three-month period, about one-quarter of U.S. adults experience at least one day of back pain, according to the National Institute of Arthritis and Musculoskeletal and Skin Diseases. That translates into a lot of employees.

“Musculoskeletal conditions represent 16% of all medical costs,” says Michael W. Rosen, M.D., senior national medical director, clinical content, with OptumHealth Care Solutions. “Total costs for low back pain are estimated to be between \$100 million and \$200 million each year — two-thirds of which are due to decreased wages and productivity.”

Back pain is the No. 2 reason for doc-

tor’s visits (colds rank No. 1), says Dr. Edward Crouch, vice president and national medical director, group benefits, for Liberty Mutual. In addition, musculoskeletal (including back) injuries are the primary cause for both occupational and nonoccupational disability.

It’s this combination of direct costs through workers’ compensation claims and indirect costs through lost productivity and absenteeism that make back pain a serious issue for employers.

“If you look at the total burden of back pain — combined workers’ compensation claims and non workers’ comp — some people estimate that the impacts on work are twice the medical costs,” says Dr. Glenn

Pransky, director of the Center for Disability Research at the Liberty Mutual Research Institute for Safety. “The employer loses a lot in terms of lost work days or lost productivity for people who are at work but not functioning properly.”

Finding the source of back pain is



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often a complicated, time-consuming process that can leave employees frustrated, still in pain and even depressed, particularly if a back problem turns into a chronic condition (defined as pain lasting longer than three months).

No quick fix

Origins of the pain can vary but one of the most common causes of back pain is musculoskeletal — muscles or ligaments are strained or inflamed because of poor posture or incorrect lifting techniques. Other reasons include pinched nerves or disc disease.

The sad thing is there’s no quick fix to back pain, especially once it becomes

chronic. Employees often believe that if they rest and take a few analgesics like ibuprofen to manage their pain, they'll get better. And they will — at least temporarily.

"In general, if you have a muscle spasm or back pain, the worst thing you can do is go to bed," says Dr. Fernando Branco, medical director, Rosomoff Comprehensive Pain Centre. "Because you're not going to resolve the problem, but make your back even less fit."

Dr. Gale Brown, consulting physician in group benefits with Liberty Mutual, agrees. "In my experience, any time you have a back pain problem, the treatment should be active, rather than passive, whether it's chronic or acute," she says. "The patient should have shared responsibility in the recovery with the treating provider."

Improper treatment

The problem occurs when back pain is improperly treated. It never goes away, leading to more doctor visits and increasingly invasive procedures and treatments, including narcotics, nerve blockers, spinal cord stimulators, morphine pumps and surgeries.

"In general, these [invasive procedures] are short-lived, don't treat the cause, and they're very expensive for insurers and employers," says Branco.

"Clinicians erroneously jump to the conclusion that if the pathology is there, it must be causing the symptom. And it just drives unnecessary surgeries and procedures."

A study published in the Journal of the American Medical Association earlier this year found that, among older adults, the rate of complex fusion procedures — complicated back surgery in which at least three vertebrae are fused together — increased 15-fold between 2002 and 2007.

"Surgery seems to be overutilized in this country for nonspecific back pain," says Brown, adding that part of the problem is

that imaging today is so sensitive. "Clinicians erroneously jump to the conclusion that if the pathology is there, it must be causing the symptom. And it just drives unnecessary surgeries and procedures."

In Europe, says Pransky, "they're doing about a third or less as much back surgery as we're doing in the U.S. and they don't have people walking around crippled," he says.

"In fact, our outcomes in treatment of back pain are probably worse than in Europe."

The difference, he adds, is that in Europe "they're using much less technology. The treatment is occurring within a culture that is not as focused on every symptom needing a medical evaluation and a cure. There's a cultural difference that's important that we can't discount."

Early intervention

Educating employees on less invasive procedures and intervening early are two areas where employers can make a difference.

OptumHealth recently launched a program designed to help coordinate care for

patients suffering from musculoskeletal conditions, including prevention, consumer education, conservative treatment options, surgical support and chronic condition management.

Using predictive modeling, the program is able to identify and engage employees who are facing a treatment decision within the next six months for back pain and several other musculoskeletal conditions. The program uses specialized nurses who are trained to coach employees through the decision-making process and explain the risks and benefits of different treatments.

The program's achieved impressive results so far, according to Rosen, with over one-quarter of individuals facing upcoming treatment for a medical condition shifting to a more conservative treatment option than they had originally planned, resulting in a net savings of over \$14 million.

"Once a musculoskeletal condition develops, employees are often overwhelmed with all the treatment options," Rosen says. "Employers should educate workers to help them understand the pros and cons of these options and help them select a course of care that is medically appropriate."

Pransky cites a study in Norway in which people were taught about back pain and that it's just a fact of life.

"They didn't have very high disability rates before, but after this education, especially in the places where the population education was also accompanied by a workplace education program, they found significant decreases in visits to doctors, physical therapists and chiropractors."

Intervening early — before a case of acute back pain turns chronic — is important. From a medical standpoint, "that means no lag times between date of injury and getting them in to the appropriate specialist, using an active and goal-oriented approach rather than a symptom-oriented approach, giving them expectations in terms of recovery times, when they're expected to get better and get back to work and, hopefully, working with employers to return to work."

From an HR standpoint, it means training supervisors and managers to deal with this issue in a positive way. Pransky's team conducted a research project in which it trained supervisors to respond in a positive, empathetic and problem-solving way when workers came to them with a musculoskeletal problem.

"We found that a lot of people didn't feel they needed to go out and see a doctor [after speaking with their supervisor]," he says. "They realized that they would be supported to get over this episode and so they stayed at work. And just in the narrow window of workers' comp claims we found in a controlled study that we had a 25% reduction in total lost time days, just by giving supervisors a training program on how to do this. It was a surprising result."

Case management an option

Referring chronic pain cases to a case management company is another technique employers can use. "The earlier we're engaged in a claim, the better the outcome," says Bill McAweeney, associate vice-president with Paradigm Management Services, a case management company.

Being able to identify those cases that turn into chronic pain, and perhaps even disability, is an extremely complex job. McAweeney admits it can be hard to make the case to employers that they should pay for intensive case management upfront for something that might not even occur.

"There's not a lot of technology and understanding around chronic pain and the factors that drive these cases in the di-

rection that they take," he says. "It's hard for some employers to accept the idea that they're going to pay upfront for something that they're not sure might even happen."

But with an aging population, many employers will be left footing the bill, whether through workers' compensation and medical costs or the indirect costs of absenteeism and lower productivity. Chronic back pain isn't something employers can afford to ignore.

"Chronic pain is like having diabetes," says Branco. "You're never going to be cured, necessarily. You have to constantly manage it, keep yourself fit, manage your weight. These things are not easy. You have to change your whole mindset." —A.D.

Surgery has questionable results

In a recent study in the journal *Spine*, researchers reviewed records from 1,450 patients in the Ohio Bureau of Workers' Compensation database who had diagnoses of disc degeneration, disc herniation or radiculopathy, a nerve condition that causes tingling and weakness of the limbs. Half of the patients had surgery to fuse two or more vertebrae. The other half had no surgery, even though they had comparable diagnoses.

After two years, just 26% of those who had surgery returned to work. That's compared to 67% of patients who didn't have surgery. Researchers also found that there was a 41% increase in the use of painkillers, specifically opiates, in those who had surgery.

"If pain doesn't get better, narcotics are prescribed or pain blockers, injections, nerve blocks, spinal cord stimulators, morphine pumps — all very invasive procedures that are being done more frequently over the past few years," says Dr. Fernando Branco. "They get into a vicious circle of pain that eventually they will find a doctor that will do surgery, even if it's not perfectly indicated for that case."

