

Treatments for Chronic Low Back Pain: A Dramatic Scaling Back of Therapeutic Expectations

Researchers funded by the US Agency for Healthcare Quality and Research (AHRQ) recently updated a major review of the evidence on noninvasive, nondrug treatments for chronic pain, including chronic low back pain. The review by Andrea Skelly, PhD, and colleagues is both enlightening and frustrating. (See Skelly et al., 2020.)

It is enlightening in that it provides a detailed and accurate assessment of the state of the evidence on noninvasive, nondrug treatments. It is frustrating in that it does not reveal *any* panaceas or cures for chronic low back pain. A number of common treatments can lead to small improvements over the short- and medium-term. No treatment led to *large* improvements in chronic back pain.

This review came on the heels of a similar AHRQ review on drug therapies for chronic pain—which found that most drug therapies for chronic back pain provide only small, short-term benefits, which have to be balanced against some obvious risks. (See McDonagh et al., 2020.)

Since most chronic back pain cases don't have an identifiable pain mechanism—or a specific target for invasive interventions—only noninvasive treatments are relevant to the vast majority of cases. So the lack of substantially effective therapies is a huge issue.

The effects of drug- and non-drug treatments for chronic back pain are so modest that the definition of “large” improvements has been redefined over the years. In recent years large improvements in the AHRQ and many other evidence reviews have often been defined as greater than a 20% improvement in pain and/or function. To call a 21% improvement “large” is a stretch from a linguistic perspective. This is an area where back pain appears to have shrunk the meaning of an adjective.

In the recent AHRQ review on noninvasive, nondrug therapies, only three treatments—exercise, yoga, and low-level laser therapy—led to even moderate improvements in pain or function in some subgroups of patients—defined as a 10-20% improve-

ment in pain or disability scores. Several common and popular treatments led only to small improvements (a 5-10% improvement in pain or disability scores): acupuncture, spinal manipulation, massage, psychological therapies, multidisciplinary care, and mindfulness-based stress reduction.

Evidence-based guidelines around the world recommend some of these interventions as first-line or second-line treatments for chronic back pain. And they are certainly superior to harmful usual care, such as opioids, early imaging, and early referrals.

However, some observers suggest that these interventions, with such marginal benefits, shouldn't be conceptualized as effective treatments. Rather, they should be regarded as coping strategies, lifestyle interventions, and self-help measures. And some assert that researchers need to take a fresh

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Disc Surgery and Pain

Patients and healthcare providers alike are confused by the evidence on disc surgery—and the degree to which it relieves pain and disability following a symptomatic disc herniation.

Does disc surgery lead to complete relief of pain and disability? Partial relief? How long does that relief typically last? And do symptoms and disability wax and wane over ensuing years?

For those who fail to gain relief with nonoperative care, disc surgery usually provides an advantage over nonsurgical care—an advantage that lasts for a few months or a few years, depending on how one interprets the evidence from randomized controlled trials and cohort studies.

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Pain and Weather: Uncertainties Persist

People have speculated that weather has a significant influence on musculoskeletal pain for thousands of years.

“Weather has been thought to affect symptoms in patients with chronic disease since the time of Hippocrates over 2000 years ago. Around three-quarters of people living with arthritis believe their pain is affected by the weather. Many report their pain is made worse by the cold, rain, and low atmospheric pressure,” according to Williams G. Dixon and colleagues in *Nature*. (See Dixon et al., 2019)

Several dozen studies have examined the relationship between weather and chronic musculoskeletal pain. So what is the collective message from these studies?

A recent systematic review by Anna L. Beukenhorst and colleagues examined that question. They searched five databases and 43 observational studies that met their inclusion criteria. Most investigations had a longitudinal study design and most were fairly small (fewer than 100 people with chronic pain and related symptoms).

Although two-thirds of the studies reported some kind of association between a weather variable and chronic pain, the review did not support any strong take-home messages.

“Because of various limitations to study quality, it has not been possible to reach a robust conclusion to the age-old question whether the weather influences pain. The best that we can say, based on studies that did not find an effect or reported very small effect sizes, is that if an association exists, it is not likely to be strong. Future studies can build upon the existing body of literature by increasing their ability to detect an association between weather and pain if one exists yet reducing the probability of spurious findings, specifically by increasing power and reducing noise,” they added.

Beukenhorst et al. did make recommendations on improving the design of studies on weather and pain (See Beukenhorst et al., 2020):

- Studies in this area need larger sample sizes: “Most studies had fewer than 100 participants, and few studies had more than 300 participants. Because patients’ daily pain can be affected by nonweather factors (e.g., medication intake, physical exercise, and sleep quality), a larger sample size is required to detect possible associations.”
- Studies should look at a variety of factors that might influence results.
- Researchers should carefully match pain measures to study design.
- Researchers should observe participants though a full range of weather types and seasonal exposures.
- “Researchers should consider multicollinearity when performing multivariable analyses. Investigating strongly related weather variables would violate the assumption of independent exposure variables.”

[Editor’s note: “Multicollinearity occurs when independent variables in a regression model are correlated. This correlation is a problem because independent variables should be independent. If the degree of correlation between variables is high enough, it can cause problems when you fit the model and interpret the results,” according to a definition at a popular statistics blog. (See Frost, 2020.) This is a particular hazard in weather studies, where many weather variables may be interrelated.]

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Women Surgeons Much Less Likely Than Males to Have Lucrative Financial Relationships With Industry

Achieving gender equality is still an uphill battle in orthopedic surgery and spine surgery. Women compose half of medical school classes and 35% of active physicians in the United States, yet remain lamentably scarce in most surgery fields—especially in orthopedics, neurosurgery, and spine surgery. In 2015, women made up only 14.8% of surgical residency programs in orthopedics, according to a 2018 study by Mary I. O'Connor, MD. According to O'Connor, women made up only 3.3% of the adult spine surgery field. (See O'Connor, 2018.)

A recent review in *JAMA Surgery* pointed out that the recruitment of women into surgery is increasing. “However, obstacles to career development for women surgeons, including residency/fellowship support, mentorship/sponsorship, leadership, work-life balance, and pay equity remain. More importantly, gender discrimination continues, originating from conscious and unconscious bias, which is remedied only by recognition and deliberate correction,” according to cardiovascular surgeon Elizabeth H. Stephens, MD, and colleagues. (See Stephens, 2020.)

The paucity of women in orthopedic surgery has led a broad variety of inequities. One that has come under scrutiny recently is the fact that women surgeons are struggling to develop consulting relationships with device, drug, and technology companies. These are relationships which could have a major influence on the entire orthopaedic surgery field. Industry, needless to say, is being deprived of female perspectives on the evaluation and management of orthopaedic problems. Having a diversity of opinions and approaches is vital for any field of medicine.

A recent study from the Hospital for Special Surgery in New York by G.S. Ray et al. looked at sex disparities in financial relationships with industry and found glaring differences in compensation. (See Ray et al., 2020.) This was particularly acute in spine surgery, where the average male spine surgeon received twice the amount of industry payments compared with female peers. This is not surprising to anyone in the spine field, where women have had to struggle to enter the field—and to deal with the long hours, heavy workload, and what some consider a male-centered culture. (See Ray et al., 2020.)

“Orthopedic surgery is historically a male-dominated specialty, with women

comprising only 6.5% of AAOS members. However, a growing number of women are entering training programs and now represent about 13% of orthopedic residents,” said senior author A. Holly Johnson. “As the number of female orthopedic surgeons increases and efforts are made to establish workforce equality, it’s imperative to understand any disparities that may exist. We hypothesized that men receive a higher proportion of royalties and consulting fees than women after adjusting for the number of men and women in the orthopedic workforce.”

And the hypothesis of the research team proved to be correct. They looked at data on financial relationships with industry from the Open Payments Database of the Centers for Medicare & Medicaid Services, focusing on payments for royalties, licensing, and consulting fees from 2016 through 2017.

The found that industry payments to orthopedic surgeons totaled more than \$700 million in these years. And there were notable sex disparities in payments. Roughly 11% of orthopedic surgeons received 88% of payments. And 88% of this group were male and only 2% women.

The average male orthopedic surgeon received more than five times the amount paid to female surgeons. Not surprisingly, surgeons with more years of service in the profession were more likely to receive payments—and more substantial payments—than their less experienced peers.

Ray et al. offered several potential explanations for these financial disparities:

- Men may be more inclined to seek industry relationships and employ a more egocentric philosophy in financial negotiations.
- Women may simply *not* be invited to work with industry due to the male-dominated culture of the field.
- Senior surgeons—almost all of whom are men—often introduce their mentees and residents to industry contacts. Women may lack these relationships and subsequent opportunities.

However, as the field embraces more women, it is important to overcome these disparities.

“Recent studies have demonstrated that women are grossly underrepresented in



positions of leadership within the field of orthopedics,” Johnson noted. “It is possible that the low number of women in leadership positions contributes to a lack of opportunities to work with industry to advance the field.”

As the number of women entering the specialty of orthopaedics rises, addressing inequities is of paramount importance, according to the study authors. “As we promote equal and fair opportunities within the workplace for all orthopedic surgeons, we must ensure that resources are equally and fairly distributed,” they noted. “This responsibility should be shared among surgeons, industry partners, hospital administrators and government officials. Only with concerted and directed efforts will we ensure that financial incentives and research funding are allocated based on merit rather than gender or race.”

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References:

- O'Connor MI, Where are all the women?, *Journal of Bone and Joint Surgery*, 2018; 100(4):e26. doi:10.2106/JBJS.17.01501.
- Ray GS et al., Gender disparities in financial relationships between industry and orthopedic surgeons, *Journal of Bone and Joint Surgery*, 2020; 102(4):e12. doi:10.2106/JBJS.19.00669.
- Stephens EH et al., The current status of women in surgery: How to affect the future [published online ahead of print July 8, 2020], *JAMA Surgery*; doi:10.1001/jamasurg.2020.0312.

Extensive Conflicts of Interest Between Medical Societies—Including Spine Societies—and Industry

A recent study found extensive conflicts of interest (COIs) between the leaders of professional medical societies and industry in the United States.

“Almost three quarters of the leaders of 10 influential professional medical associations in the US, representing and educating doctors working across the most common and costly diseases areas, had financial relationships with pharmaceutical and device manufacturers,” according to Ray Moynihan, PhD, from Bond University in Australia and colleagues. (See Moynihan et al., 2020.)

“These powerful ... groups have enormous influence in the US and globally, including over the definitions of disease which determine who’s healthy and who’s sick,” said Moynihan in a statement from *BMJ* accompanying the study.

“It’s basic common sense that these leaders should be free from financial ties to companies which stand to gain enormously from the work of these medical associations,” he added.

However, eliminating these COIs would appear to be a steep uphill battle.

The COIs were especially prevalent among societies that have a major influence on the management of spine and back problems.

According to Moynihan et al., 61% of the leadership of the American College of Physicians, 75% of the leaders of the North American Spine Society, 88% of leaders at the American College of Rheumatology, and 93% of the leadership of the Orthopedic Trauma Association have financial ties with industry.

This is a timely study of an enormously important topic. As the coronavirus disease-2019 (COVID-19) pandemic spreads around the world, there is a likely to be a significant reorganization of medical services. And it might be possible to substantially reduce or eliminate financial COIs that may be biasing whole areas of medicine.

One major reason for eliminating conflicts-of-interest in professional societies is that the primary allegiance of drug and device makers is not the health and welfare of patients and healthcare providers. The main priority for these companies along with other commercial groups is to increase revenues and profits for their investors and shareholders—through increased sales,

rising prices, and gaming the medical system to maximize return on investment.

Physicians, patients, and industry groups all have separate priorities. And there should be tension among these groups rather than close alliances. Physicians and other healthcare providers need to remain fiercely independent, so they can provide checks and balances against industry. If large segments of physicians and professional groups have financial conflicts, it will be hard to rein in exorbitant and rising healthcare costs—and improve the cost-effectiveness of US medical care.

Physicians and their professional societies need to remain fiercely independent, so they can provide checks and balances with regard to industry initiatives. If large segments of physicians and professional groups have financial conflicts with industry, it will be difficult to rein in exorbitant and rising healthcare costs—and improve the cost-effectiveness of US medical care.

Financial Ties May Promote Overtreatment and Ineffective Treatment

Could these COIs have a relationship to the rapid growth in the costs of back pain treatments in recent years? Do these ties promote overdiagnosis and overtreatment? Do they bias the practice of medicine? It is hard to imagine that they do not, because the costs of back and neck care soared from \$37 billion in 1996 to \$135 billion in 2016. (See Dieleman et al., 2020.)

This occurred over a period in which there was no obvious improvement in the



prevalence of back pain or back pain-related disability—suggesting that this is a field engaged in massive overtreatment, ineffective treatment, or both.

“As others have observed, guidelines from these professional medical associations [i.e. all the associations covered in this study] frequently call for greater use of health care services, and financial independence from commercial interests is doubly desirable if we are to tackle the problems of overuse and overdiagnosis,” Moynihan and colleagues explained.

An editorial by orthopedic surgeon Jake Checketts, MD, and psychiatrist Matt Vassar, MD, suggested it is time to act to rein in these potential conflicts. They acknowledged that there is no single cookie-cutter approach that can be applied across societies and across medical fields. However, even incremental improvements would be beneficial. (See Checketts and Vassar, 2020.)

They proposed five main actions:

1. Each association must take the initiative to evaluate its present conflicts using the Open Payments database.
2. Associations should alter their recruitment processes to yield balanced and diverse groups of physician leaders largely free from financial COIs.
3. They called for the creation of standards for promoting medical associations that are free from financial COIs, similar to the framework within the Institute of Medicine’s standards for producing trustworthy unconflicted clinical practice guidelines.
4. They pointed out that greater reliance on the Sunshine Act and Open Payments database in the United States (and elsewhere for countries with similar data) could eliminate the need

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for the traditional “honor system” of financial self-disclosure, which is ineffective and inaccurate at best.

- They proposed that all medical associations, guideline groups, and policy makers provide links from their documents and websites to the Open Payments data for each US-based physician contributor. Such links would make it easier for anyone, including patients, to evaluate risk of bias.

For societies that are unwilling to rein in conflicts in their leadership ranks, one intermediate step might be useful. Societies that allow conflicts of interest among their board members and leadership could develop parallel boards of nonconflicted members. And then see to what extent the two boards agreed on major society initiatives.

Study of COIs in the Most Expensive Areas of US Medicine

Moynihan and colleagues studied the nature and extent of financial relationships between leaders of professional societies and the drug and device industries in the 10 most expensive areas of US medicine.

They asked opinion leaders in these fields to identify the most influential professional medical associations in these 10 fields.

They defined the leaders of these societies in the following way: “Leaders were

defined as members of the association’s overarching body or predominant leadership entity, such as a member of the board or governing council but not of subcommittees. We included members for the current year of service (2019) and two years previously.”

Two members of the research team then identified industry-related payments to these leaders through the Open Payments database at the Centers for Medicare & Medicaid Services (CMS).

They then categorized the financial relationships by nature and type. “General payments include but are not limited to consultancy, royalties, and hospitality. Research payments include those where the company making the payment names the individual doctor as primary recipient, and payments to institutions, where the doctor is named as a principal investigator on the research,” according to Moynihan and associates.

Overall, 72% of the leaders of these societies had financial relationships with industry. Eighty percent of leaders with MD or DO degrees had financial ties. The total of the payments to these leaders was \$130 million, with a median payment to each leader of \$31,805.

“General payments, including those for consultancy and hospitality, were \$24.8 million and research payments were \$104.6 million—predominantly payments to academic institutions with association leaders named as principle investigators,” the study noted.

There were dramatic differences in payment levels between and among fields of medicine. “Variation was great among the associations: median amounts varied from \$212 for the American Psychiatric Association leaders to \$518 000 for the American Society of Clinical Oncology.”

“The largest research payments flowed to leaders of the American Society of Clinical Oncology (\$54 million) and the American College of Cardiology (\$21 million). The largest general payments—which included fees for consultancy, speaking, royalties, and other payments—were given to leaders of the North American Spine Society (\$9.5 million) and the Orthopedic Trauma Association (\$4.7 million).”

Disclosures: None declared.

References:

- Checketts J and Vassar M, Financial relationships between leaders of US medical societies and industry, *BMJ*, 2020; 369:m1811. doi:10.1136/bmj.m1811.
- Dieleman JL et al., US health care spending by payer and health condition, 1996-2016, *JAMA*, 2020; 323(9):863–84.
- Moynihan R et al., Financial ties between leaders of influential US professional medical associations and industry: Cross sectional study, *BMJ*, 2020;369: m1505. doi:10.1136/bmj.m1505.

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look at this entire area. (See further comments at the end of this article.)

The outcomes of these treatments will be a disappointment to patients and providers alike. How many patients with vexing chronic low back pain would visit a health-care provider to access a treatment costing real money that might lead only to a 5% or 10% improvement in their chronic pain?

It is easy to forget that not that long ago—at the beginning of the evidence-based treatment movement in the 1990s—proponents of various therapies believed them to be curative, or at least substantially effective in the management of both acute and chronic back pain.

It is no exaggeration to say that in the mid-1990s, providers of various therapies waited with bated breath for the results of definitive randomized controlled trials. They anticipated dramatic treatment effects, only to have their hopes dashed—and dashed repeatedly. The last three decades have seen a major scaling down of expectations regarding treatments for nonspecific chronic low back pain in randomized controlled trials, systematic reviews, and evidence-based guidelines.

If people living in the early 1990s were to be catapulted into the year 2020, they might look at the evidence on treatments for chronic low back pain and utter the sentence “The emperor has no clothes.”

Many healthcare providers object strenuously to the conclusion that their favored treatments have meager benefits in RCTs. They often respond to evidence reviews

with the vehement declaration: “My patients get better.” But these are the types of evidence—along with the results of high-quality observational studies—that healthcare systems and third-party payers use to make reimbursement decisions. Everyone has to take them seriously.

It is important to observe that some patients with chronic back pain do make good recoveries. But, given the available evidence, these recoveries may not stem largely from specific treatments. Other factors come into play: the variable course and trajectory of chronic back pain, social and economic influences, placebo and other non-specific effects, expectations, and the “healing” capabilities of some providers.

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Telehealth Interventions for People With Pain and Substance Abuse Problems: Major Priority

Hundreds of thousands—arguably millions—of US residents are grappling with chronic pain problems compounded by addiction and dependency issues. The coronavirus disease-2019 (COVID-19) disruption of medical treatment may have a terrible impact on many of their lives.

As many as two million Americans have substance abuse disorders, many of which stemmed from the inappropriate treatment of chronic pain with opioids. And an estimated eight million US residents are on long-term opioid therapy. Many of these patients are likely to develop addiction and complex dependency issues. So these will be ongoing problems across US society for years and perhaps decades.

In the past, almost all screening for and treatment of substance abuse problems occurred on a face-to-face basis. However, many programs based on face-to-face treatments will have to give way to telehealth and other remote interventions.

Unfortunately, the US healthcare system is woefully unprepared for this transformation. And before the pandemic there appeared to be no forward planning on how to deal with this issue in a crisis setting. This is another example of the world being caught flat-footed by a pandemic that was eminently *predictable*.

A recent essay in *JAMA* offered some advice on how to facilitate both the remote treatment of substance abuse problems and

research on this pressing issue. “Telehealth increases the availability and reach of treatments, but it has been underused and understudied in patients with SUDs [substance use disorder],” according to Lewei Lin, MD, and colleagues in *JAMA Psychiatry*. (See Lin et al., 2020.)

They noted that temporary legal and regulatory changes have reduced barriers to telehealth consultations for substance abuse problems. These have facilitated remote medication-assisted treatment and facilitated insurance coverage and reimbursement for it.

However, Lin and colleagues pointed out there is a pressing need for new guidelines on patient-centered, evidence-based addiction and dependency care—and its delivery via telehealth methods. There is also a need for facilitating telemedicine prescribing of controlled medications employed to treat addiction/dependency—particularly buprenorphine for opioid use disorders. Wider availability of buprenorphine could save many lives. However, not enough prescribers are licensed to provide buprenorphine services or to deliver them at a distance.

And there is also an urgent need for additional resources and tools to help substance abuse patients deal with the difficult stresses imposed by the COVID-19 pandemic.

As Lin et al. put it, “The stress and uncertainty brought on by COVID-19 emphasize the importance of having resources, including psychotherapy treatment, case management,

crisis support, and community supports, available. Making resources accessible online and adapting evidence-based psychotherapy treatments to telehealth is key and would also support care after COVID-19.”

“Telehealth can uniquely address capacity shortages, but much work is needed to support large-scale dissemination and adoption. In the future, it will also be critical to understand the effects on treatment uptake and on patient outcomes to assess the quality of care delivered. Lifting of restrictions during COVID-19 is helpful, but many of these guidelines pertain to care only under the current public health emergency. For lasting improvements to occur in treatment access, we need to make these changes permanent.” They hope that years from now, medicine can look back at this crisis not only as a tragedy but also as a period of rapid improvements in the ability to provide care for patients with substance abuse issues and other mental health disorders.

Disclosures: None declared.

Reference:

Lin L et al., Telehealth for substance-using populations in the age of coronavirus disease 2019: Recommendations to enhance adoption [published online ahead of print July 1, 2020], *JAMA Psychiatry*. doi:10.1001/jamapsychiatry.2020.1698.

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Do Patients Understand that Back Pain Treatments Have Only a Modest Effect?

One wonders how many patients with chronic back pain in 2020 still expect dramatically effective treatments for their chronic pain. And whether contemporary medicine is adequately educating patients about the types of modest or marginal outcomes they can expect from common medical treatments as well as complementary and alternative care. Ironically, there is not much evidence that healthcare providers

themselves have taken this information on board.

One *BackLetter* reviewer, who will remain anonymous, said she rarely encounters patients who are aware that most treatments for chronic back pain have a modest or marginal impact, at least in randomized controlled trials and systematic reviews. “Many patients are looking for a ‘fix’ and believe fixes exist,” she commented. “And they are willing to consider the treatments of any provider who promises a ‘fix’ or a ‘cure.’ It is difficult to convince them otherwise.”

“I try to explain to patients that most treatments for chronic back pain might help them get a *little* better. They may allow them to increase their physical activity,

calm some of their fears and anxieties, and work towards returning to a normal life and normal thinking. But for many people that is a hard sell. And they are often continually lured back to providers who promise dramatic results—with drugs, physical treatments, pain interventions, and surgery.”

Terry Corbin is a patient advocate and healthcare policy analyst who works with HealthPartners in Minnesota. He said in a recent telephone interview that most patients with back pain never learn about the limited effectiveness of common therapies and treatment approaches for chronic back pain.

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Primary care providers and specialists alike rarely get into the details of the evidence. And some healthcare providers are biased towards one treatment approach or another—and are not going to advertise the limited impact of these approaches in RCTs.

“Even if they did learn about the results of careful evidence reviews, most patients wouldn’t be able to put the information into a useful context, as patients and the general public are continually exposed to massive levels of hype and marketing in medical circles, the mass media, and social networks,” according to Corbin.

It is difficult for expert researchers to sort out the evidence in this area, let alone people with no background in the field. So most patients end up trusting the advice of their healthcare providers, which is often off-base—as evidenced by the high levels of guideline-discordant care in the United States and other societies.

Chronic Back Pain Shrouded in Uncertainty

Unfortunately, the entire area of chronic back pain—and its treatment—is still shrouded in uncertainty. There is no universally accepted definition of chronic back pain. Some studies define chronic back pain solely by timeline and duration. Others define it by duration along with measures of pain severity and/or disability.

Chronic back pain is not a homogenous condition. There appear to be multiple pain trajectories. Some people have pain that resolves completely, some have symptoms that wax and wane, some have persistent pain of uniform severity, and some have conditions that worsen progressively.

So studies of treatments for chronic back pain may be mixing different types of patients and different pain trajectories—leading to confusing outcomes in broad systematic reviews.

And no one knows how chronic back pain is actually being treated on a population basis in real-world settings. A recent systematic review by Steven Kamper, PhD et al. concluded that few patients are actually receiving evidence-based care for low back pain. Instead, they appear to be receiving inadequate information and advice—and guideline-discordant care. (See Kamper et al., 2019.)

Kamper et al. found that patients with back pain often receive inappropriate imag-

ing, excessive opioid prescriptions, and other counter-productive management.

Kamper et al. also highlighted a stunning lack of real-world data on the way back pain is actually being managed across societies and healthcare systems. Most healthcare systems are unable to provide accurate information on the treatment of low back pain.

It is vital to find out how chronic back pain is actually being treated. Many evidence-based guidelines recommend some of the treatments discussed in this AHRQ review. For example, the most influential US guideline—the 2017 guideline from the American College of Physicians—recommended the following as first-line treatments for chronic back pain. (See Qaseem et al., 2017.)

“For patients with chronic low back pain, clinicians and patients should initially select nonpharmacologic treatment with exercise, multidisciplinary rehabilitation, acupuncture, mindfulness-based stress reduction (moderate-quality evidence), tai chi, yoga, motor control exercise, progressive relaxation, electromyography biofeedback, low-level laser therapy, operant therapy, cognitive behavioral therapy, or spinal manipulation (low-quality evidence),” according to Amir Qaseem, MD, et al.

However, at the present time it is not clear whether healthcare providers or patients are following these recommendations. Or whether major healthcare systems can even provide access to them.

Have patients moved away from guideline-discordant care? In the United States, the sketchy evidence that is available suggests here has been some reduction in the prescription of opioids but no progress in reining in unnecessary imaging. There hasn’t been any obvious movement towards increased physical exercise and activity. It is not clear whether there has been a reduction in early referrals for specialty care—and unnecessary pain interventions and surgery—at least prior to the COVID-19 pandemic. During the pandemic there has been a vast reduction in back care services of all types.

It would also be useful to know whether there has been any movement among people with chronic back pain towards self-care—without medical interventions. According to some estimates, about 50% of people with memorable back pain in the United States do not seek medical care for it. And people with low-impact or non-interfering chronic back pain probably don’t need much formal care.

Unfortunately, there is scant evidence that those who do seek medical treatment for low

back pain get much benefit from it. On a population basis there has been no obvious reduction in the prevalence of low back pain or related disability over recent years in the United States—despite record annual expenditures of more than \$130 billion per year. Many people currently accessing medical care might do just as well—or better—to engage in self-care, with proactive approaches, upbeat attitudes, and increased physical activity—and decreased use of expensive and potentially harmful interventions.

Excellent Characterization of the Existing Evidence

The AHRQ review analyzed an enormous body of evidence on the treatment of common forms of chronic pain. The review is difficult to read and interpret but not for any lack of effort on the authors’ part. This unwieldy body of evidence is complex and defies easy characterization. It runs 360 pages in PDF format.

Skelly and colleagues updated a previous report on the outcomes of noninvasive, nonpharmacologic treatments for five chronic pain conditions: chronic low back pain; chronic neck pain; osteoarthritis of the knee, hip, or hand; fibromyalgia; and tension headache.

They found 233 randomized controlled trials published through September 2019. Many of the trials were small. Most lacked long-term follow-up. The reviewers assessed study quality with predefined criteria (see open access report for details).

“We analyzed effects and assessed strength of evidence (SOE) at short term (1 to <6 months following treatment completion), intermediate term (≥ 6 to <12 months), and long term (≥ 12 months).”

They also used predefined criteria to characterize small, medium, and large improvements. “Small” improvements in pain or function represented 0.5 to 1-point improvements on a 10-point scale (10 representing maximal improvement). In other words, a 5% or 10% improvement in pain and/or function.

“Moderate” improvements in pain or function indicated a 1- or 2-point improvement. In other words, a 10% to 20% improvement in pain and/or function.

“Large” would indicate a greater than 2-point improvement on pain and/or function scales. In other words, greater than a 20% improvement in pain or function.

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Therapeutic Expectations

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The review suggested that most treatments for chronic low back pain have modest outcomes—some might call them marginal (Table I).

“For chronic low back pain (LBP), compared with usual care, attention control, sham, or placebo, there was moderate evidence of small improvement in function, at least in the short term, for exercise, massage, psychological therapies (cognitive-behavioral therapy [CBT]) and moderate improvement with yoga (SOE: moderate),” according to Skelly et al.

Skelly et al. found small functional improvements for acupuncture, low-level laser therapy, spinal manipulation, and multidisciplinary rehabilitation (SOE: low). With the exception of spinal manipulation, these therapies were associated with small or moderate short-term improvements in pain.

Where Will the Field Go from Here?

One hopes that the spine and back pain fields will eventually move out of the current phase of harmful usual care, common treatments of limited benefit, and a broad range of inferior outcomes. It will be

fascinating to see how that process plays out over time.

What about viewing low back pain as a coping issue? Nortin Hadler, MD, has argued eloquently for three decades that common back pain is usually a coping issue rather than a treatment issue. He has pointed out that members of the general public and prospective patients need to carefully think about what medicine can and can’t provide for low back pain.

He has stressed that people shouldn’t look to medicine for dramatically or consistently effective therapies for regional back pain—acute or chronic. “The only possible justification would be that your physician can provide a port in the storm, empathy, reassurance, and constructive advice. There is no magic hiding in the black bag...The same pertains to any other other port one might choose in this storm. No one has a better bag of tricks,” according to Hadler. (See Hadler, 2009.)

He has suggested that for ordinary back pain, patients who are otherwise well might do better to cope without medical treatment—“by managing the best they can, perhaps with some lay advice, [rather] than by choosing to become patients.”

Many groups around the world are pinning their hopes on improvements in the understanding of “bio” aspects of low back

pain—better knowledge about pain transmission, genetic underpinnings, and interactions among the brain, spinal cord, and the lumbar spine.

However, based on the recent history of back pain research—and the interactivity with psychological, economic, and social issues—this is likely to be a long, drawn-out process, with many stops and starts over years and decades.

Although many hope that simple strategies will go a long way towards addressing the back pain crisis, a recent essay in *Pain* by Julia Hush, PhD, of Macquarie University in Australia suggested it is time to move away from traditional unimodal treatments for low back pain (many of which were covered in the AHRQ review) towards more complex interventions. Hush observed that many common back pain treatments haven’t addressed a broad range of back pain influences—and haven’t produced clinically important benefits.

“In the design of treatments tested in clinical trials, the multidimensional nature of LBP has been largely neglected. If we genuinely embrace a formulation of LBP as an experience that results from a constellation of biopsychosocial drivers, then why would treatments directed at a single

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Table I. Underwhelming Results: The Impact of Common Treatments on Chronic Low Back Pain

What treatments had a large impact on chronic back pain?	None
What treatments had a large impact on function?	None
What treatments had a moderate impact on chronic back pain?	Exercise for short- and long-term pain Yoga for intermediate-term pain Low-level laser therapy for short-term pain
What treatments had a moderate impact on function?	Yoga for intermediate-term pain
What treatments were associated with small improvements in pain?	Psychological therapy Spinal manipulation Massage Mindfulness-based stress reduction Acupuncture Multidisciplinary rehabilitation
What treatments were associated with small improvements in function?	Exercise Psychological therapy Spinal manipulation Acupuncture Multidisciplinary rehabilitation

The Impact of Selected Nonsurgical, Nondrug Treatments on Chronic Back Pain and Function

Exercise

- Exercise associated with moderate effects on pain vs. usual care, an attention control, or a placebo intervention over the short term (strength of evidence: low).
- Exercise associated with small effects at intermediate term (strength of evidence: low).
- Exercise associated with moderate effects on pain over the long term (based on a single trial; strength of evidence: low).
- Exercise associated with small improvements in short-term function compared with usual care, attention control, or a placebo intervention (strength of evidence: moderate).
- Exercise not associated with any improvements in function over the intermediate-term or long-term (strength of evidence: moderate for short term, low for intermediate and long term).

Psychological Therapy

- Psychological therapy (primarily cognitive-behavioral therapy) associated with small improvements in pain and function compared with usual care, an attention control, or a placebo intervention at short term, intermediate term, and long term (strength of evidence: moderate).

Ultrasound

- No advantage for ultrasound vs. sham ultrasound in terms of short-term pain (strength of evidence: low).
- Ultrasound associated with inconsistent effects on short-term function (strength of evidence: insufficient.)

Spinal Manipulation

- Spinal manipulation had no advantage over sham manipulation, usual care, or an attention control in short-term chronic pain (strength of evidence: low).
- Spinal manipulation associated with small improvement in intermediate-term pain (strength of evidence: moderate).
- Spinal manipulation associated with small improvements in function compared with sham manipulation, usual care, an attention control, or a placebo intervention in short-term and intermediate-term function (strength of evidence: low).

Massage

- Massage associated with small improvements in pain and function compared with sham massage or usual care (strength of evidence: moderate).
- Massage had no advantage over comparison treatments for intermediate-term pain or function (strength of evidence: low).

Yoga

- Yoga associated with a small improvement in short-term pain and a moderate improvement for intermediate-term pain, compared with an attention or waitlist controls (strength of evidence: low for short-term, moderate for intermediate-term pain).
- Yoga associated with moderate improvement in function at short-term and small improvement for intermediate-term function (strength of evidence: low for short-term, moderate for intermediate-term pain).

Mindfulness-Based Stress Reduction

- Mindfulness-based stress reduction (MBSR) associated with a small improvement in short-term and intermediate-term pain but had no advantage in long-term pain compared with usual care or an attention control (strength of evidence: low).
- MBSR had no advantage over usual care or an attention control in terms of short-, intermediate-, or long-term function (strength of evidence: low).

Acupuncture

- Acupuncture associated with small improvements in short-term and long-term pain, but not intermediate-term pain, compared with sham acupuncture or usual care (strength of evidence: low).
- Acupuncture associated with small improvements in short-term but not intermediate- or long-term function (strength of evidence: low).

Multidisciplinary Rehabilitation

- Multidisciplinary rehabilitation associated with small improvement in pain and function over the short- and intermediate term—but not over the long term (strength-of-evidence low for function; moderate for short-term and intermediate-term pain, and low for long-term pain).

Adapted from Skelly AC et al., *Comparative Effectiveness Review*, No. 227. Rockville, MD: Agency for Healthcare Research and Quality (US); 2020. Report No.: 20-EHC009.PMID: 32338846.

Pain and Weather

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References:

Beukenhorst AL et al., Are weather conditions associated with chronic musculoskeletal pain? Review of results and

methodologies, *Pain*, 2020; 161(4): 668–83.

Dixon, WG et al., How the weather affects the pain of citizen scientists using a smartphone app, *Nature Public Journals Digital Medicine*, 2019; 2: 105. <https://doi.org/10.1038/s41746-019-0180-3>

Frost J, Multicollinearity in regression analysis: Problems, detection, and solutions, *Statistics by Jim*, <https://statisticsbyjim.com/regression/multicollinearity-in-regression-analysis/>

Disc Surgery and Pain

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What is the Magnitude of Pain Relief?

But what is the magnitude of pain relief after disc surgery? And to what extent does that pain relief translate into better function?

If one looks at individual studies, the course of pain and disability is somewhat variable. A substantial proportion of studies report ongoing symptoms following disc surgery. But what do scientific studies collectively say about this issue?

Systematic reviews of observational studies suggest that disc surgery typically leads to substantial but incomplete relief of symptoms and disability.

For example, a systematic review by Gustavo Machado, PhD, and colleagues looked at 39 inception cohort studies that included 13,883 patients with sciatica. Before surgery these subjects had a pooled leg pain score of 75.2 out of 100 (100 signifying maximal pain). (See Machado et al., 2016.)

The pooled leg pain scores fell to 15.3 out of 100 at three months. But then they bounced back to 21 out of 100 at five years. Pooled mean disability scores were 55.1 out of 100 before surgery. These pooled scores fell to 15.5 at three months and 13.1 at five years.

“Although surgery is followed by a rapid decrease in pain and disability by 3 months, patients still experience mild to moderate pain and disability 5 years after surgery,” according to Machado and colleagues. It is not clear what accounts for the ongoing pain and disability over the long term.

The latest systematic review to weigh in on these issues is a study by British and Dutch researchers.

Ali Rushton, EdD, of the University of Birmingham and colleagues performed a systematic review and meta-analysis on the clinical course of pain and disability follow-

ing first-time lumbar discectomy. (See Rushton et al., 2020.)

Review of 87 Studies

They included inception cohort studies (i.e. cohort studies that tracked patients from the time of surgery) of subjects older than 16 years. They excluded 15 studies published in other languages as well as studies missing key data—information that could not be retrieved from the study authors.

They assessed risk of bias in these studies with the QUIPs tool (i.e. “Quality in Prognosis Studies”). They addressed the overall quality of evidence and strength of evidence with the GRADE system. They assessed outcomes over a range of time points: short-term (≤ 3 months), medium-term ($>3, \leq 12$ months), and long-term (>12 months) follow-up.

All told, the review included 87 studies of 31,034 subjects. The surgical candidates had substantial symptoms at baseline. The subjects had a mean presurgical leg pain score of 7.04 on a 10-point pain scale (10 signifying maximal pain)—based on the results of 50 of the studies. Participants had a mean presurgical back pain score of 4.72—based on the results of 53 studies.

Mean disability before surgery was 53.33 according to the Oswestry Disability Index (ODI), which measures disability on a 0 to 100-point scale, 100 signifying maximal disability. Forty-eight studies provided ODI data.

Steep Reduction in Pain and Disability

Overall, disc surgery was associated with a major early reduction in leg pain, with pain scores dropping from just over 7 points at baseline to 2 points after a week, and 1.5 points after a month—on a 10-point visual analogue pain scale. And the relief of leg pain seemed to be maintained over time.

Subjects did not experience complete relief pain over any period. But there was substantial relief of pain at one year (roughly a mean 2-point pain score) two years (a little under a 2-point mean pain score), and five years (roughly a mean 1-point pain score).

Lesser Reduction in Back Pain Scores

Back pain also improved but to a lesser degree. The mean back pain score improved from 4.72 out of 10 at baseline to roughly 3 out of 10 at long-term follow-up of five years.

Disability scores (ODI scores) dropped from a mean 53.33 out of 100 at baseline to roughly 15 at five-year follow-up.

Most of the studies in this review had some methodological issues that might compromise the overall results. Thirty-eight of the 87 studies had a high risk of bias and 49 had moderate risk of bias. GRADE analysis rated the overall quality of evidence and recommendations as “moderate.”

Disclosures: None declared.

References:

- Hadler NM, Doc, My Back is Killing Me, in *Stabbed in the Back: Confronting Back Pain in an Overtreated Society*, University of North Carolina Press, Chapel Hill, 2009, pp. 38-54.
- Machado GC et al., Patients with sciatica still experience pain and disability 5 years after surgery: a systematic review with meta-analysis of cohort studies, *European Journal of Pain*, 2016; 20(10):1700–9.
- Rushton A et al., Clinical course of pain and disability following primary lumbar discectomy: Systematic review and meta-analysis, *European Spine Journal*, 2020; 29:1660–70.

Therapeutic Expectations

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domain be expected to produce worthwhile outcomes?”, she asked.

She called for greater attention to the growing field of “complexity science,” which might lead to management approaches that tackle multiple dimensions of low back pain. (See Hush, 2020 for further details.)

The 2018 *Lancet* Series on low back pain offered an eloquent vision of the future—and suggested a series of major changes to systems of care—in low-, middle-, and high-income countries. Here are a few of the changes the *Lancet* authors called for (See Buchbinder et al., 2018):

- Changing population beliefs about back pain;

- Reducing harmful treatment, unnecessary treatment—and overtreatment;
- Encouraging the rational self-management of low back pain;
- Addressing social, psychological, economic, and occupational roots of low back pain;
- Providing better training for clinicians;

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MEETING CALENDAR

■ **Scoliosis Research Society 53rd Annual Meeting (to be conducted online)**

September 9-12, 2020
Phoenix, Arizona

Contact: Scoliosis Research Society
555 East Wells Street, Suite 1100
Milwaukee, WI 53202
Tel: 414-289-9107
E-mail: meetings@srs.org

Burr Ridge, IL 60527
Tel: 630-230-3600
Fax: 630-230-3700
www.spine.org

■ **Eurospine 2020 (to be conducted online)**

October 7-9, 2020
Vienna, Austria

Contact: Eurospine, Spine Society of Europe
Attn: Judith Reichert
Schild Seefeldstrasse 16
8610 Uster-Zurich,
Switzerland
Tel: 41-44-994-1404
www.eurospinemeeting.org

■ **Cervical Spine Research Society**

December 10-12, 2020
Las Vegas, Nevada

Contact: Cervical Spine Research Society
9400 W. Higgins Road, Suite 500
Rosemont, IL 60018-4976
Tel: 847-698-1628
Fax: 847-268-9699
E-mail: csrs@aaos.org

■ **NASS 2020: Annual Meeting of the North American Spine Society (to be conducted online)**

October 7-10, 2020
San Diego, California

Contact: North American Spine Society
7075 Veterans Boulevard

■ **International Association for the Study of Pain 2020 World Pain Congress**

June 27-July 1, 2021

Amsterdam, The Netherlands

Contact: IASP
1510 H Street NW, Suite 600
Washington, DC 20005
Tel: 202-856-7400
Fax: 202-856-7401

Coming Soon:

- The Social and Economic Roots of Back Pain
- What Proportion of Back Pain Disability Stems from Obesity?
- Injectable Biologics for Disc Degeneration: Any Progress?
- Beliefs About Back Pain Causation in the General Population

Therapeutic Expectations

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- Incentivizing high-value care;
- Streamlining effective systems of care; and
- Altering the definition of wellness—by moving towards the concept of “positive health” rather than defining wellness as the complete absence of pain and other symptoms.

Disclosures: None declared.

References:

Buchbinder R, van Tulder M, Oberg B, et al. Low back pain: a call for action, *Lancet*, 2018;391:2384–8.

Croft P et al., Primary care for low back pain: we don’t know the half of it, *Pain*, 2019 Nov 9. doi: 10.1097/j.pain.0000000000001752.

Hush JM, Low back pain: it’s time to embrace complexity, *Pain*, 2020 May 22, online ahead of print. doi: 10.1097/j.pain.0000000000001933.

Kamper SJ et al., What is usual care for low back pain? A systematic review of health care provided to patients with low back pain in family practice and emergency departments, *Pain*, 2019; DOI: 10.1097/j.pain.0000000000001751.

McDonagh MS et al., Nonopioid Pharmacologic Treatments for Chronic Pain, Rockville, MD: Agency for Healthcare

Research and Quality; 2020, Report No.: 20-EHC010.

Qaseem A, et al., Noninvasive treatments for acute, subacute, and chronic low back pain: A clinical practice guideline from the American College of Physicians, *Annals of Internal Medicine*. doi:10.7326/M16-2367.

Skelly A et al., *Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review Update* [Internet]. Rockville, MD: Agency for Healthcare Research and Quality (US); 2020. Report No.: 20-EHC009. www.ncbi.nlm.nih.gov/books/NBK556229/

THE **BACKPAGE**

Medical Records Fail to Tell Patients' Real Stories

Clinical notes and electronic medical records often gather lots of needless information and fail to record patients' real stories. Heather E. Gantzer, MD, and colleagues recently raised major questions about the value and appropriateness of current medical notes and records.

Current patient documentation often prioritizes "billability" over interpretability—and wastes the time of healthcare providers and patients.

"There is a critical distinction between documentation and communication: Communication can document, but documentation alone rarely communicates what matters most. Too often, the welter of data loses the story of the patient. In particular, structured data from the electronic record are poorly suited to communicating an understanding of the actual person and their background, experiences, resources, challenges, hopes, fears, and goals," according to these researchers. (See *Annals of Internal Medicine*, 2020; doi:10.7326/M20-0934.)

This is particularly relevant to the management of the highly subjective symptom of low back pain. Technical details about imaging, the physical examination, pain scores, and duration of symptoms often have little to do with a patient's underlying needs and concerns.

As Nortin Hadler, MD, and Tim Carey, MD, wrote in a classic editorial 22 years ago, "We hear the patient complain of back pain when we should be hearing the patient proclaim, 'My back hurts, but I'm here because I can't cope with this episode.' If we could learn to listen to this chief complaint, perhaps we can tackle the impairment in coping,

which is the illness that renders the predicament of back pain intolerable." (See *Annals of the Rheumatic Diseases*, 1998; 57:1–2; doi:10.1136/ard.57.1.1.)

Yet information about those predicaments and coping issues rarely makes an appearance in medical notes and the electronic medical record.

Gantzer et al. are supporters of the American College of Physician's "Restoring the Story Task Force," which is promoting clinical documentation that tells the patient's story in a meaningful manner. (See www.acponline.org/acp_policy/letters/acp_comments_on_onc_draft_

embracing a total of 1025 participants with chronic back pain. The RCTs took place in Turkey, Iran, Saudi Arabia, Croatia, the UK, and the United States—and involved six to 18 ultrasound treatments.

Many of the studies had significant shortcomings: a lack of blinding, substantial risk of selection bias, selective reporting, and other methodological problems.

Some of the studies reported a benefit but did not provide adequate evidence to support this widely employed treatment.

"There was very low-certainty evidence (downgraded for imprecision,

mean difference -0.29 , 95% CI -0.51 to -0.07 (MD -1.07 , 95% CI -1.89 to -0.26 ; Roland Morris Disability Questionnaire); $n = 325$; 4 RCTs), but this effect does not appear to be clinically important," they added.

The overall conclusion? "The current evidence does not support the use of therapeutic ultrasound in the management of chronic LBP [low back pain]," according to Ebadi et al. (See *Cochrane Database Systematic Review*, 2020; 7:CD009169.)

Bariatric Surgery and Low Back Pain

Individual studies on bariatric surgery leave much to be desired in terms of size and variable study methods. However, they have a common theme. Bariatric surgery for obesity appears to be consistently associated with reduced levels of low back pain, at least over the short-to-medium term.

Irina Stefanova and colleagues performed a meta-analysis of 246 patients (mean age 42.3) in seven studies with follow-up of three to 24 months. They found statistically significant reductions in measures of low back pain, body mass index, SF-36 scores, and Oswestry Disability Index Scores after surgery. In terms of low back pain, there was a mean improvement of roughly 3 points on a 10-point visual analogue pain scale.

Stefanova and colleagues pointed out that the causes of these improvement aren't clear. They may be related to reductions in axial loading of the spine or improvements in quality of life. "Further studies will improve understanding and aid preoperative counseling," they suggested. (See *Obesity Surgery*, 2020, 30, 3201-3207.)

The BackPage Online

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[health_it_burden_reduction_strategy_2019.pdf](#).)

No Evidence to Support Therapeutic Ultrasound

Healthcare providers around the world continue to treat low back pain with ultrasound despite a lack of compelling evidence that it is beneficial for acute, sub-acute, or chronic pain.

A recent Cochrane Collaboration review by Safoora Ebadi and colleagues examined the evidence on therapeutic ultrasound for chronic low back pain.

They performed exhaustive literature searches to identify trials comparing ultrasound to a placebo intervention or other interventions.

All told, they found 10 randomized controlled trials (RCTs)

discision, inconsistency, and limitations in design) of little to no difference between therapeutic ultrasound and placebo for short-term pain improvement (mean difference (MD) -7.12 , 95% confidence interval (CI) -17.99 to 3.75 ; $n = 121$, 3 RCTs; 0-to-100-point visual analogue scale (VAS));" according to Ebadi et al.

"There was also moderate-certainty evidence (downgraded for imprecision) of little to no difference in the number of participants achieving a 30% reduction in pain in the short term (risk ratio 1.08, 95% CI 0.81 to 1.44; $n = 225$, 1 RCT). There was low-certainty evidence (downgraded for imprecision and limitations in design) that therapeutic ultrasound has a small effect on back-specific function compared with placebo in the short term (standardised