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Tragic Intersection: Where the Back Pain Crisis and the COVID-19 Pandemic Meet

If someone tried to design a "perfect storm" for people with serious back problems, it would be pretty close to the current situation in the United States and many other countries. The world is experiencing the greatest interruption in spine care since World War II. It is not at all clear how long this pandemic-related interregnum will last—or if there will ever be a return to "usual care."

In the spring of 2020, back care systems in the United States are in disarray. Many practices are closed. Others are only interacting with patients via telemedicine, apps, and telephone. In many states, hospitals and clinics are no longer performing nonessential spine surgery or pain interventions.

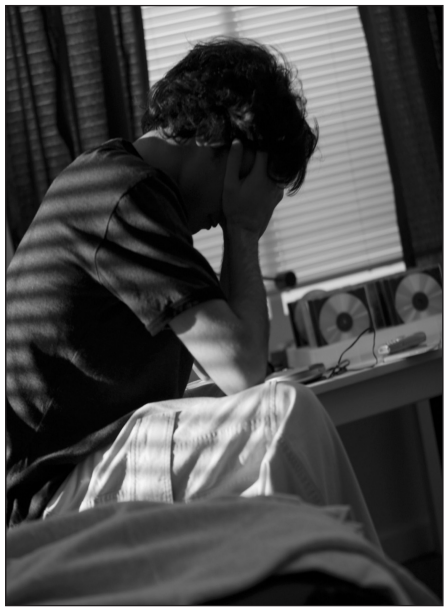
To compound these problems, many organizations within the healthcare system are severely strained financially—as the revenues from usual care and common surgical procedures have dried up. Some are actually laying off front-line medical personnel—and reducing the pay of others, at a time when those providers are being asked to risk their lives treating patients with COVID-19.

In preparation for this article, a *BackLetter* editor contacted several back care providers in areas affected by COVID-19—including specialty care, primary care, mental health services, and complementary/alternative medicine. Most said they were not doing any face-to-face treatments and only a modest number of telemedicine procedures.

Delaying care probably doesn't pose a major threat to most individuals with back pain. For many people with back symptoms, there is no hurry to seek medical care. Much of back care is purely discretionary. Despite the claims of proponents, most common therapies for low back pain have only marginal or modest effects. And medical care often does not have a major influence on recovery. The favorable natural history of most forms of back pain has a greater influence.

For those with serious anatomic problems, many hospital and clinics are still performing essential spine surgery—for victims of trauma, those with progressive neurologic disease, and patients with cancer. And there are sensible triage guidelines available for hospitals and ambulatory clinics that want to define "essential" spine procedures.

However, even people with more severe problems appear reluctant to seek hospital care for fear of contracting the virus that causes COVID-19. For example, many hospitals are reporting a major fear-driven reduction in the number of patients seeking urgent care for dire conditions such as heart attacks and stroke. The same is likely to hold true for people with serious spine problems such as traumatic injuries, progressive



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Does Back Pain Stem from Work?

About a third of US workers have experienced work-related health problems, with back pain the most frequently reported complaint, according to Hannah Free, MPH, and colleagues at the Centers for Disease Control and Prevention. (See Free et al., 2020.)

However, it is unclear to what extent back pain is caused by work.

"Approximately 2.8 million nonfatal workplace illnesses and injuries were reported in the United States in 2018. Current surveillance methods might underestimate the prevalence of occupational injuries and illnesses. One way to obtain more information on occupational morbidity is to assess workers' perceptions about whether they have ever experienced health problems related to work," according to Free et al.

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Time to Curtail One-to-One Spine Care?; A Deluge of Assertions About Back Pain and Working at Home; Fear of COVID-19 Causing Financial Problems for Hospitals

Telemedicine on the Rise—Finally

Critics of the US healthcare system have pointed out for years that many expensive face-to-face consultations with healthcare providers and spine specialists are unnecessary. They can be replaced by telemedicine consultations. And these can lead to major savings in what are called "opportunity costs," (i.e. the costs of choosing one form of care over another).

Because of the coronavirus disease-2019 (COVID-19) pandemic, there has been rapid uptake of telemedicine over the past few weeks. Some of the limiting factors for telemedicine in the United States include licensing issues, reimbursement policies, and privacy regulations. However, many local authorities, licensing agencies, and healthcare systems have loosened up those restrictions to prevent the spread of the coronavirus.

Face-to-face consultations, of course, can be hugely expensive, not only in the types of therapies involved but also in terms of transportation costs, lost productivity, and lost wages.

"In an analysis of more than 100,000 interviews for the American Time Use Survey, the average total time required for a physician visit was about two hours. Of that, less than one-sixth—about 20 minutes—was spent with a physician. The remainder was spent waiting in the clinic (64 minutes) or traveling (37 minutes). The average amount of lost wages associated with a visit was $43—more than the out-of-pocket payment for the visit itself. In addition to a patient's time, additional resources that factor into opportunity costs include time spent by friends or family members participating in the patient's care and non-medical costs such as travel expenses or lost wages," according to an article by Nathan Handley and Judd Hollander at the *Health Affairs* Blog. (See Handley and Hollander, 2019.)

They were referring to an eye-opening study on opportunity costs in the United States by Kristin Ray and colleagues in 2015. (See Ray et al., 2015.) Ray et al. calculated that the total annual opportunity costs for physician visits in the United States in 2010 came to a colossal $52 billion.

Rapid uptake of telemedicine services has occurred in many countries. An April 4th article in the *New York Times* bore the provocative headline "Telemedicine Arrives in the UK: Ten Years of Change in One Week" with the subhead "With the coronavirus pandemic turning doctors' offices into no-go zones, family physicians are now doing many of their consultations online or by telephone." (See Mueller, 2020.) In the United States the same is holding true for back care providers and spine specialists.

However, this revolution is still in its early days. And some telephone, video, and communication systems are not yet up to the task. There are reports of healthcare systems getting swamped with requests for remote consultations that they cannot accommodate at the moment. And some healthcare providers say they are not yet comfortable with telehealth consultations—which they suggest seem "cold" compared with face-to-face interactions.

Disclosures: None declared.

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Department of Justice Homing in on Kickbacks Paid to Spine Surgeons

Federal prosecutors appear to be homing in on companies that allegedly pay kickbacks to spine surgeons for using certain spine surgery devices. And they are targeting the surgeons who accepted those payments.

The US Attorney's Office in the District of Massachusetts recently filed a civil suit against a device manufacturer in the Boston area, with a big splash of publicity and surprisingly strong language. The prosecutors also arrived at settlements with five spine surgeons around the United States for accepting payments for consulting hours they did not actually work. The financial penalties to the surgeons ranged from roughly $105,000 to more than $485,000.

According to the Department of Justice (DOJ) prosecutors, the company in question paid $500 for cervical procedures and $1000 for lumbar procedures, as long as the surgeons used the company's devices.

These actions came in response to information that came to light in two whistleblower cases filed under the False Claims Act.

This action may be a shot across the bow of the spine treatment community. The DOJ appeared to be sending a general message about cleaning up consulting arrangements and financial ties between surgeons and device makers, according to a statement published by the DOJ.

According to former spinal device consultant Terry Corbin, the types of financial inducements cited in this case have been pretty common across the spine treatment industry for decades. This is a competitive, hard-scrabble business. Companies are in a continual battle for market share. He suggests that companies won't end financial inducements for spine surgeons to use particular spinal implants and devices. However, they will likely make modifications to current practices to avoid the scrutiny of the Department of Justice and avoid future legal actions and fines.

The complaints were made under the Anti-Kickback Statute of federal law, according to a second news release from the DOJ. The Anti-Kickback Statute prohibits offering, paying, soliciting, or receiving remuneration to induce referrals of items or services covered by Medicare, TRICARE, and other federally funded programs. The Anti-Kickback Statute is intended to ensure that a physician's medical judgment is not compromised by improper financial incentives. (See Department of Justice, 2020a, 2020b.)

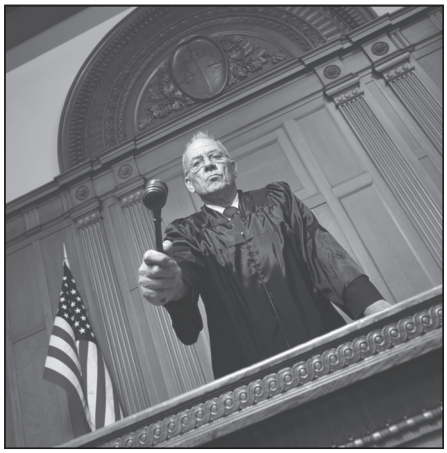
"Medical device companies that pay surgeons kickbacks, directly or indirectly, corrupt the market, damage the health care system and jeopardize patient health and safety," said United States Attorney Andrew E. Lelling. "We will pursue aggressively any organization or individual who fails to play by the rules."

"Kickbacks undermine the integrity of federal health care programs and can result in unnecessary or harmful medical care," said Assistant Attorney General Jody Hunt of the Department of Justice's Civil Division. "The Department of Justice will pursue unlawful kickback arrangements in whatever form they occur to ensure the integrity of the medical care received by federal program beneficiaries."

"Kickbacks undermine the integrity of federal health care programs and can result in unnecessary or harmful medical care."

"Kickbacks paid to surgeons as sham medical consultants, as alleged in this case, cheat patients and taxpayers alike," said Phillip M. Coyne, Special Agent-in-Charge for the Office of Inspector General of the US Department of Health and Human Services. "Working with our law enforcement partners, we will continue to investigate kickback schemes that threaten the integrity of our federal health care system, no matter how those schemes are disguised."

"Surgeons have a moral imperative to operate in a trustworthy, transparent manner. No less than people's lives and safety depend on them. Today, five spine doctors from across the country admitted they prioritized payoffs over patients to enrich themselves … by shelving their ethics once hundreds of thousands of dollars in kickbacks were put on the negotiating table," said Joseph R. Bonavolonta, Special Agent in Charge of the FBI Boston Division.



"The FBI aggressively pursues health care fraud because cases like this don't just impact a few people. The cost of these egregious crimes is ultimately borne by all taxpayers.

"Veterans and non-Veterans alike put trust in their physicians and that confidence is the cornerstone of our health care system. When physicians choose personal gain over patient care, that trust is broken."

"Medical device companies that pay surgeons kickbacks, directly or indirectly, corrupt the market, damage the health care system and jeopardize patient health and safety," said United States Attorney Andrew E. Lelling. "We will pursue aggressively any organization or individual who fails to play by the rules."

Disclosures: None declared.

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"Surprise" Billing Still Surprisingly Common—and "Morally Repugnant"

As previous articles in the *BackLetter* have noted, medical billing horror stories are common. There have been numerous instances of patients being victimized by exorbitant medical bills from "out-of-network" physicians and other providers.

These are healthcare professionals who do not have a contract with the patient's health insurance company—and are free to charge cruel and exorbitant prices.

These are reprehensible practices. Ashish Jha, MD, director of the Harvard University Global Health Institute, recently termed them "morally repugnant" in an article in the *Boston Globe*. "To financially ruin our patients when they are sick shows a moral rot in our community." (See Jha, 2019.)

A recent example in spine care involved a patient who had successful spine surgery for a rare condition. However, after the operation, she received a surprise bill for $94,000 from an out-of-network provider for diagnostic monitoring. Her insurance company declined to pay it, so she was on the hook for the exorbitant charge. There are scores of similar stories around the country, many involving even larger sums of money. (See Hamilton, 2019.)

The COVID-19 crisis could exacerbate this situation. Many hospitals and healthcare systems are suffering billions of dollars in potential financial losses due to loss of revenue from usual care and nonessential surgical procedures. Physicians and other healthcare providers are also under financial pressure from looming layoffs, furloughs, and loss of income. It may be tempting for some individuals and organizations to see what they can get away with, in terms of overbilling and balance billing. (In balance billing, healthcare systems ask patients to make up the shortfall between what out-of-network providers charge and what insurance companies actually pay.) Recent regulations from the Department of Health and Human Services have forbidden the overbilling of some COVID-19 patients. However, it is not yet clear how those regulations might be interpreted and enforced. And there are numerous reports of COVID-19 patients receiving exorbitant bills for emergency department and standard hospital care.

Ending Surprise Billing Could Save Billions

A recent study by Zack Cooper and colleagues published in *Health Affairs* before the COVID-19 crisis suggests that surprise billing is common across the United States. And it is wasting billions of dollars.

"Using data for 2015 from a large commercial insurer, we found that at in-network hospitals, 11.8 percent of anesthesiology care, 12.3 percent of care involving a pathologist, 5.6 percent of claims for radiologists, and 11.3 percent of cases involving an assistant surgeon were billed out-of-network. The ability to bill out-of-network allows these specialists to negotiate artificially high in-network rates," according to Cooper et al.

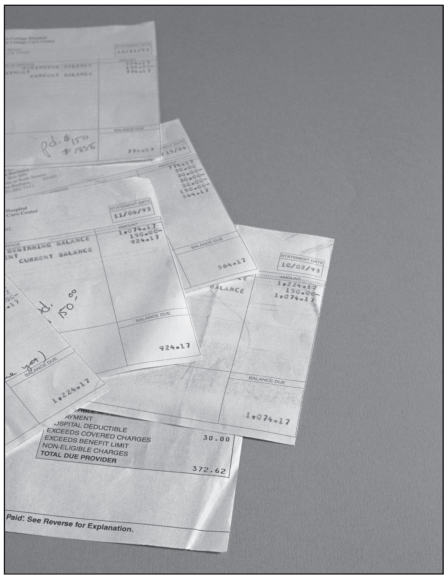
These authors pointed out that if the United States were to end the practice of surprise billing in the four professions in this study alone, there would be huge savings for the entire healthcare system.

"We estimated that if policies were introduced that precluded these four physician specialties from billing out-of-network and thus lowered their in-network payments to 164 percent of Medicare payments, the savings would equal 13.4 percent of physician spending and 3.4 percent of spending for people with employer-sponsored insurance. For reference, it has been estimated that approximately $1.2 trillion was spent on people with commercial health insurance in 2017. As a result, this would amount to approximately $40 billion in savings annually," according to Cooper et al. (See Cooper et al., 2020.)

A Study of 347,356 Surgery Patients

A recent retrospective study by Karan R. Chhabra, MD, et al. looked at out-of-network billing among 347,356 patients who underwent surgery for seven common elective procedures. These included arthroscopic meniscal repair, laparoscopic cholecystectomy, hysterectomy, total knee replacement, breast lumpectomy, colectomy, and coronary artery bypass graft surgery. These operations were performed by an in-network surgeon and in-network facilities between January 1, 2012, and September 30, 2017.

The primary outcome measure was the proportion of operations that resulted in out-of-network bills.



The results are disturbing. "Among 347356 patients (mean age, 48 [SD, 11] years; 66% women) who underwent surgery with in-network primary surgeons and facilities, 20.5% of episodes (95% CI, 19.4%-21.7%) had an out-of-network bill," according to the authors.

Surgical Assistants and Anesthesiologists the Chief Culprits?

The two professions that were most likely to submit an out-of-network bill were surgical assistants and anesthesiologists.

"Out-of-network bills were associated with surgical assistants in 37% of these episodes; when present, the mean potential balance bill was $3633 (95% CI, $3384-$3883). Out-of-network bills were associated with anesthesiologists in 37% of episodes; when present, the mean potential balance bill was $1219 (95% CI, $1049-$1388)," according to Chhabra et al.

Out-of-network billing was more common in operations with surgical complications and among patients who were members of health insurance exchanges.

"The presence of an out-of-network bill was associated with significantly higher total charges ($48 383 vs. $34 300; difference, $14 083 [95% CI, $12 883 to $15 281])," according to the study.

It is important to remember that this study took place among patients who

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Ibuprofen and COVID-19

Reports from France, Ireland, Austria, and other countries in early March suggested that the nonsteroidal anti-inflammatory drug ibuprofen might increase the chances of contracting the coronavirus and exacerbate ill effects among those who develop coronavirus disease-2019 (COVID-19)—the clinical syndrome caused by the virus.

These reports caught some major health authorities by surprise. In mid-March the World Health Organization (WHO) overreacted to anecdotal reports about these relationships and suggested that individuals with COVID-19 symptoms avoid taking ibuprofen.

However, the lack of conclusive evidence linking ibuprofen to a worsening of a COVID-19 led several governments to issue statements about it.

Here is a March 20th statement from the government of the UK correcting the record.

"There is some debate suggesting NSAIDs [nonsteroidal anti-inflammatory drugs] may increase complications from simple acute respiratory infections or slow recovery. The product information of many NSAIDs already contains warnings that their anti-inflammatory effects may hide the symptoms of a worsening infection. However, the evidence is not conclusive," according to the statement. (See Medicines and Healthcare Products Regulatory Agency, 2020.)

Given the skeptical response over the link between ibuprofen and COVID-19, the WHO ended up walking back its position on this issue.

"WHO is aware of concerns on the use of ibuprofen for the treatment of fever for people with COVID19. We are consulting with physicians treating the patients and are not aware of reports of any negative

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Surprise Billing

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choose an in-network surgeon and an in-network surgical facility. So there may be an even greater prevalence of surprise billing in out-of-network settings with out-of-network surgeons.

There was also extensive geographic variation in out-of-network billing. Several US states have enacted regulations to protect patients from out-of-network billing. Ironically, some of these states had out-of-network billing levels above the national average, suggesting that their patient protection policies are not completely effective.

Should Surgeons Take Charge?

According to the study by Chhabra et al., the mean amount billed to patients in surprise billing scenarios was $2011. To an affluent American this does not sound like a lot of money. It can cost 10 times that amount to buy an inexpensive new car. However, many American families have limited assets, with a few hundred dollars in the bank. And, of course, roughly 40 million Americans live in poverty. (See Chhabra et al., 2020.)

"One of the major problems with surprise billing is that it is impossible to plan for. The evidence provided by Chhabra et al. adds to an increasing literature on the prevalence and size of these 'surprise' bills for privately insured patients. Such billing practices are particularly pernicious because patients usually have no knowledge that they will occur, and no way to avoid them," according to an accompanying editorial by Karen Maddox, MD, and Edward Livingstone, MD. (See Maddox and Livingstone, 2020.)

"When feasible, surgeons should ensure that all the personnel involved in the care team that they are leading accept the same insurance plans and should consider refusing to work in facilities that allow surprise billing."

They suggest that healthcare providers, surgeons in particular, work with policy makers to end this practice. "First, surgeons have an ethical responsibility to speak out against surprise billing. Patients generally select surgeons because they have faith that the surgeon they choose will provide them with the best possible care. This crucial trust between patient and physician will be eroded if patients discover after an operation that they must pay large sums of money to other clinicians the surgeon has involved in their care. When feasible, surgeons should ensure that all the personnel involved in the care team that they are leading accept the same insurance plans and should consider refusing to work in facilities that allow surprise billing." And they support several bills in Congress designed to cap these problems.

However, definitive solutions to surprise billing problems would hinge on quelling opposition from several major physician groups, which hold the position that laws against surprise billing would harm their ability to negotiate with healthcare systems for fair wages.

Unfortunately, the medical system in the United States is all too often a "dog-eat-dog" world. And the increasing focus on revenue production and profitability compounds these problems.

Disclosures: None declared.

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Ohio Lost More Than One Million Years of Life to Fatal Opioid Overdoses

National data on fatal opioid overdoses sometimes come across as abstract and difficult to interpret in human terms.

Looking at opioid overdoses in individual US states can sometimes drive home the tragic nature of the opioid overdose crisis more effectively.

The state of Ohio is a case in point. It has some of the highest opioid overdose death rates in the United States and the world. The crisis, of course, began with the inappropriate treatment of chronic pain with powerful narcotics.

Two recent studies hammer home the devastating effects of these overdoses on life expectancy in this populous mid-western state.

In a recently published study, Trent Hall, DO, and colleagues calculated the "years of life lost" (YLL) to opioid overdoses in Ohio from 2009 to 2016. (See Hall et al., 2020a.)

YLL is a metric developed by the Global Burden of Disease studies. "The YLL metric essentially corresponds to the number of deaths multiplied by the standard life expectancy at the age at which death occurs," according to the World Health Organization.

More Than 500,000 Years of Life Lost

Hall and colleagues documented 12,782 fatal opioid overdoses over the seven-year course of the study. Opioid overdoses accounted for a stunning 508,451 years of life lost between 2009 and 2016.

"This data gives us a picture of the profound impact of opioid related deaths," said Rick Hodges, director of the Ohio Alliance for Innovation in Population Health. "These are people in the prime of life during their most productive years. The data also tells a story about families and communities," according to a document published by Ohio State University in response to early reports from this study.

"One of the most heartbreaking aspects of the opioid epidemic is the incredible loss of life as so many young people die of overdoses," said Randy Leite, dean of the Ohio College of Health and Sciences and Professions. "The years of life lost data paint a picture of the greatest consequence of the epidemic—the loss of so many individuals who could have been productive parents, spouses, workers, and citizens."

Further Years of Life Lost in 2018 and 2019

Hall and colleagues recently extended their previous study to include the years 2017 and 2018. Unfortunately, opioid overdose problems showed no signs of diminishing significantly. (See Hall et al., 2020b.)

"There were 26,350 unintentional drug overdose deaths in Ohio from January 1, 2009, to December 31, 2018, and opioids were involved in 20,793 deaths (78.9%)," according to Hall et al.

Overall, fatal opioid overdoses blotted out over one million years of life. They were the third leading cause of excess mortality in Ohio over the course of the study.

The groups that experienced the greatest number of years of life lost were white individuals (89.2%), men (64.6%), individuals aged 30 to 39 years (31.9%), and individuals aged 20 to 29 years (25.2%).

"During the course of a decade, Ohio lost more than one million years of human life to drug overdose. Drug overdose contributed more to an observed increase in all-cause mortality than any other cause and was associated with reduced mean life span in 2017," according to Hall and associates. In 2017, residents of Ohio suffered a mean 1.27-year loss of life expectancy.

"All-cause mortality increased 14.2% during the period, with total annual YLL increasing from 1,607,512 YLL in 2009 to 1,836,220 YLL in 2018. A total of 38.2% of this increase was due to drug overdose. The next leading clinical entity, heart disease, accounted for just 12.7% of the increase."

Disclosures: None declared.

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Ibuprofen and COVID-19

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effects, beyond the usual ones that limit its use in certain populations. WHO is not aware of published clinical or population-based data on this topic," according to a March 18th Tweet about this topic. (See WHO, 2020.)

The US Centers for Disease Control and Prevention (CDC) has taken a similar stance. "We have been getting a lot of questions about whether drugs like ibuprofen can worsen the course of disease and make you sicker if you get COVID-19," according to John Brooks, MD, Chief Medical Officer for CDC's COVID-19 Emergency Response Team. "We have reviewed the scientific evidence. . . At present there is no compelling evidence that ibuprofen and other drugs like it can make you sicker with COVID-19."

Disclosures: None declared.

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Tragic Intersection

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myelopathy, and other worrisome neurological conditions.

It is sad to say, but some people may benefit from *not* being exposed to standard US back care. Some have argued that the back care system in the United States is inherently disabling. The costs of back care in the United States jumped from $37 billion in 1996 to $135 billion in 2016 without any discernable improvement in the prevalence of back pain, chronic back pain, and disabling back pain. (See Dieleman et al., 2020.) This suggests that a substantial portion of back care—including medications, physical treatments, pain interventions, and surgery— may be ineffective or even counterproductive on a population basis.

However, it would be naive to suggest that the COVID-19 pandemic will have a broadly positive impact on back pain and spinal health. It important to recognize that the social, economic, and medical disruption posed by the pandemic may cause pain problems to proliferate. The pandemic has brought massive unemployment, poverty, economic uncertainty, social disruption, physical inactivity, loss of confidence in the future, and varied mental health problems. All of these can be viewed as risk factors for the development of high-impact disabling chronic pain problems.

As of late April 2020, at least 30 million US residents had filed unemployment claims. But this figure underestimates the unemployment problem. There is an additional large group of Americans who have withdrawn from the workforce altogether but are not considered unemployed—because they are not looking for work.

The proportion of the US population of adults participating in the workforce has been declining steadily over the last few decades. For men over the age of 25, labor force participation dropped from nearly 90% in 1948 to less than 75% in 2016, according to a study by the late Alan Krueger, PhD. (See Krueger, 2016.)

For example, Krueger found that about 11% of prime age men—roughly seven million individuals—are out of the work force altogether. Many of these relatively young men are ailing. "Forty percent of non-labor force prime age men report that pain prevents them from working on a full-time job for which they are qualified," according to Krueger. "Survey evidence indicates that almost half of prime age NLF [non-labor force] men take pain medication on a daily basis." There is also a large group of prime-age women who are outside of the labor force.

So there may be millions of people with pain and disability problems that aren't reflected in unemployment figures.

High-Priority Groups

There are groups of pain patients that may be disproportionally affected by the pandemic-related disruptions. The group that appears at greatest risk in the United States includes the many people suffering from opioid addiction, complex opioid dependency, and difficult opioid tapering issues.

- **Some people may benefit from not being exposed to standard US back care, which is often ineffective and disabling.**
- **However, it would be naive to suggest that the COVID-19 pandemic will have a broadly positive impact on back pain and spinal health.**
- **The social, economic, and medical disruption posed by the pandemic may cause pain problems to proliferate.**
- **The pandemic has brought massive unemployment, poverty, economic uncertainty, social disruption, physical inactivity, loss of confidence in the future, and varied mental health problems.**
- **All of these can be viewed as risk factors for the development of high-impact chronic pain problems.**

Due to 20 years of intemperate and excessive opioid prescription for chronic pain, millions of patients are struggling with addiction and complex opioid-dependency problems in the United States. Roughly two million American have a substance abuse disorder—most typically involving opioids. And about half of these individuals have a substance abuse disorder and a mental health problem. They are in every back care practice—especially those that prescribe or have prescribed opioids for chronic pain.

According to various estimates, as many as eight million Americans are on long-term opioid therapy—many on perilously high-dose prescriptions. Numerous patients will require substantial help in tapering their opioid dosages—and the challenges that accompany that process.

Many patients with drug-related problems are not receiving any active treatment—including vital medication-assisted treatment with buprenorphine and methadone— for their pain and addiction issues at the moment. Like their fellow citizens, they are sheltering-in-place, engaging in social distancing, and avoiding going out. They are isolated, lonely, and ailing.

High-Priority Group

Unfortunately, this is a group that is clearly at significant risk of serious and even lethal outcomes from the suspension of usual care.

Their problems will likely snowball without effective treatment. Lack of effective medical care may push patients toward despair and dangerous use of street drugs, from heroin to carfentanyl to cocaine to methamphetamine—and various combinations of drugs. Individuals with addiction and dependency problems are vulnerable to loss of income, bankruptcy, homelessness, incarceration, and suicide.

"Although the pandemic threatens everyone, it is a particularly grave risk to the millions of Americans with opioid use disorder, who—already vulnerable and marginalized—are heavily dependent on face-to-face health care delivery. Rapid and coordinated action on the part of clinicians and policymakers is required if these threats are to be mitigated," according to Caleb Alexander, MD, et al. in *Annals of Internal Medicine*. (See Alexander et al., 2020.) Yet the political leadership in many countries

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Medicine Needs to Overcome Its Passive Tendencies—and Primitive Communication Methods

To address drug dependency issues during the COVID-19 epidemic, there will have be a major shift in communication by healthcare providers and healthcare systems.

The entire medical establishment has traditionally adopted a passive approach to patient care—and one that does not involve modern communication methods. Patients who have traditionally sought medical care have had to telephone a clinic, make an appointment, and then show up in person. Most healthcare practices have not traditionally utilized modern communication methods—from text messaging to e-mail to social media to telemedicine.

However, to address the current crisis, healthcare practices will have to reach out to their most vulnerable patients—regardless of whether those patients try to make contact first. Highly evolved addiction medicine programs handle these processes well—with a variety of outreach programs, to address issues from medications to employment to housing to disability programs.

However, mainstream medicine is only beginning to migrate toward these proactive approaches.

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does not seem capable of rational, rapid, and coordinated action.

Disruption of Care

Alexander et al. pointed out in their commentary that one of the greatest threats to people with substance abuse disorders is *disruption* of care, particularly for patients receiving tightly controlled medications such as methadone and buprenorphine. And disruption of care is the rule rather than the exception right now.

The COVID-19 pandemic comes at a time when the United States was *beginning* to make some modest progress in opioid prescription and the management of opioid-related problems.

"The COVID-19 pandemic strikes at a moment when our national response to the opioid crisis was beginning to coalesce, with more persons gaining access to treatment and more patients receiving effective medications. COVID-19 threatens to dramatically overshadow and reverse this progress. Some disruptions in the care of patients with opioid use disorder are inevitable during the weeks and months to come. However, extraordinary planning and support can limit excessive disruption and its dire consequences. These efforts will require new partnerships, unprecedented use of technology, and the dismantling of antiquated regulations. The greatest strength of the treatment system has always been compassionate care for the most vulnerable—qualities needed now more than ever," according to Alexander et al.

Many reading this article will say "I treat back pain and spinal problems. I don't offer addiction and dependency services. I'll refer those out." But it is clear that there are not nearly enough pain and addiction specialists to go around. The vast majority of people with pain and addiction/dependency disorders will end up being treated by their main providers—often primary care physicians.

There is a dire need to address this situation. Everyone in the pain treatment community should lend a hand in this troubling time, both in the effective treatment of pain and in the rational management of substance abuse problems. The treatment of pain, particularly chronic back pain, played a key role in the development of the opioid crisis. And most people who developed dependency and addiction issues due to the treatment of pain still have pain problems.

Substance Abuse Problems Are Often Silent Problems

Unfortunately, many substance abuse issues are silent problems. People often do not volunteer that they have substance abuse issues. People in the United States with addiction and dependency disorders are heavily stigmatized. In many quarters, including many areas of medicine, addiction is still viewed as a moral failing rather than a serious disease.

At the best of times, accessing effective treatment for addiction and dependency disorders (and chronic pain problems) is an uphill battle. In the midst of a massive pandemic, there are intimidating obstacles to effective care.

Living on a Knife's Edge

A *BackLetter* editor recently interviewed psychiatrist and addiction specialist Kenneth Stoller, MD, who coauthored the recent commentary in *Annals of Internal Medicine* by Alexander et al. He heads two addiction treatment programs in inner-city Baltimore, including the John Hopkins Broadway Center for Addiction.

Stoller emphasized several key points. He noted that outreach is key to the effective management of addiction and dependency problems. Many people struggling with addiction disorders are mistrustful of the health care and social welfare systems and are often reluctant to acknowledge these problems or seek help.

Many have comorbid mental health disorders complicating their management. As Stoller recently commented in the *Baltimore Sun*, "Mental health disorders and addiction are both diseases of the brain that are 'tied together in a very dangerous way.'" For example, there is heavy overlap between addiction disorders and suicide. (See Cohn, 2020.)

People with these dual problems often live on a knife's edge. In that same *Baltimore Sun* article, Stoller said that those with substance use disorders often live on a continuum between wanting to live and wanting to die. Their feelings can waver depending on whether they are intoxicated or in withdrawal and in the throes of depression, for example."

"When I get a chance to ask patients who survive their drug use, they tell me it's about escaping," he said. "Whether someone wanted to escape permanently or absolutely wanted it to be temporary, or somewhere in between, it may be tough to tell."

He noted in his *BackLetter* interview that people with addiction and dependency problems often need help in multiple areas:

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People With Pain, Addiction, and Dependency Issues Face a Dual Threat

People with pain, addiction, and dependency issues face a double whammy. Not only is their care being disrupted, their drug use is putting them at heightened risk for the coronavirus and COVID-19.

"Because it attacks the lungs, the coronavirus that causes COVID-19 could be an especially serious threat to those who smoke tobacco or marijuana or who vape. People with opioid use disorder (OUD) and methamphetamine use disorder may also be vulnerable due to those drugs' effects on respiratory and pulmonary health," according to Nora Volkow, MD, director of the National Institute of Drug Abuse (NIDA). (See Volkow, 2020.)

"Other risks for people with substance use disorders include decreased access to health care, housing insecurity, and greater likelihood for incarceration. Limited access to health care places people with addiction at greater risk for many illnesses, but if hospitals and clinics are pushed to their capacity, it could be that people with addiction—who are already stigmatized and underserved by the healthcare system—will experience even greater barriers to treatment for COVID-19. Homelessness or incarceration can expose people to environments where they are in close contact with others who might also be at higher risk for infections. The prospect of self-quarantine and other public health measures may also disrupt access to syringe services, medications, and other support needed by people with OUD," said Volkow at her NIDA blog.

"We know very little right now about COVID-19 and even less about its intersection with substance use disorders," Volkow added. "But we can make educated guesses based on experience that people with compromised health due to smoking or vaping and people with opioid, methamphetamine, cannabis, and other substance use disorders could find themselves at increased risk of COVID-19 and its more serious complications—for multiple physiological and social/environmental reasons. The research community should thus be alert to associations between COVID-19 case severity/mortality and substance use, smoking or vaping history, and smoking- or vaping-related lung disease. We must also ensure that patients with substance use disorders are not discriminated against if a rise in COVID-19 cases places added burden on our healthcare system."

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healthcare, employment, housing, and legal services. His organizations have dedicated staff who provide outreach and help in all these areas. Yet the US healthcare system in general does not provide adequate help in any of these areas.

Outreach a Priority

Outreach poses especially difficult challenges for healthcare providers in single or small-group practices. For example, primary care providers are over-scheduled and overburdened at the best of times—and that will be the case as medical practices start opening up again. Stoller said that every practice that manages opioid-related addiction disorders needs to organize outreach efforts. He believes that individual providers should devote time to this effort. And if they can't, each practice should appoint someone to regularly contact patients with addiction and dependency problems.

There is another major problem in this area. Many in the healthcare community do not have adequate knowledge about the management of addiction and complex dependency issues—and they don't prioritize developing expertise in this area of medicine.

A *BackLetter* editor asked Stoller how inexperienced healthcare providers could improve their capabilities in this area during the pandemic—a period in which traditional training programs are not going to be available to many providers.

He suggested that healthcare providers contact local branches—and the websites—of major addiction societies and other groups that support this area of medicine.

For example, the American Society of Addiction Medicine (ASAM) offers a variety of useful resources at ASAM.org. ASAM has organized a task force to make recommendations on the management of addiction disorders during the COVID-19 epidemic. And ASAM will update its resources in real time, as new recommendations become available.

The website is offering free webinars, general articles on the treatment of opioid addiction during COVID-19, and information on medication-assisted treatment with buprenorphine and other drugs. There are resources on the mitigation of infection risks during inpatient and outpatient services, drug testing protocols, telehealth, online support groups, in-person support groups with social distancing, and other key topics.

Stoller also emphasized the importance of organizing outreach and treatment services that minimize face-to-face contact between patients and providers, via online services and programs that prioritize social distancing. "Several members of our group have become infected with the virus. We can't afford to lose any more people," he commented.

He pointed out that some of the restrictions on telehealth services and the remote prescription of medications have been relaxed, at least temporarily. So there is plenty of scope for effective management of these problems without compromising the health of key personnel.

But at best, the effective management of addiction and complex dependency issues is going to be a continual challenge going forward. For example, recent research suggests that about 30% of US primary care providers don't believe in, or prescribe, medication-assisted treatment for addiction and dependency problems. Yet the evidence is clear that treatment with buprenorphine or methadone is highly effective and can save lives. So everyone in the medical community needs to make a valiant effort to get up to speed in this area of medicine.

Disclosures: None declared.

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Google Trends Reveals a Decline in Interest in Spine Treatments—Surgical and Nonsurgical

In March of this year, several US agencies and professional societies called for postponing nonelective forms of surgery on account of the raging COVID-19 pandemic in the United States. And many back pain clinics are no longer offering face-to-face back pain services.

In early March, the Centers for Medicare & Medicaid Services, the largest payer in the United States, suggested that providers "consider postponing surgery/procedures" in the following areas: nonurgent elective spine surgery, hip replacement, knee replacement, elective angioplasty, and low-risk cancer surgery.

However, not all US states are complying with this order. And even within states that have agreed to postpone nonelective surgeries, compliance is not complete.

There is no completely accurate way of assessing short-term compliance with these recommendations. However, Google Trends does give some insight into consumer interest in various forms of spine care over time.

And, indeed, Google Trends suggests there has been a decline in interest in many spine treatments—as spine care clinics of all types have stopped offering their usual therapies. Starting in mid-March, there has been a significant drop in Google searches for spinal manipulation, acupuncture, and massage therapy.

However, there has been less of a drop-off in treatments that can be done at home, such as yoga, tai chi, and mindfulness meditation. And there has been a major increase in Google searches for various forms of exercise. Searches for analgesic drugs have remained fairly steady, apart from inquiries about opioids (which have fallen).

Interest in spine surgery has waned. There have been many fewer Google searches for disc surgery, fusion surgery, degenerative disc disease, spinal stenosis, spondylolisthesis, sciatica, sacroiliac joint, and other potential surgical topics. The same holds true for epidural steroid injections.

Searches for more general topics such as "back pain" and "neck pain" have remained fairly steady. Readers who would like to access Google Trends can do so at the following web address: https://trends.google.com/trends/?geo=US.

Back Pain and Work

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"Overall, 35.1% of employed respondents had ever experienced a work-related health problem (95% confidence interval [CI] = 33.0%–37.3%). The most commonly reported work-related health problem was back pain (19.4%, 95% CI = 17.6%–21.2%). Among industries, construction (48.6%, 95% CI = 36.54%–60.58%) had the highest prevalence of any work-related health problems. Workplace injury and illness prevention programs are needed to reduce the prevalence of work-related health problems, especially in higher-risk industries."

Unfortunately, most back pain—80% to 95%—cannot be ascribed to any particular cause or occupational exposure. So most reports on back pain stemming from work have to be taken with a grain of salt. There is no smoking gun relating most cases of low back pain in the workplace to a specific workplace cause.

Back pain is extremely common in and out of the workplace. And neither back pain sufferers nor their healthcare providers —nor industry consultants—are capable of determining causation in most cases. Certainly, work can exacerbate back problems. But this is not to say that workplace factors caused the back pain.

There is an unfortunate bias towards blaming back pain on work because of antiquated workers' compensation and disability regulations. To gain workers' compensation in the United States applicants have to document that a back injury arose in the course of work. Some back problems—such as traumatic falls and fractures—obviously stem from an injury sustained in the course of work.

But most cases of back pain have uncertain causation. As Nortin Hadler, MD, observed in his book *Stabbed in the Back*, "Back 'injury' is a social construction, not a valid clinical diagnosis." (See Hadler, 2009.)

Free and colleagues studied the 2018 SummerStyles survey—conducted online—to assess health problems attributed to work. They sent the survey to 5584 survey subjects and had a response rate of 73.2%.

The most common health complaint attributed to work was low back pain, which was reported by 19.4% of the sample.

Survey respondents reported varying levels of work-related health problems. Reporting varied by age, racial/ethnic background, socioeconomic status, and educational attainment.

"Respondents aged 55–64 years reported the highest prevalence of work-related health problems (41.3%), nearly twice that of persons aged 18–24 years (21.7%), and prevalences among all age groups except respondents aged ≥75 years were significantly higher than those of respondents aged 18–24 years. Non-Hispanic multiracial respondents had the highest prevalence of work-related health problems (49.1%). Prevalence among non-Hispanic blacks (39.9%) was also significantly higher compared with that of non-Hispanic other race respondents (28.2%). By educational attainment, prevalence was highest (39.2%) among respondents with less than a high school diploma and lowest (30.6%) among those with a bachelor's degree or higher. The prevalence of any work-related health problem did not vary significantly by occupation, or work arrangement, but did vary significantly by industry and employment situation," according to Free et al.

The overall conclusions, according to these researchers? "A history of perceived work-related injury or illness is common among the working population (35.1%), and the prevalence varies by employment situation, industry of employment, and some demographic characteristics.

"Workplace injury and illness prevention programs are needed to prevent work-related health problems, such as back pain, and reduce the number of health problems in higher-risk industries such as construction."

Disclosures: None declared.

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MEETING CALENDAR

Scoliosis Research Society 53rd Annual Meeting
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

Eurospine 2020
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

NASS 2020: Annual Meeting of the North American Spine Society
October 7-10, 2020
San Diego, California
Contact: North American Spine Society
7075 Veterans Boulevard
Burr Ridge, IL 60527
Tel: 630-230-3600
Fax: 630-230-3700
www.spine.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

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 Impending Telehealth Revolution**
- **Marijuana Products Too Strong for Routine Pain Problems?**
- **Will Interruption in Spine Care Lead to High-Impact Chronic Pain?**
- **The Evidence on Nonopioid Drug Treatments for Chronic Pain**

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BACKPAGE

Time to Curtail One-to-One Spine Care?

A recent article at the *Health Affairs* Blog pointed out that "one-to-one" relationships between patients and healthcare providers have been a tradition in medicine for centuries.

However, for at least a couple of decades, many patients have engaged multiple healthcare providers in one-to-one relationships—primary care providers, multiple specialists, along with ancillary healthcare providers. This pattern is not sustainable economically, according to Shantanu Nundy and colleagues.

"Today's prevailing one-to-one model is not only complex and dangerous for patients, it is also unaffordable and unsustainable. A key driver of rising health care costs in the US is declining labor productivity—the output of visits, tests, treatments, and surgeries per cost—as more and more health professionals are required to care for the same patients," they asserted.

They suggest that "one-to-many" care—a single provider dispensing advice and medical recommendations to multiple patients simultaneously—is the wave of the future. And that may hold true in back pain and spine care, but with some caveats.

With the rise in remote consultations and telemedicine related to the COVID-19 pandemic, this may be a good time to experiment with new models.

However, there would have to be another major shift for this to work in spine care—and that would be adherence to guidelines and scientific evidence. Evidence to date suggests that many healthcare providers have veered away from evidence-based care—toward care based on their personal beliefs and experience. And that has led to a proliferation of overdiagnosis, overtreatment, and exorbitant costs.

If there is no uniformity in medical care for low back pain and scant adherence to the scientific evidence, a one-to-many management approach may be counterproductive. (See *Health Affairs*, April 6, 2020. doi:10.1377/hblog20200320.600000.)

A Deluge of Assertions About Back Pain and Working at Home

Millions of people are currently sheltering-in-place to avoid the novel coronavirus and prevent COVID-19. This has led to a tsunami of news coverage about the dangers of working at home, "poor" posture, protracted sitting, a sedentary lifestyle, excessive cell phone use, and other home-based activities, and the alleged benefits of various interventions to overcome these influences.

Here are a few headlines from Google News: *Working from Home Can Cause Poor Posture and Back Pain*, *Covid-19 Self-Isolation Could Cause a Back Pain Epidemic*, *Tips for Avoiding Back Pain and Injury While Working From Home*, *Expert Tips on How to Combat Work From Home Back Pai*n, and *Working From Home Can Lead to Poor Posture*.

Happily, the human spine can adapt to many working conditions and stresses. So most people can transition from office-based to home-based work without any trouble.

And many claims about back pain causation related to home-based activities do not find abundant support in high-quality scientific studies. For instance, there is not much evidence that sitting is a major risk factor for back pain. Posture also does not have a clear relationship to symptoms. Nor does excessive cellphone use. And ergonomic interventions to address these issues do not have a good track record in clinical trials.

However, it is important to stay active—and engage in normal activity—for a variety of reasons.

The Back*Page* Online

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Fear of COVID-19 Causing Financial Problems for Hospitals

The COVID-19 epidemic is causing major worries at hospitals and other healthcare institutions. And not just because of the cost of treating COVID-19 cases.

Hospitals are also worried about the downturn in usual care and surgical and procedure rates. Spine procedures would be a prime example. For instance, the hospital costs of elective spinal fusion surgery in the United States exceeded $10 billion in 2015, according to a study by Brook Martin and colleagues. (See *Spine,* 2019; 44(5):369–76.)

An article by Martha Bebinger, jointly published at *NPR* and *Kaiser Health News*, suggested that patient volume was down 75% at one large physician group in Massachusetts.

Dallas-based Steward Health Care reported experiencing "seismic financial shock."

"Elective surgeries are the cornerstone of our hospital system's operating model—and the negative impact due to the cancellations of these procedures cannot be overstated. In addition, patients are understandably cautious and choosing to defer any nonemergency treatments or routine visits until this crisis has passed," according to a statement from this healthcare system. (See *Kaiser Health News*, March 20, 2020, https://khn.org/news/already-taxed-health-care-workers-not-immune-from-layoffs-and-less-pay/)

In addition, patients appear to be shying away from hospital-based medical care altogether, vastly revenues. A recent article in the *New York Times* by Harlan Krumholz, MD, bore the provocative title "Where have all the heart attacks gone?" He pointed out that not only has there been a reduction in elective procedures there has also been a reduction in urgent and emergency procedures.

"The most concerning possible explanation is that people stay home and suffer rather than risk coming to the hospital and getting infected with coronavirus. This theory suggests that Covid-19 has instilled fear of face-to-face medical care," according to Krumholz. (*See New York Times*, April 6, 2020; www.nytimes.com/2020/04/06/well/live/coronavirus-doctors-hospitals-emergency-care-heart-attack-stroke.html.)

However, some of the patient fears may be warranted. There is not currently clear evidence about the risks of infection transmission in hospitals where there are a substantial number of COVID-19 cases.