Challenges and Solutions in Reducing Opioid Misuse and Abuse

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Initiatives aimed at reducing opioid misuse and abuse include mining claims data to identify patients at high risk for substance abuse, promoting wearable technologies to improve monitoring of patients with chronic pain, placing limitations on the prescribing and dispensing of opioids, and increasing patient and provider awareness of alternative pain management options.

A variety of approaches—and a variety of challenges emerged from an Academy of Managed Care Pharmacy (AMCP) Foundation symposium in October 2016 entitled "Balancing Access and Use of Opioid Therapy" in National Harbor, Maryland. Panelists later recounted some of the ideas they heard that might have the most effect. David Calabrese, RPh, MHP, Chief Pharmacy Officer for OptumRx, summed up the takeaway from the symposium: "This is going to take a well-coordinated, multidimensional type of solution to truly impact, in a positive way, this epidemic."

Predicting Opioid Use Disorder

One approach focuses on identifying the patients at highest risk for problems. Using Truven Health Analytics' nationally representative database, Purdue Pharma researchers evaluated treatment patterns among noncancer patients and identified patterns of opioid prescribing that fell outside the standard for normal and could be considered a risk for patients.

Researchers followed 71,000 patients who initiated an extended-release (ER) opioid over a two-year period to better understand how these drugs are being used. Tracy Mayne, PhD, Executive Medical Director for Purdue Pharma, a panelist at the meeting, shared findings of the study. Of the 71,000 patients, 72% used one ER opioid over the two-year period, 21% used two opioids, and just 0.7% (520 patients) used three or more. These data show that a practice known as "opioid rotation" is very rare and not a standard practice among physicians who prescribe these drugs. Among patients who took a longacting opioid for the full two years, only 72 patients had more than two dose increases after the initial 90-day titration period; this, Dr. Mayne says, "is the most worrisome group, showing a pattern of continuous dose escalation. Fortunately, this practice was also uncommon."

Opioid-Related Costs

Another Purdue study examined the costs of opioid abuse, dependence, overdose, and poisoning over a three-year period. Researchers used a propensity score match on 200 variables during a seven- to 12-month period for two cohorts: one with opioid misuse and one without. The primary drivers of excess cost in this population were opioid dependence and poisoning, but this was closely followed by nonopioid drug abuse and

Peter Sonnenreich is a freelance health care writer in Bethesda, Maryland. Linda Geisler is a freelance health care writer in Weston, Connecticut. dependence, and alcohol abuse and dependence. Medical costs started to increase six months before a diagnosis of abuse and continued to accumulate over the next 18 months. Compared with the control group, patients in the abuse group incurred costs of \$1,000 more a month. Costs arose from inpatient settings, emergency departments, rehabilitation facilities, outpatient settings, and prescription drugs. Interestingly, these patients were in treatment for alcohol- and nonopioid-related substance abuse but do not appear to have been properly evaluated for opioid use.

"If somebody had any prior history of alcohol or any other substance abuse," Dr. Mayne says, "that patient is at high risk. And we should ... think twice about giving that patient an opioid. If they do need an opioid, monitor that patient very, very carefully. And the truth is, we know physicians are not going to their claims or medical record and looking for that history."

Pain Practice Analyzers

Purdue is working in partnership with a chronic pain clinic and companies that provide wearable health technologies to offer the device to new patients in the clinic over the course of a year. The device will track pain, physical activity, sleep, depression, and other measures important in chronic pain and provide a two-way exchange of data. These data will go to dashboards for the patient and the physician, but the device will also interface with electronic medical records. "The device can give physicians a window into the patient's daily function, and they may be able to intervene sooner," Dr. Mayne says.

Total Opioid Management for Managed Care

At the conference, Calabrese described a "Five for Life" approach to Total Opioid Management, an initiative he is helping to spearhead at OptumRx. This five-step approach includes up-front education and prevention strategies to increase public awareness and encourage appropriate opioid use and promote alternatives where clinically warranted. The program limits individual exposure to opioid therapy through what Calabrese describes as "disruptive yet highly warranted dose and duration limitations on the dispensing of these drugs, particularly in patients who may be naïve to opioid therapy." He explains that "limiting indiscriminate prescribing by the physician and dispensing by the pharmacy is where we are likely to drive the greatest benefits with regard to decreasing the prevalence of dependence, addiction, and overdose in this country."

Another important component is high-risk patient identification and intervention. "This involves employment of a much more forensic approach to uncovering patterns of patientspecific drug utilization that might be indicative of current or future misuse, abuse, or diversion," he says. Then there is prescriber and pharmacy surveillance, which "amplifies how we are monitoring physician prescribing and pharmacy dispensing patterns and shutting down any disproportionate or potentially

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abusive opioid prescribing by physicians. We will be deploying much more comprehensive and sophisticated analytics to identify outliers, those physicians and pharmacies that may be contributing to the crisis through high-risk clinical practice and potentially unethical behaviors that we know are occurring all too frequently in the marketplace." The fifth step is appropriately supporting those who have already been afflicted—those who have had a previous overdose, are actively in substance abuse treatment, or have formally completed substance abuse treatment—to ensure that they have proper access to the right resources, properly accredited treatment centers, behavioral health support services, and medication-assisted treatment.

Calabrese says it's important to remember how this problem started. Excessive marketing and promotion of opioids in the late 1980s and early 1990s was a main driver of the situation our country faces today—the excess prescribing of these products in noncancer-related chronic pain, where evidence is significantly lacking to support the value of these drugs versus therapeutic alternatives. "The particular promotional campaign of *Pain as the Fifth Vital Sign* by the American Pain Society that coincidentally coincided with the FDA approval of Oxycontin has been identified by industry experts as potentially one of the biggest mistakes in modern medicine," Calabrese says. "The numbers speak for themselves in terms of growth in opioid prescriptions since that time and how that directly parallels with trends in inpatient admissions, ED visits, and death tolls due to overdose."

"While a contributing factor is certainly managed care's insufficient surveillance and intervention to date with the 'bad guys,' it must be recognized that the bulk of the problem leading up to this crisis has been the well-intentioned, but significantly misguided, efforts of physicians across the country, who were simply trying to do the right thing for their patients based on what they were taught and what the consensus was at the time," Calabrese says. "Now it is time for us all to take accountability for the situation we find ourselves in by reeducating providers and patients and taking a more aggressive, well-rounded approach to limiting indiscriminate use of these meds while still ensuring proper care for those with chronic pain management needs."

The Path of Pain: Maze or Labyrinth

During Patient Perspective panel discussions at the AMCP Foundation meeting, Glenna Crooks, PhD, Founder and CEO of Strategic Health Policy International, Inc., described a patient's experience of pain as being like a maze or labyrinth. A maze, she explained, has blind alleys and dead ends. It's possible to get lost in a maze and even die there. Many people would say that is their experience of pain. For others, their path of pain is like a labyrinth—if they keep going, they eventually come out the other side. That was her experience of dealing with acute surgical pain and long-term chronic pain from traumatic injury.

"Frankly, many people experience pain but are not dealing with it," Dr. Crooks says. "I think we all are in denial about pain." She adds that even the language we use to describe pain, the scale of 1 to 10, is insufficient and should be revised to deal with the opioid crisis.

Dr. Crooks calls pain "that 'in your face' existential challenge." Patients who have experienced pain from an

accident, injury, or disease may fear that it will happen again. They may feel vulnerable, helpless, and ashamed that somehow it's their fault. Some get caught in an anger-depression loop. Chronic pain can constrict social activities, can interfere with sleep, and can lead to isolation. The pain—and the emotional turmoil that comes with it—can bring about unemployment, addiction, and early death.

Alternatives to Opioids

Many patients and providers do not know about the nonpharmaceutical treatment options for both acute and chronic pain. In some instances, access to these alternative pain management strategies may be limited. Dr. Crooks acknowledges that finding a treatment that works requires a person's willingness and ability to keep looking. Her career in government and the pharmaceutical industry gave her access to experts and information about nondrug alternatives to pain management and the financial stability to pay out-of-pocket for them.

To avoid opioids, she tried yoga, massage, nutrition solutions, wellness, a Zen practice known as "BigMind," and the Canyon Ranch Health Resort. She studied neuroscience to learn how to use her brain to manage her pain and has seen a psychiatrist specializing in trauma because much of her pain has been caused by a traumatic event. Another pain-relieving strategy for her is staying active mentally and working.

Dr. Crooks was recently in a clinical study examining the effects of the Spire and Muse apps, which track breathing and facilitate meditation, respectively. Another FDA-approved overthe-counter device she uses, Quell, fits around the leg below the knee and delivers an electrical signal directly into the brain for chronic, widespread pain. After wearing the device for a short period, she says, she experienced better sleep quality and a lot less pain.

As with all of the other treatments Dr. Crooks has tried, however, she acknowledges that eventually, Quell, like other methods, may no longer help. That for her is part of the journey through the labyrinth. "For people with chronic pain, like me," she says, "when it comes to the point where something doesn't work anymore, you just have to keep going and try something different."