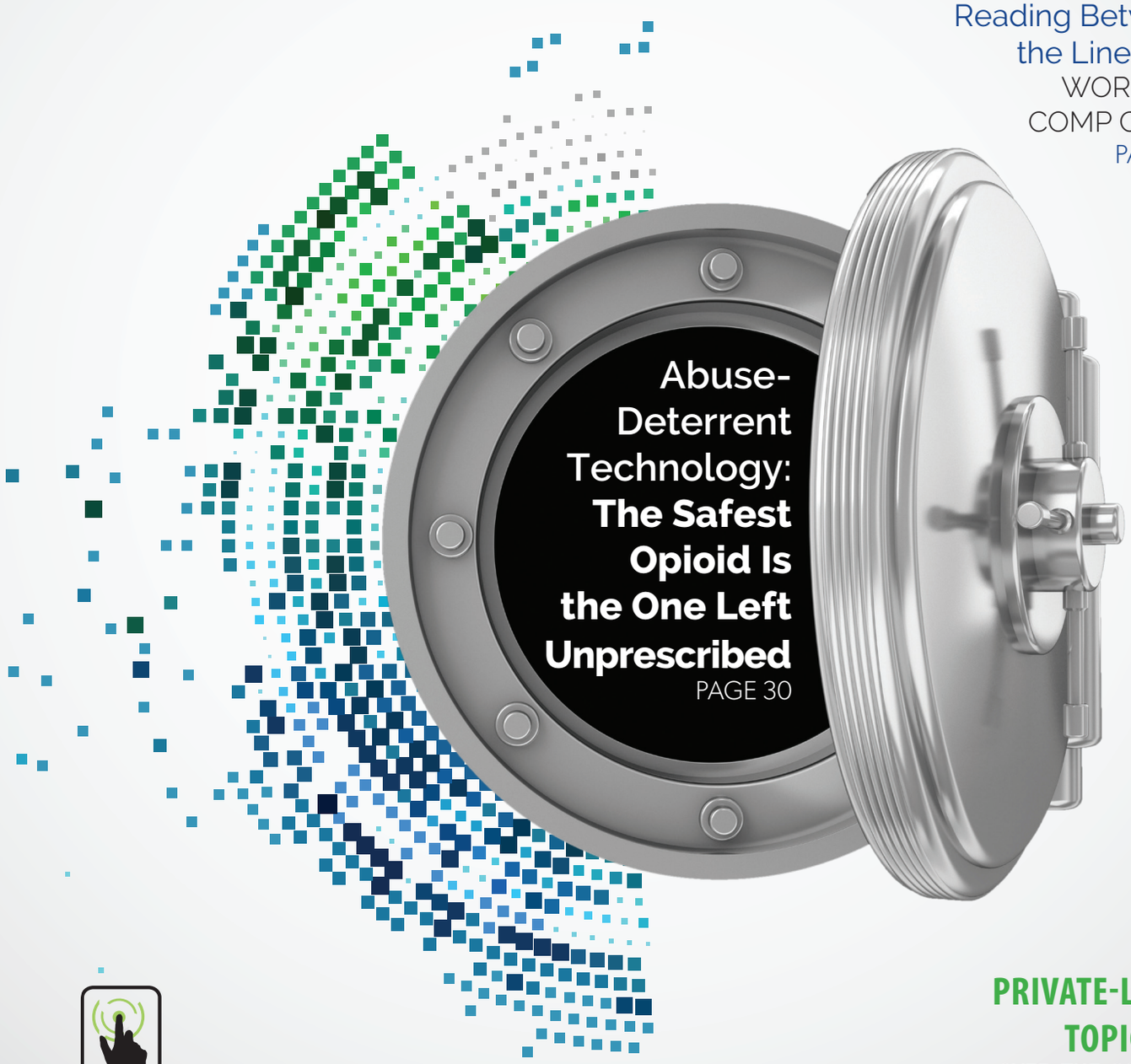
Healthesystems®

RxINFORMER

CURRENT AND EMERGING ISSUES IMPACTING WORKERS' COMP SPRING 2015

Reading Between the Lines of a WORKERS' COMP CLAIM PAGE 12



Abuse-Deterrent Technology: **The Safest Opioid Is the One Left Unprescribed**

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PRIVATE-LABEL TOPICALS:

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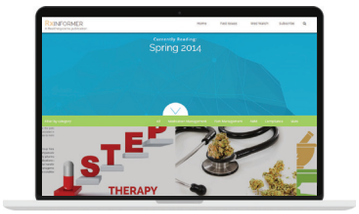
RXINFORMER

SPRING 2015

INTERACTIVE EXCLUSIVES



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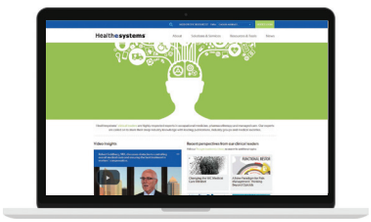

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Our clinical experts lend insight into current topics in workers' compensation through video discussion, whitepapers, and data infographics.

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INTERACTIVE EXPERIENCE

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BUILDING PROGRESS THROUGH **MEANINGFUL INTERVENTION**

PRESCRIBER-LEVEL INTERVENTION IS CRITICAL TO THE SUCCESS OF BROADER STATE AND FEDERAL INITIATIVES

A number of high-level efforts have demonstrated significant progress in fielding the challenges of workers' compensation. Notably in this issue, we discuss the growing adoption of closed drug formularies on a state level, and the positive impact these regulations are having on cost and utilization. However, while progress is being seen in some areas, new challenges arise that will require renewed attention. Despite reforms targeting physician dispensing, costs associated with this practice continue to increase. And while pharmaceutical manufacturers focus their efforts on new and more expensive formulations of opioids with abuse-deterrent features, misuse of and addiction to these prescription narcotics remain the biggest challenges in workers' compensation.

The shortcomings of these efforts do not indicate failure; rather, they are their own form of progress, as they highlight current unmet needs and serve to reinforce that there is no quick fix, no silver bullet. Headway is being made. But no single initiative can be expected to achieve success on its own; it is the coalescing of efforts that will effect change in the most impactful way. While broader initiatives are being implemented, effective interventions on the prescriber and even patient levels serve to support and strengthen these efforts. There continues to be considerable opportunity for outreach and education at both of these stakeholder levels.

A recent survey administered by the National Safety Council (NSC) indicated that a surprising number of patients are unaware they have even been prescribed an opioid medication, and an even greater percentage don't understand the risks associated with this class of drugs. For those of us who witness daily the collateral damage of inappropriate opioid prescribing, it is easy to forget that a large part of the population is uneducated regarding this ongoing epidemic. For many people, Vicodin® is viewed as a household name rather than a federally controlled substance. The NSC data underscore the need for continued education about the risks posed by opioid therapies among injured workers, as well as prescribers who are either unaware of these risks or are failing to communicate them to their patients.

COMBATING ABUSE

Exploration of abuse-deterrent opioid formulations is a relatively new science restricted to the last decade, and products approved thus far are unable to deter the most common form of misuse among injured worker patients, oral ingestion. While the future may bring

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advanced technologies, these products still fail to address the underlying causes of misuse, which include dependence and addiction. There is no pill that can successfully manage the many factors that lead to opioid misuse, which often include psychosocial elements that are individual to each patient. The recommended strategy remains employment of a comprehensive, evidence-based pain management program that supports the complex and often changing needs of the injured worker. This strategy includes significant opportunity for intervention on both the prescriber and patient levels through its incorporation of evidence-based guidelines, prescription drug monitoring programs (PDMPs), patient-physician dialogue tools such as written opioid treatment agreements, and non-pharmacologic treatment.

PHYSICIAN-DISPENSED DRUG TRENDS

Physician dispensing has long been a driver of inflated medication-related costs in workers' compensation. Despite state-enacted reforms intended to reduce rates of this practice, the presence of physician-dispensed medications among workers' comp claims has continued to steadily increase. In *Physician Dispensing: New Challenges in an Ongoing Battle*, we take a look at where state reforms have been successful, where they are falling short, and the trends that are arising as dispensing physicians identify new avenues of revenue that fall within current regulation. While physician dispensing remains legal in the large majority of states, there are measures that the payer can take in partnership with their pharmacy benefits manager to help encourage responsible prescribing and reduce the financial and patient safety impacts of this controversial practice.

CLOSED DRUG FORMULARY SUCCESS

Adoption of a closed drug formulary has proven to have a measurable and significant impact on utilization and costs within workers' compensation, and successful implementation of formularies on a state level supports payer efforts to control prescribing of high-cost, high-risk medications. In states adopting formularies that provide broad and consistent oversight of these drugs, payers and pharmacy benefits managers are empowered to focus their efforts at the prescriber and claims levels to address concerns that state regulations cannot.

Successful intervention requires a degree of collaboration, and changing behaviors is no small feat. However, in the majority of cases, we at Healthesystems find that meaningful interactions with physicians are in fact garnering positive results and impacting outcomes. Ultimately, the majority of those involved in the care of injured workers share the goal of improved function and patient quality of life. Sometimes it takes extra effort to guide the process in the right direction. It is my hope that this issue of *RxInformer* helps provide insights into some areas of critical need where these efforts can be most effectively applied for the most meaningful impact.

MED WATCH

WORKERS' COMPENSATION PROFESSIONALS SHOULD KEEP AN EYE ON THESE MEDICATIONS

The U.S. Food and Drug Administration (FDA) announced a number of approvals in recent months that could potentially impact workers' compensation, with additional approvals pending in upcoming months. These include new products and/or indications, new dosages or formulations of existing products, and generics introduced to the market.

- ✦ NEW PRODUCT/INDICATION
- ■ FIRST-TIME GENERIC
- ♦ NEW DOSAGE/FORMULATION
- ✱ SPECIALTY

2014

NOVEMBER

Hysingla™ ER (hydrocodone bitartrate) extended-release tablets ✦
PAIN
For the management of severe pain; abuse-deterrent features
NOTE: Schedule II controlled substance

Lemtrada™ (alemtuzumab) injection ✦ ✱
AUTOIMMUNE
A third-line treatment for patients with relapsing forms of multiple sclerosis

Epivir® (lamivudine) 10 mg/mL oral solution ■ ✱
ANTIVIRAL
For use in combination with other antiretroviral agents for human immunodeficiency virus type 1 (HIV-1) infection

DECEMBER

Viekira Pak™ (ombitasvir/paritaprevir/ritonavir; dasabuvir) ✦ ✱
ANTIVIRAL
Oral, fixed-dose combination therapy for chronic hepatitis C (genotype 1)

Dyloject™ (diclofenac sodium) injection ✦
PAIN
For the management of mild to moderate pain and moderate to severe pain alone or in combination with opioid analgesics

Trezix™ (acetaminophen/caffeine/dihydrocodeine) ■
PAIN
For the relief of moderate to moderately severe pain
NOTE: Schedule III controlled substance

Zohydro® ER (hydrocodone bitartrate) with BeadTek™ ♦

PAIN

For the management of severe pain; new formulation with abuse-deterrent features

NOTE: Schedule II controlled substance

Prezcobix™ (darunavir/cobicistat) ✦ ✱

ANTIVIRAL

Combination treatment for HIV-1 infection in adult patients with no darunavir resistance-associated substitutions

Evotaz™ (atazanavir/cobicistat) ✦ ✱

ANTIVIRAL

For use in combination with other antiretroviral agents for the treatment of HIV-1 infection

Androgel® 1% (testosterone) ▪

OPIOID SIDE EFFECTS

Testosterone replacement

Nexium® (esomeprazole) delayed-release capsules ▪

ANTI-ULCER

Treatment indications include protection from gastric ulcers associated with continuous nonsteroidal anti-inflammatory drug (NSAID) therapy

JANUARY 2015

Farydak® (panobinostat) ✦ ✱

ONCOLOGY

For treatment of patients with multiple myeloma who have received at least two prior regimens

Dutrebis™ (lamivudine/raltegravir) ✦ ✱

ANTIVIRAL

For combination use with other antiretroviral agents for the treatment of HIV-1 infection

FEBRUARY

▶ALWAYS ON THE WATCH

The new product landscape is ever-shifting. Visit MEDWATCH online for all of the latest updates, plus an expanded list of medications at www.healthesystems.com/rxinformer.

Opdivo® (nivolumab) IV injection ✦ ✱

ONCOLOGY

New indication to treat patients with advanced squamous non-small cell lung cancer (NSCLC)

MARCH

APRIL

Abilify® (aripiprazole) ▪
PSYCHIATRY
An atypical antipsychotic used to treat psychoses and an add-on to antidepressant therapy for major depressive disorder

PRODUCTS ON THE HORIZON

The following product NDAs have recently been accepted for review by the FDA, and some could be approved by the end of 2015.

Belbuca (buprenorphine HCl) buccal film
PAIN
An opioid analgesic buccal film formulation in development for the management of chronic pain

ALO-02 (oxycodone HCl/naltrexone HCl) extended-release capsules
PAIN
Extended-release opioid analgesic formulation for the management of severe pain. Contains abuse-deterrent properties

Xtampza ER (oxycodone) extended-release capsules
PAIN
Extended-release opioid analgesic in development for the treatment of chronic pain. Contains abuse-deterrent properties

MorphaBond ER (morphine sulfate) extended-release tablets
PAIN
Extended-release, opioid analgesic formulation in development for the treatment of severe pain. Contains abuse-deterrent properties

Unfold for full timeline

DRUG ALERTS

THREE COMPANIES LAUNCH GENERIC VERSIONS OF CELEBREX®

Generic celecoxib available as of December 2014

Three pharmaceutical manufacturers announced the launch of celecoxib capsules in 50mg, 100mg, 200mg, and 400mg formulations. Celecoxib is indicated for the relief of the signs and symptoms of osteoarthritis, rheumatoid arthritis and ankylosing spondylitis, and for the management of acute pain in adults. Celebrex has historically been a large contributor to medication spend in workers' comp.

FDA DRUG SAFETY COMMUNICATIONS

Testosterone products may increase cardiovascular risk

The U.S. Food and Drug Administration (FDA) has concluded that there is a possible increased cardiovascular risk associated with testosterone. The FDA is requiring manufacturers of prescription testosterone products to add information to the labeling about a possible increased risk of heart attacks and strokes. Testosterone deficiency is a side effect of opioid use.

Ziprasidone associated with rare but serious skin reaction

The FDA warned in December 2014 that the antipsychotic drug ziprasidone (Geodon®) is associated with a rare but serious skin reaction, in some cases leading to death.

RECENT SCHEDULE CHANGES

Naloxegol no longer a controlled substance

The Drug Enforcement Administration removed naloxegol (Movantik®) from the schedules of the Controlled Substances Act. Prior to the January 2015 removal, naloxegol was a schedule II federally controlled substance due to its derivation from opium alkaloids. Naloxegol is used to treat opioid-induced constipation in adults with chronic non-cancer pain.

PRODUCT RECALLS BY HOSPIRA, AUROBINDO PHARMA

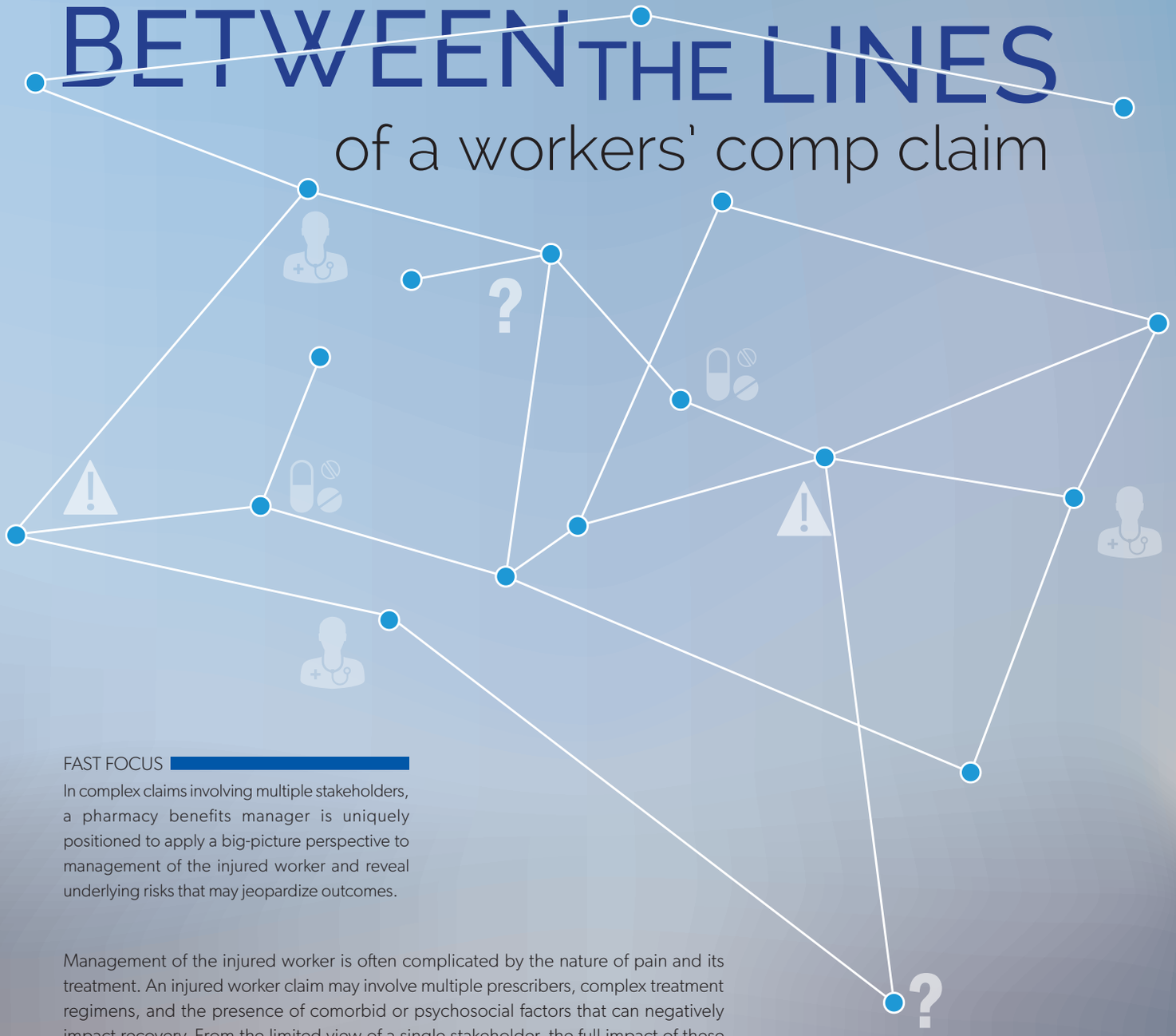
Ketorolac tromethamine injection

Hospira announced a voluntary recall of ketorolac tromethamine injection, USP in the United States and Singapore due to potential particulate, identified as calcium-ketorolac crystals. The recalled lots were distributed from February 2013 to December 2014 in the United States. Ketorolac tromethamine injection is indicated for the short-term management of moderately severe, acute pain.

Gabapentin 300mg capsules

Aurobindo Pharma USA voluntarily recalled lot GESB14011-A of gabapentin capsules, USP 300 mg 100-count bottles, to the consumer level. The product lot has been found to contain some empty capsules. Expiration is 12/2015. Gabapentin is prescribed for neuropathic pain in injured workers.

READING BETWEEN THE LINES of a workers' comp claim

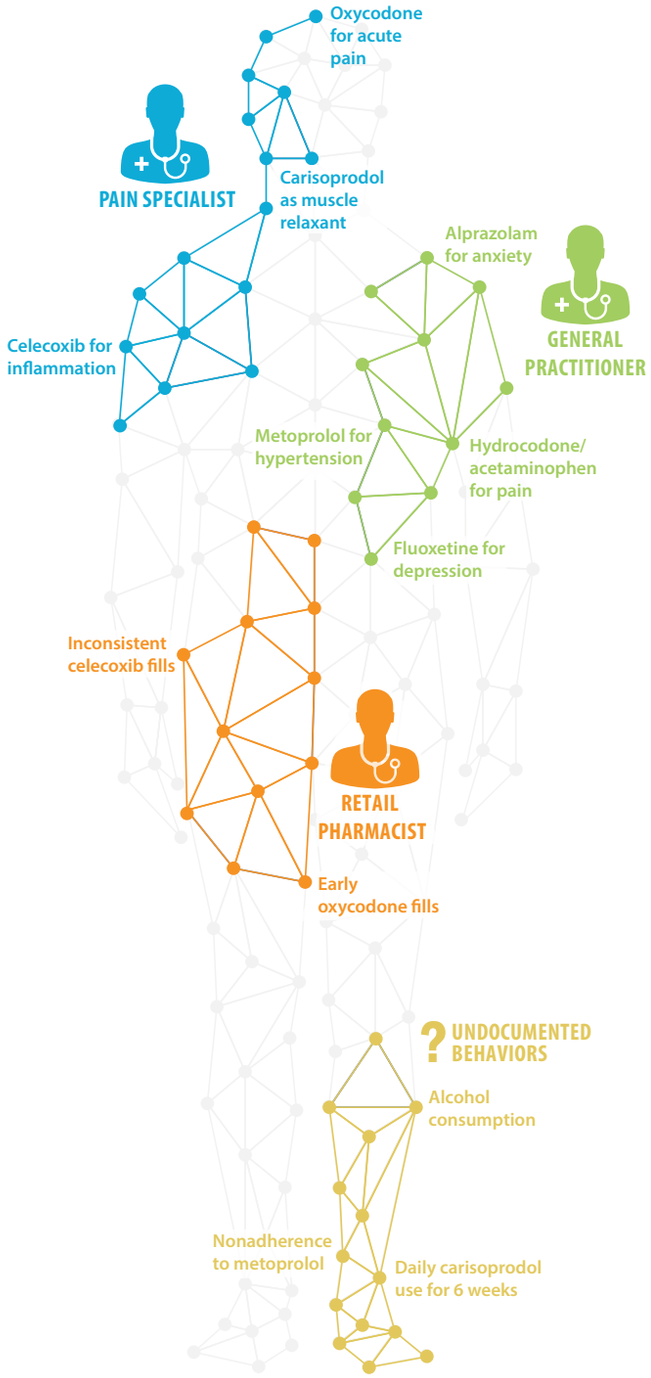


FAST FOCUS

In complex claims involving multiple stakeholders, a pharmacy benefits manager is uniquely positioned to apply a big-picture perspective to management of the injured worker and reveal underlying risks that may jeopardize outcomes.

Management of the injured worker is often complicated by the nature of pain and its treatment. An injured worker claim may involve multiple prescribers, complex treatment regimens, and the presence of comorbid or psychosocial factors that can negatively impact recovery. From the limited view of a single stakeholder, the full impact of these concerns can be difficult to ascertain. Prescribers can make the best possible treatment decisions with the information at hand; but if a key piece of information is missing, recovery can take a wrong turn.

Fragmented Stakeholder Data in the Treatment of an Injured Worker



WITHOUT COMPLETE DATA TREATMENT CONCERNS GO UNNOTICED

PATIENT: DOUG G.

- Pain due to shoulder tear
- A history of hypertension
- New-onset depression and anxiety

TREATMENT

Pain specialist has prescribed an opioid analgesic to manage acute pain, a nonsteroidal anti-inflammatory drug (NSAID) to reduce inflammation, and the muscle relaxant carisoprodol

General practitioner has prescribed Vicodin® when Doug complained his pain remained unmanaged

General practitioner has also dispensed a trial of alprazolam and fluoxetine for symptoms of anxiety and depression

Beta-blocker treatment (metoprolol) is ongoing for a history of hypertension

This injured worker case study is an example of how a seemingly straightforward claim can quickly become complicated in the absence of stakeholder communication. The specialist treating the injury prescribed an opioid analgesic to manage Doug's acute pain and an NSAID to reduce inflammation. She has also prescribed carisoprodol for muscle spasms. She is unaware of Doug's history of hypertension, or that his general practitioner has prescribed Vicodin® (hydrocodone/acetaminophen). The general practitioner has also dispensed a trial of alprazolam and fluoxetine to "see if they help" with the symptoms of anxiety and depression that have developed post-injury.

Neither prescriber is aware that Doug's alcohol consumption has increased, or that he has not been taking metoprolol to treat his hypertension as directed due to the number of medications he must now keep track of. However, the prescription continues to be filled regularly through his private insurance via mail-order, so his spotty adherence goes undetected.

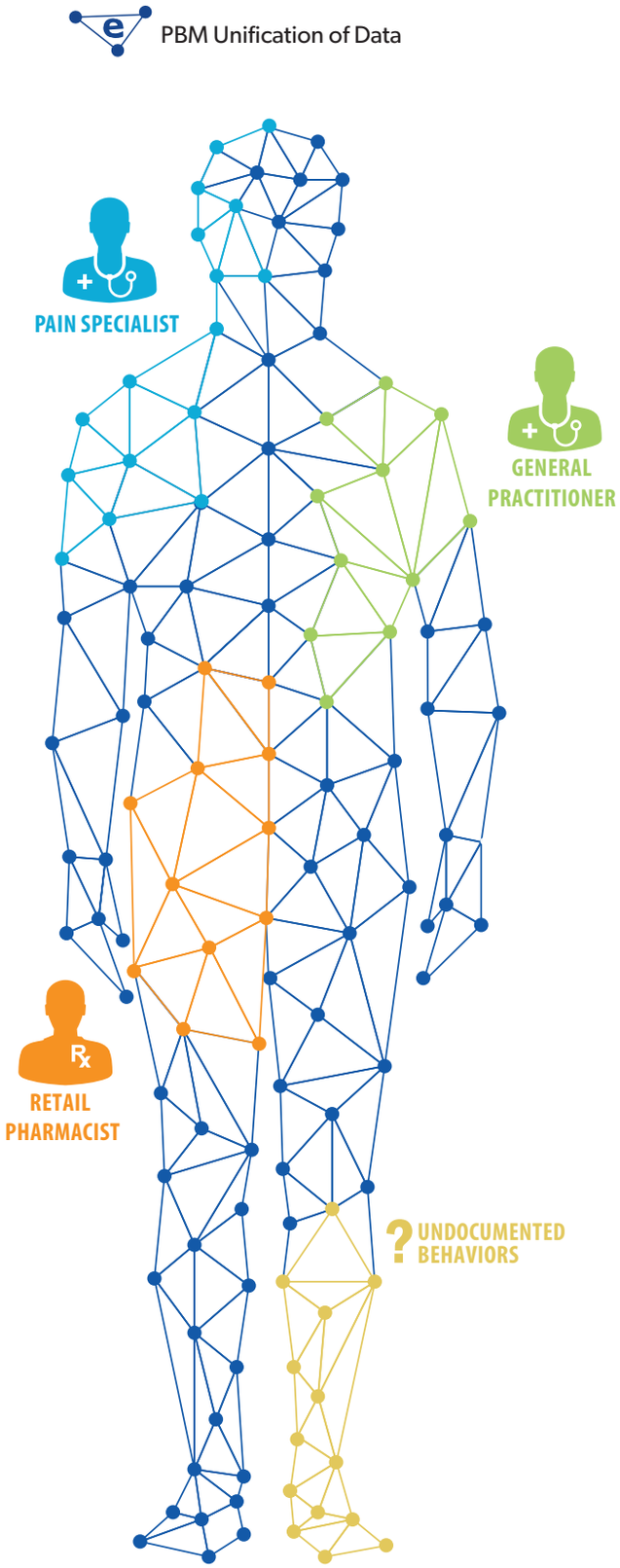
The pharmacist at the local retail pharmacy where Doug fills his prescriptions has noticed that Doug sometimes comes in a few days early every month for his opioid prescriptions, but is less consistent with his NSAID fills. However, in the mind of the pharmacist, it's not enough to raise a red flag. The pharmacist is unable to see all of the medications Doug is taking, due to the fact they are being dispensed through different channels. She is also unaware of his newly developed psychosocial concerns — knowledge that provides a troubling context for his refill patterns.

From each of the stakeholder's perspectives, there are no major red flags that indicate a serious threat to Doug's health or recovery. However, when stakeholder knowledge is combined, a very different — and highly concerning — story begins to emerge.

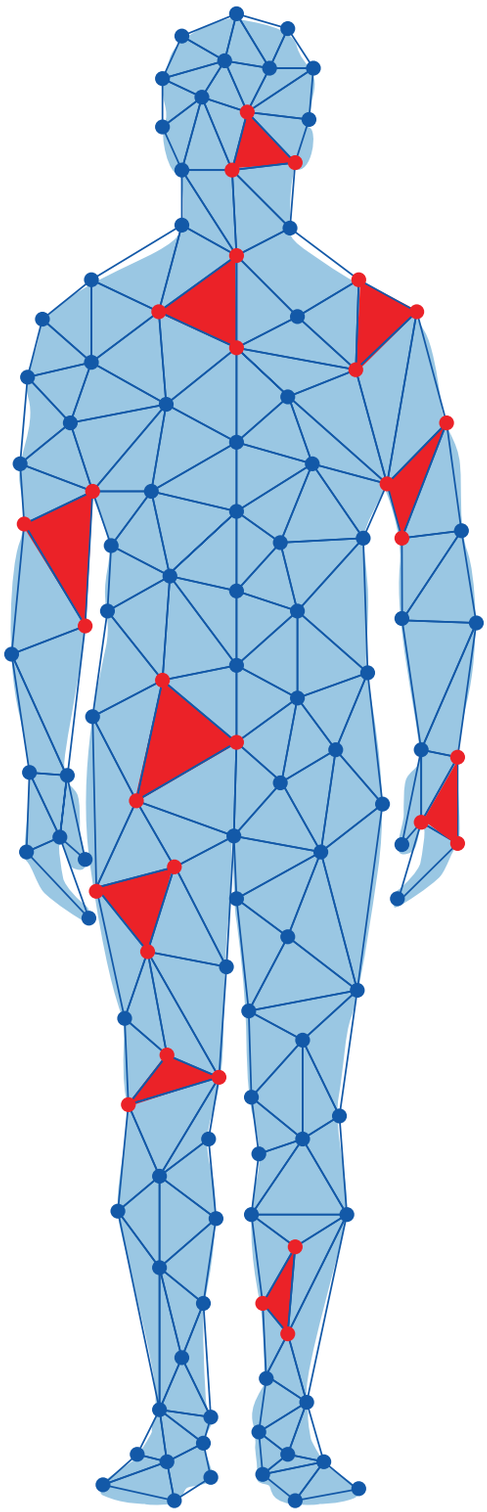
PROVIDING THE RIGHT CONTEXT REVEALS UNDERLYING RISK

Ensuring the safe and effective treatment of an injured worker goes beyond flagging disparate pieces of information. Doug's case must be reviewed in its full context to successfully identify the underlying treatment concerns. A pharmacy benefits manager (PBM) can help read between the lines and fill in the gaps by ensuring that all pertinent data are being considered, allowing for more informed treatment decisions.

In this case, there are multiple prescribers and dispensers of medication. There is also some critical information that is not visible on Doug's workers' compensation claim, including his history of hypertension, and undocumented behaviors such as nonadherence. Through a full medical record review and analysis, the PBM is uniquely positioned to provide a 360-degree perspective, revealing a veritable list of concerns that may have been difficult for any single stakeholder to identify on their own.



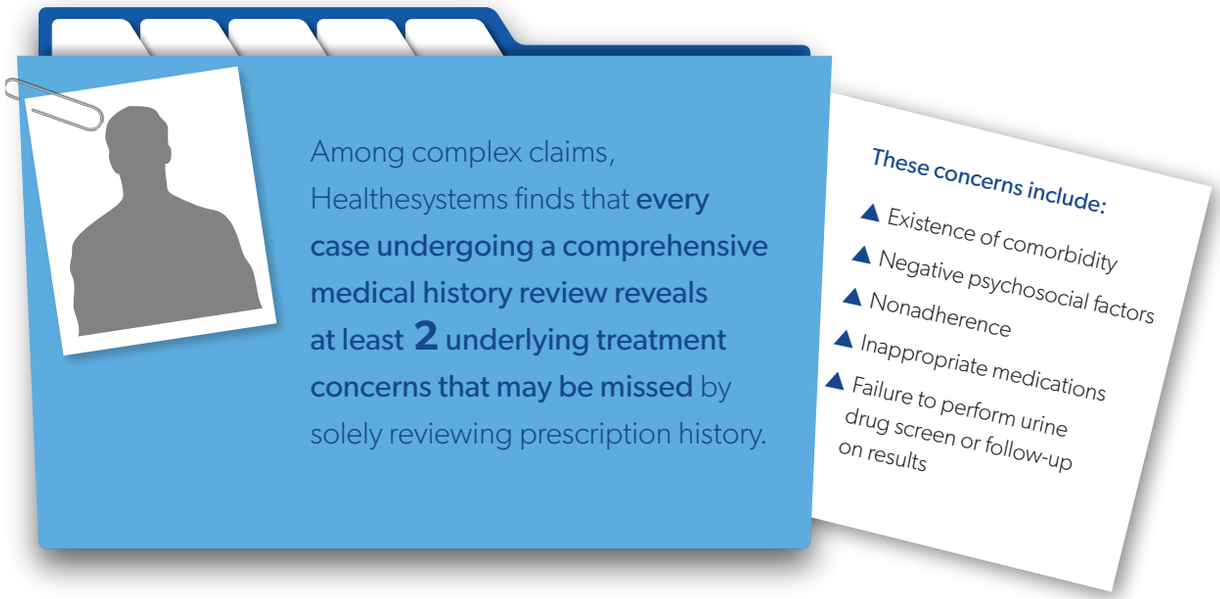
Holistic View of Patient



! Treatment Concerns

- ! Multiple opioid analgesics
- ! Multiple prescribers
- ! Multiple channels of medication dispensing
- ! "Unholy" trinity of opioid + benzodiazepine + carisoprodol
- ! Possible selective adherence to pain medications
- ! Carisoprodol use beyond indicated 2-3 weeks
- ! Increased risk of cardiovascular event due to:
  - Drug-disease interaction of NSAID in hypertensive patient
  - Nonadherence to hypertension medication due to polypharmacy/excessive pill burden
- ! Additive sedative effects of alcohol when combined with the muscle relaxant carisoprodol and the benzodiazepine alprazolam
- ! Evidence of psychosocial concerns (anxiety, depression), a potential contributor to poorer outcomes and medication misuse
- ! Absence of non-pharmacologic component in therapy, such as physical therapy or another form of complementary alternative medicine (CAM)

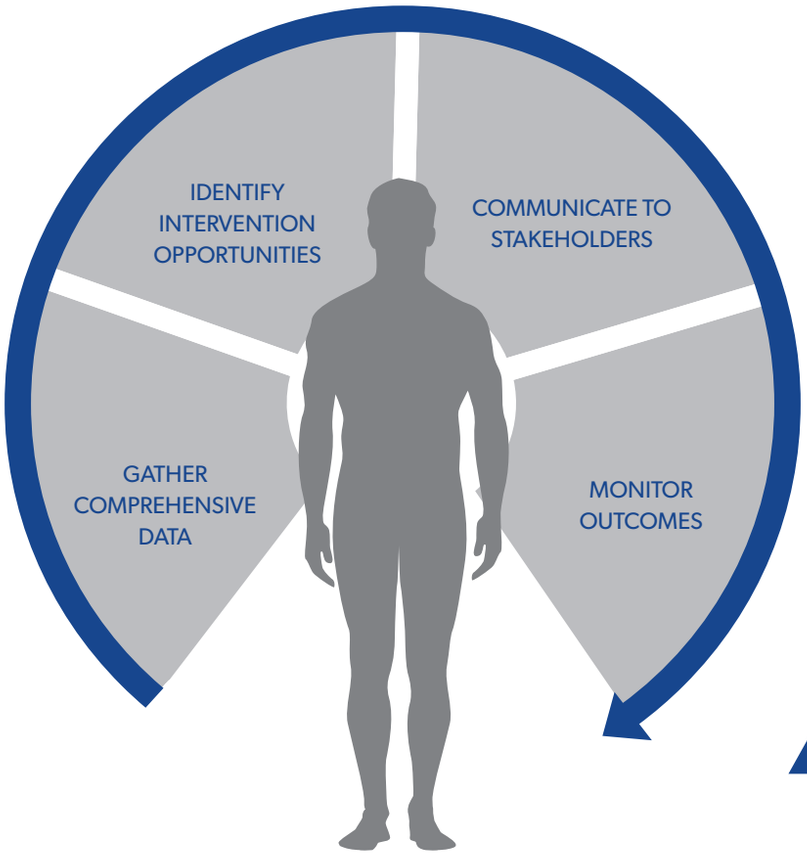
Doug represents a very real scenario in workers' compensation that can go overlooked by a cursory review of prescription transaction history. The failure to detect critical concerns in the treatment plan can unnecessarily extend the life of the claim and drive up costs, which often increase exponentially over time. Complex claims such as Doug's benefit from a high-touch, holistic approach to management that can better identify early intervention opportunities. Reducing risk levels earlier can effectively course correct the claim, increasing the opportunity for successful outcomes such as improved functional status and return to work.



REWRITING THE TREATMENT PLAN TO IMPACT OUTCOMES

Identifying treatment concerns through medical record review and analysis is just one aspect of holistic patient management. Outcomes can only be impacted if action is taken based on the information gleaned from this initial step. Now armed with all of the necessary information, the PBM can facilitate stakeholder communication and provide effective clinical decision support that can help optimize the patient's treatment plan to reduce risk levels and improve functional status, while also considering cost-effectiveness for the payer.

Translating Information Into Outcomes



Early intervention by Healthesystems clinical staff has **successfully impacted** outcomes in **4 out of 5** complex claims.

Early intervention by Healthesystems clinical staff has successfully impacted outcomes in 4 out of 5 complex claims. Successful outcomes could include a change in treatment plan based on clinically supported recommendations, such as discontinuation or tapering of a dangerous or unnecessary drug, adding a medication that was lacking from the treatment plan, decreasing or increasing dosage of a medication as needed, or considering an alternative therapy when medically appropriate. Other examples of successful intervention may not be specific to the drug therapy regimen itself, but could include consolidation of multiple prescribers or pharmacies, or patient evaluation for abuse, diversion or nonadherence.

A large part of an intervention's ability to significantly impact outcomes relies on the prescriber and their willingness to incorporate recommendations into a treatment plan. However, the success of intervention is also influenced by a number of other factors.

INCREASED COMMUNICATION

Although positive outcomes are achieved through indirect and direct methods of communication with prescribers, a direct teleconsult results in a higher rate of success

EARLIER INTERVENTION

The younger the claim, the more opportunity for impact. Interventions within the first 6 months experience the highest rates of success

NON-DISPENSING PHYSICIAN

Greatest interventional success is observed when working with prescribers who do not office dispense

Healthesystems combines exceptional analytics capabilities with unrivaled clinical expertise to identify and eliminate the complex risks that jeopardize outcomes for payers and their injured worker claimants. To learn more about how we can help monitor and manage your claims population, visit www.healthesystems.com/reveal.

PHYSICIAN DISPENSING:
New Challenges in an Ongoing Battle

FAST FOCUS

Despite state-enacted reforms aimed at reducing costs associated with physician-dispensed medications, costs continue to increase as new trends arise.

Rates of physician dispensing have continued to rise across the United States, despite state-enacted reforms aimed at discouraging the practice. Increased regulation has made some headway against select cost drivers traditionally associated with physician-dispensed medications, such as drug repackaging and inflated reimbursement rates. However, overall impact of these reforms has been offset by a shift in prescribing habits toward different medications that present new or increased opportunity for revenue. The practice of physician dispensing continues to be a specific challenge in workers' compensation, and the past year has given rise to some new trends of which payers should take note.

CURRENT TRENDS IN PHYSICIAN-DISPENSED MEDICATIONS

NEW OR UNCOMMON TABLET/CAPSULE STRENGTHS

When new pill strengths are manufactured, the average wholesale price (AWP) is often higher than long-standing strengths of the same medication, making them attractive from a profitability standpoint. For example, instead of prescribing the older and less expensive 15mg tablet, a physician may choose to prescribe the new 7.5mg tablets at double the quantity. The medication and combined dose are the same, but the price per pill may be several times the cost.

PRESCRIPTION PRODUCTS DESPITE OTC AVAILABILITY

Some medications, such as proton pump inhibitors used to treat NSAID-related ulcers, are readily available to the patient over-the-counter (OTC) at local pharmacies. However, when these medications are dispensed by a physician, they come at a much higher cost to the payer.

PRIVATE-LABEL TOPICAL ANALGESICS

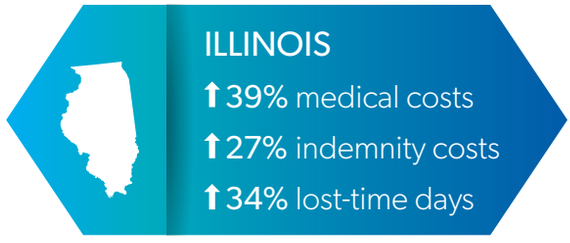
These expensive pain creams share many of the same ingredients as OTC products available on-the-shelf at retail stores, but with a significant price mark-up. See article on page 24.

A MAJOR COST DRIVER

The rate of employer-reported workplace injuries and illnesses has continued to decline over the past decade.[1] Despite this, costs associated with workers' compensation continue to increase. Physician-dispensed medications are a key contributor to the rising costs, with a number of states experiencing rapid growth of physician dispensing in recent years, in some cases doubling or even tripling.[2] The Workers Compensation Research Institute (WCRI) conducted a broad-reaching study capturing data from 23 states and nearly two-thirds of total national workers' compensation claims. In its analysis, WCRI found that prices paid for physician-dispensed drugs were often 60-300% higher compared with the prices paid for the same drugs when dispensed by a retail pharmacy. In some states, overall prescription payments for physician-dispensed medications outweighed the total payments made for pharmacy-dispensed medications.[2]

Presence of a physician-dispensed medication within a claim also reflects a higher per-claim cost. And reimbursement is not the only factor driving the increased cost of individual claims. Independent studies conducted in the states of California and Illinois demonstrate that increased percentages of medical costs, indemnity costs, and lost-time days were all associated with physician-dispensed medications.[3,4] This effect nearly doubled when specifically associated with physician-dispensed opioids versus pharmacy-dispensed opioids.[4]

Increases due to physician-dispensed drugs[3,4]



OPIOIDS COMPOUND THE PROBLEM[4]

78% higher medical costs, **57%** higher indemnity costs, and **85%** higher frequency of lost-time days associated with physician-dispensed versus pharmacy-dispensed opioids

NOTE: California rates span 2002-2011 and include pre- and post-reform data. Illinois rates span 2007-2012.

STATE REFORMS DEMONSTRATE DISAPPOINTING IMPACT

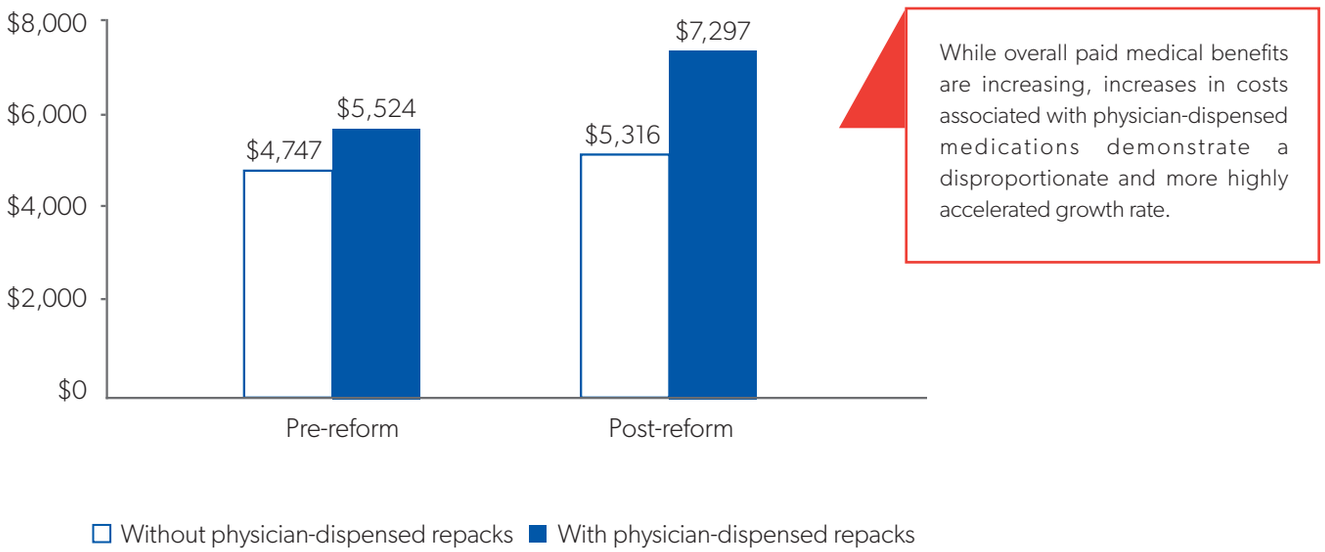
As of January 2015, 18 states have enacted reforms aimed at specifically reducing the cost of physician-dispensed drugs, primarily by prohibiting repackaging of medications and setting reimbursement limits based on the original manufacturer's AWP in an attempt to narrow the price differential between physician and pharmacy reimbursements. The success of these adjustments has been underwhelming, as costs associated with physician-dispensed medications continue to soar. Early-impact data assessing the success of reforms made in the states of Connecticut, Tennessee, and Georgia within 2012 all demonstrate the inability of regulation to sufficiently close the pricing gap between physicians and pharmacies. Although the average price paid per pill decreased for many of the drugs commonly dispensed by physicians within these states, this price still remained significantly higher than prices paid to pharmacies for the same medications — as much as 74%.[5-7]

Examples of Pre- and Post-Reform Pricing for Common Physician-Dispensed Medications in Connecticut (Average Price Paid Per Pill)[5]

Rx Drugs Commonly Dispensed by Physicians	Pre-reform (Q2 2012)	Post-reform (Q1 2013)	Post-reform Differential: Physician vs Pharmacy (%)
Ibuprofen			
Physician-dispensed	$0.59	$0.41	↑ 52%
Pharmacy-dispensed	$0.28	$0.27	
Hydrocodone-acetaminophen			
Physician-dispensed	$1.59	$0.82	↑ 74%
Pharmacy-dispensed	$0.38	$0.47	
Cyclobenzaprine HCl			
Physician-dispensed	$1.72	$1.24	↑ 31%
Pharmacy-dispensed	$0.95	$0.95	
Tramadol HCl			
Physician-dispensed	$1.62	$1.03	↑ 58%
Pharmacy-dispensed	$0.60	$0.65	
Meloxicam			
Physician-dispensed	$4.46	$3.59	↑ 32%
Pharmacy-dispensed	$2.79	$2.72	

As an early adopter, California offers a good case study when assessing the strengths and weaknesses of state regulation in the battle against physician dispensing. Prompted by ballooning rates in which more than half of drugs prescribed to injured workers were physician-dispensed medications, California enacted reforms in 2007 to help discourage the practice. Despite decreases in drug utilization and cost observed following the regulatory change, California's use of total physician-dispensed drugs is still among the nation's highest.[2] And while the frequency of physician dispensing has lowered, the costs associated with it have not. Prior to the 2007 reforms, claims that included at least one physician-dispensed repackaged drug carried a 16% higher average paid medical benefit than claims without a physician-dispensed drug. After March 2007, the differential jumped to 37%. This was in spite of the limitations placed on physician reimbursement.[3]

Average Paid Medical Benefits Per Claim (California, 2002-2011)[3]



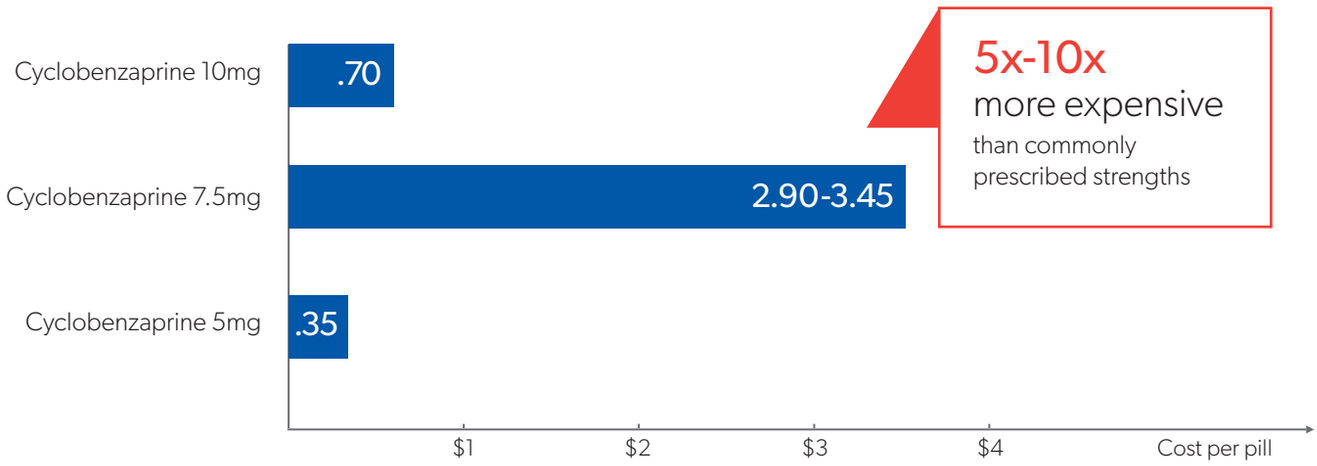
While overall paid medical benefits are increasing, increases in costs associated with physician-dispensed medications demonstrate a disproportionate and more highly accelerated growth rate.

CHANGES IN PRESCRIBING TRENDS

Increasing overall costs associated with physician-dispensed medications can be attributed to a number of prescribing trends that are developing — trends that some have argued are an unintentional result of the reforms. Another study conducted by WCRI examined the sustainability of current reforms and found that physicians and dispensing companies are finding new avenues for revenue. One new trend is the prescribing and dispensing of common medications at uncommon strengths that are ultimately linked to higher AWP reimbursements.

The muscle relaxant cyclobenzaprine has been commonly prescribed at strengths of 5mg and 10mg for years. Beginning in 2012, prescribing quickly shifted toward the 7.5mg strength, with market share in California moving from 0% up to 47% within a year. This trend coincided with a 5-fold increase in average price per pill for the 7.5mg strength. A similar trend was observed in Illinois, with the more costly 7.5mg strength achieving 21% market share in half a year.[8]

Average Price Paid Per Pill* Among Cyclobenzaprine Strengths[8]



*Reflects California pricing.

Increased prescribing of uncommon strengths for additional medications, including tramadol extended-release (ER) 150mg and hydrocodone/APAP 2.5/325mg tablets, has also been observed. Tramadol ER 150mg entered the market in 2012, and **Healthesystems data confirm a sharp uptick in prescribing of 150mg ER capsules between 2013 and 2014.** During the 1-year period, prescriptions for tramadol ER 150mg rose approximately 40 percent within the analyzed population, moving it toward the top of the list for physician-dispensed medications. During this same timeframe, there was a concurrent decrease in prescribing of tramadol 50mg.[9]

Are these two trends necessarily linked? As with any new treatment trend, there can be multiple contributing factors; however, it is important to note that the dispensing of these newer and more expensive strengths of common medications is primarily being observed among physicians and not pharmacies. The disparity may indicate that the trend is driven by cost rather than clinical benefit.

Compounded medications have always been among the ranks of physician-dispensed medications, but recent years have instead seen an uptick in private-label topical analgesics, with several of these products appearing among the top 25 physician-dispensed medications by 2014 year-end.[9] Unlike compounded medications, private-label topicals are manufactured and are assigned an NDC. However, they are not FDA-approved and often contain similar ingredients to OTC pain creams found at local retail stores such as BenGay® or IcyHot®. AWPs for private-label topicals can be up to 500x higher than the cost of OTC products, which makes them a strong source of potential profit for the dispenser. For more in-depth information about these products and how they are impacting workers' comp, see *Private-Label Topicals: Over-the-Counter Analgesics Go Undercover as Pricey Prescriptions* on page 24.

WHEN PATIENTS PAY THE PRICE

Patients may also be paying a price for physician-dispensed medications, and in the case of the injured worker, that price may be safety. While opinions may be conflicted about the positive and negative impacts of physician dispensing, there is something both sides should agree on: the primary benefactor should be the patient. The American Medical Association underscores this sentiment in its Code of Ethics, noting that "Physicians may dispense drugs within their office practices provided such dispensing primarily benefits the patients."[10]

Unfortunately, some trends observed in recent years indicate that, in some cases, financial incentive may be playing a role in influencing prescribing decisions. After the July 2011 Florida ban of physician-dispensed Schedule II and III controlled substances, physician dispensing of opioids was reduced and in many cases replaced with non-narcotic alternatives. While these data mark a positive step in reducing opioid prescribing, it does call into question the medical necessity for many of the opioid prescriptions being written prior to 2011, suggesting that physician dispensing did play a role in driving overprescribing of narcotics.[11] Following the 2007 reforms in California, the associated price drop on certain medications

had measurable impact on prescribing trends. Carisoprodol, a muscle relaxant known to negatively interact with other medications commonly prescribed in workers' compensation such as opioids and benzodiazepines, was frequently prescribed in most states where physician dispensing was common. However, following a significant reduction in reimbursement rate for the muscle relaxant, a decrease was observed in the number of carisoprodol prescriptions. Over the course of one year, 6 percent fewer injured workers in California were receiving prescriptions for carisoprodol.[2]

It was also observed that California physicians began substituting Prilosec® for the less expensive Zantac® to treat their patients with ulcer disease related to nonsteroidal anti-inflammatory drugs (NSAIDs). Prior to 2007, Zantac® had been reimbursed at a higher rate; as the pricing flipped, so did prescribing trends.[2] **Healthesystems data confirm this trend is continuing, as analysis of data between 2013 and 2014 demonstrate a 15 percent increase in Prilosec® among physician-dispensed medications.** The average price per prescription for Prilosec® is nearly $300.[9] Meanwhile, both Prilosec® and Zantac® are available to patients at local pharmacies without a prescription and for a fraction of the cost.

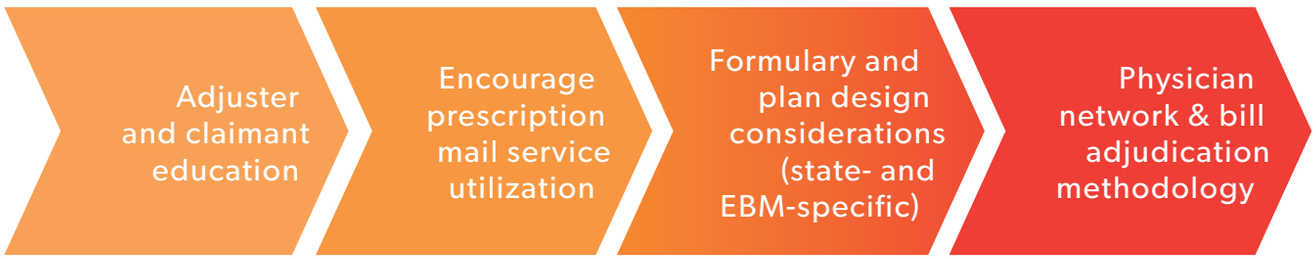
THE NEED FOR MULTI-STAKEHOLDER OVERSIGHT

The two-man rule: it's a precaution instituted by various government and military entities in situations where safety is critical, and with good reason. Placing the full onus on the shoulders of a single decision-maker — even when that decision-maker is acting ethically and responsibly — eliminates necessary safeguards. A prescriber can have the best possible intentions for their patient, but errors can still occur. Physician-dispensed medications bypass the traditional drug utilization review process, which identifies safety concerns including drug- or disease-interactions, potential adverse events and incorrect dosage. Dispensing medication at the point-of-prescribing also eliminates the potential for a pharmacist to review the patient's electronic health record (EHR), an important tool for improving patient safety and reducing medication errors.[12]

Just as prescribers should not be solely responsible for patient access to medications, state regulation alone should not be expected to control physician dispensing of medication. Regardless of the strategies employed, oversight of drug utilization, prescribing trends, and patient safety requires vigilance on the part of the payer and the pharmacy benefits manager (PBM). While the practice of physician dispensing remains legal in the vast majority of states, there are measures that can be taken to help reduce its financial impact.

Payers and PBMs can partner to implement various strategies to better manage physician dispensing activity. The options may range in the degree of aggressiveness and complexity as ways to control costs and optimize safety.

Examples of Payer/PBM Strategies That Can Better Manage Physician Dispensing



PRIVATE-LABEL TOPICALS:

Over-the-counter analgesics go undercover as pricey prescriptions

FAST FOCUS

As usage of private-label topical analgesics in the injured worker population continues to rise, payers are recognizing the need to curb prescribing of these costly and clinically unproven products.

Healthesystems has previously reported on the growing presence of private-label topical analgesics in workers' compensation (*Topical Analgesics: Expensive and Avoidable*, Fall 2013). Payers are beginning to take notice of this continuing trend, and with good reason. From a clinical perspective, private-label topicals offer no greater benefit to the patient than over-the-counter (OTC) alternatives found in retail stores. Like their OTC counterparts, private-label analgesics have not undergone controlled studies to support their clinical efficacy or safety and have not been approved by the U.S. Food and Drug Administration (FDA). Yet in most cases they are exponentially — and unjustifiably — more expensive. So why are these products being prescribed at increasing rates?

PERCEPTION PLAYS A ROLE

In some cases, the perceived difference between expensive private-label topicals and OTC products can encourage prescribing. Research shows that physicians will recommend an OTC medication before a prescription product, as long as they believe both products to have comparable efficacy.[1] However, clinical-sounding brand names associated with private-label topicals, such as Medi-Derm, Medrox® Rx and Terocin®, rather than consumer-friendly names such as IcyHot® or BenGay®, infer clinical legitimacy, though these products have not been proven in controlled trials. Some of these products are marketed by manufacturers as having unique formulations and special ingredient blends, when in reality the active ingredients in these products commonly overlap with inexpensive and widely accessible OTC alternatives. Independent wholesalers also use marketing to encourage physician prescribing of these products. As a result, prescribers may believe they are recommending a superior product, without recognizing the safety or cost implications.

The website for a popular physician-dispensing company, which assists prescribers with implementing and conducting in-office dispensing of medications, markets Medrox® pain lotion as a "fantastic alternative for patients seeking narcotics."[2] While it is true that responsible pain management includes the usage of opioid therapy alternatives, when assessing these alternatives, physicians must first consider patient safety and evidence-based guidelines. Prescribing of private-label topical analgesics is not supported by evidence-based guidelines. Furthermore, the FDA has previously issued safety communications regarding the occurrence of serious skin burns in products containing high concentrations of menthol and methyl salicylate (concentrations greater than 3% and 10%, respectively).[3] **Of the 22 private-label topical analgesics Healthesystems has observed being prescribed for injured workers, 19 contain menthol and/or methyl salicylate, and 74 percent contain these ingredients at concentrations twice or even three times higher than the recommended FDA thresholds.**[4] In comparison, there are some OTC alternatives available that contain lower doses of these potentially harmful skin irritants (see Figure on pages 28-29).

FAST FACTS ON PRIVATE-LABEL TOPICALS

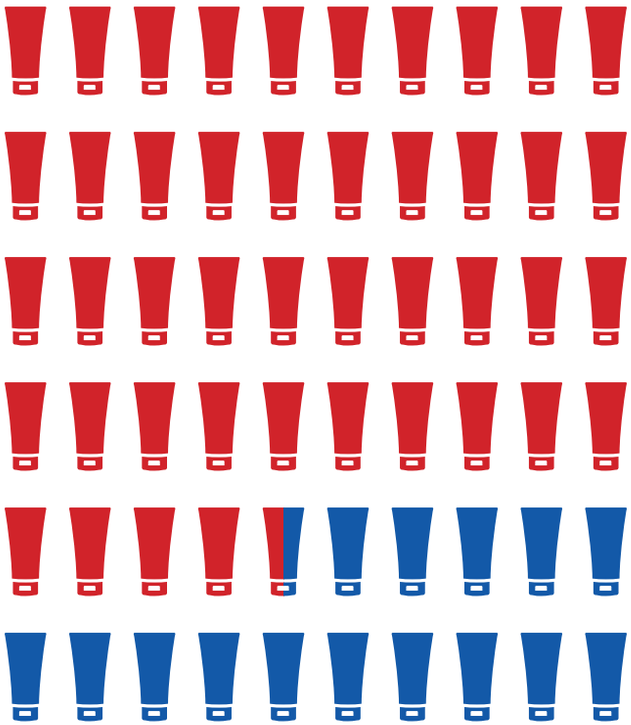
What they are

- Independently manufactured OTC products
- Contain similar ingredients as OTC products
- Significantly higher AWP vs OTC products
- Pose an increased risk of skin burns due to high concentrations of specific ingredients (menthol, methyl salicylate, capsaicin)
- Prescribed for temporary relief of minor pain associated with injury, including back & shoulder
- Most commonly dispensed by physicians or physician-associated pharmacies; smaller, independent "Mom and Pop" pharmacies

What they are NOT

- Not FDA-approved
- Not recommended by evidence-based guidelines
- Not clinically tested for safety or efficacy
- Not cost-effective
- Not compounds
- Not available at retail stores

In the Danger Zone



74% of private-label topicals identified exceed FDA thresholds for ingredient levels by 2-3 times

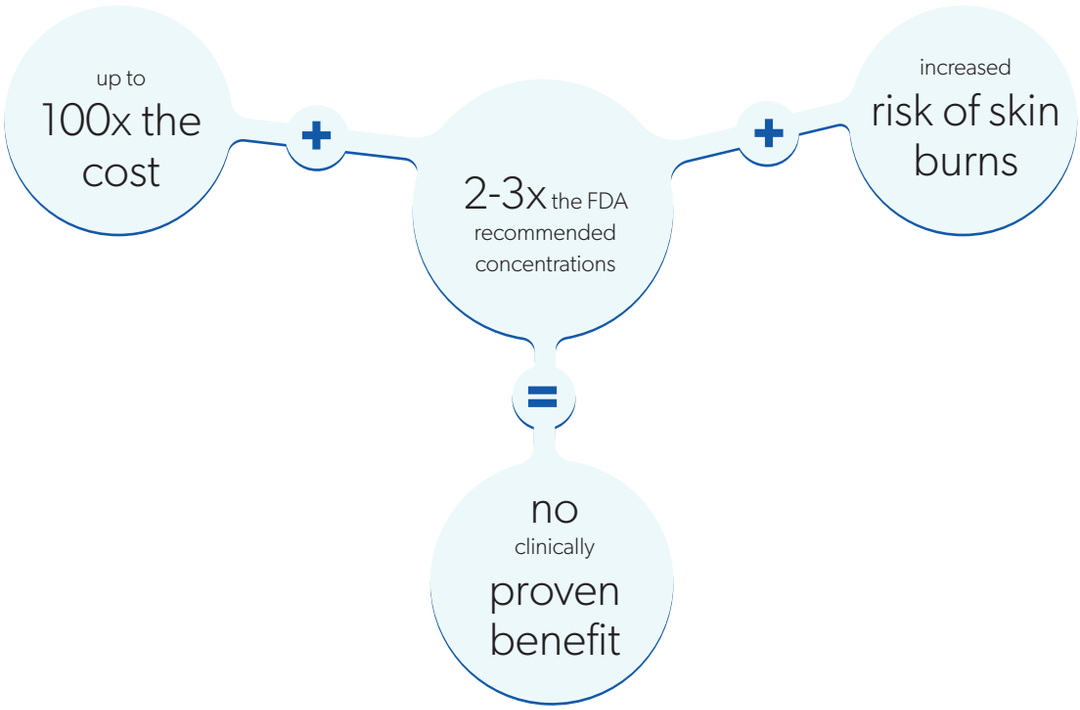
The Official Disability Guidelines (ODG) include recommendations for OTC alternatives of these pricey topical analgesics, although it should be noted that the guidelines offer additional direction regarding treatment with specific analgesic ingredients. For example, ODG recommends only the lidocaine 5% patch (Lidoderm® or generics) for patients experiencing neuropathic pain. Any other commercially available forms of lidocaine (e.g., lidocaine 3% cream) are suggested for general numbing or relief of itching. Also of note, capsaicin is deemed appropriate only for patients who have not responded to or are intolerant of other treatments.[5] Therefore, topical capsaicin products should not be prescribed as first-line therapy, regardless of cost.

PATIENT INFLUENCE ON PRESCRIBING

While evidence-based guidelines should be the primary basis of prescribing decisions, in an environment where a large component of outcomes measurement relies on patient-reported pain ratings,[6,7] physician perception of patient satisfaction does come into play. Prescribers seeking patient satisfaction with treatment should feel confident in recommending consumer OTC brands, as research demonstrates that the majority of patients trust OTC medications. In a survey conducted in 1,000 U.S. consumers aged 18 or older, OTC medications were the first choice of most respondents to treat minor injury or ailment, and 9 out of 10 respondents believed that OTC medicines are an important part of their family's overall healthcare.[1] This trust is not without reason. OTC products available to consumers directly through their retail store, such as BenGay®, IcyHot® and Aspercreme®, are often produced by major pharmaceutical companies with long-standing FDA relationships.

It is important for prescribers to recognize that patient satisfaction with treatment often correlates with the level of understanding the injured worker has regarding their injury and its treatment. When prescribing OTC topical analgesics, physicians should clearly define the role of these medications in pain management — in the majority of cases, for the temporary relief of minor musculoskeletal pain.

A Formula That Doesn't Add Up



PRESCRIBING AND DISPENSING TRENDS

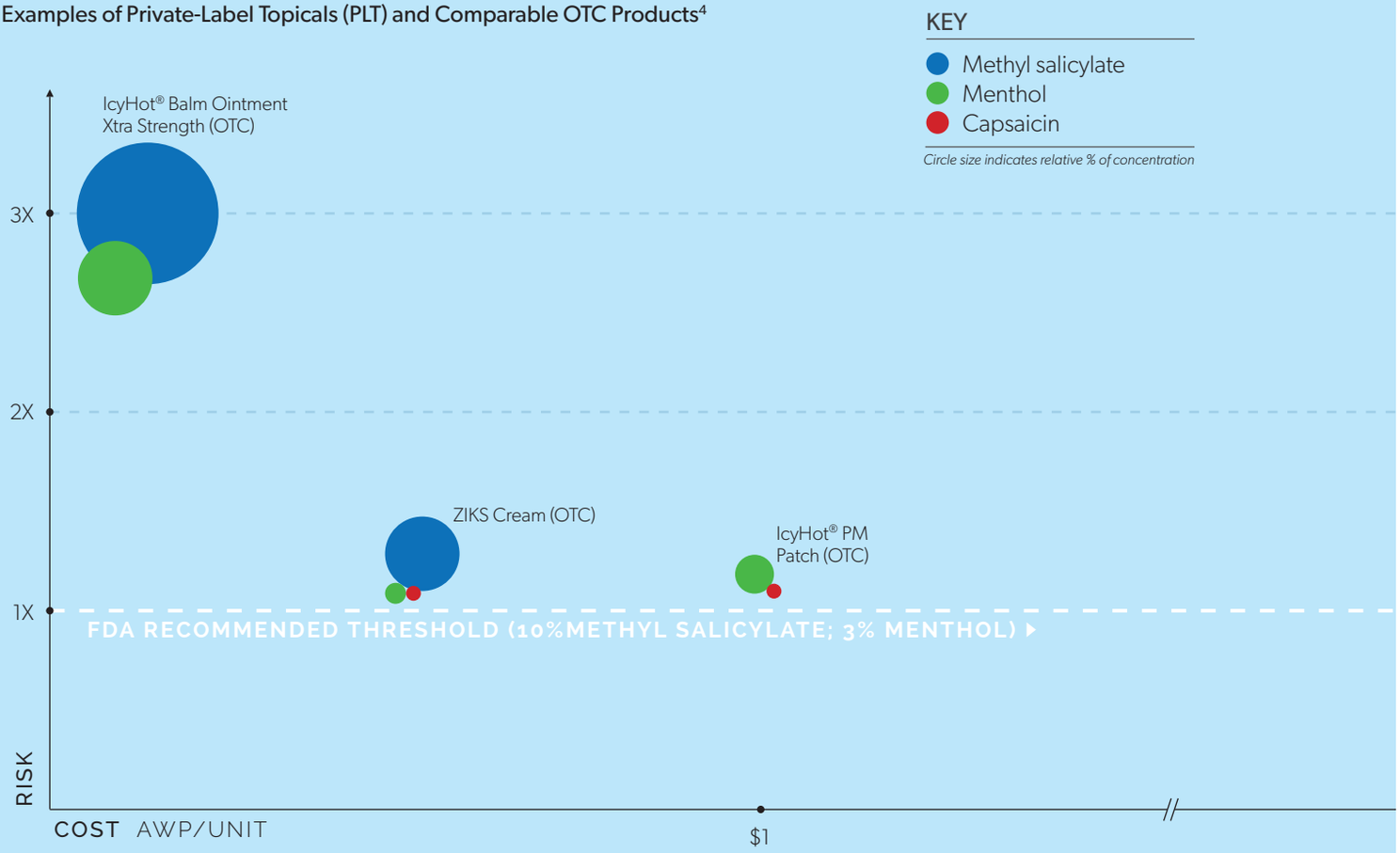
Physician prescribing of private-label topical analgesics has doubled since 2012.[4] Based on observed trends, these products are being seen disproportionately within physician-dispensed medications. They are also being dispensed through smaller, independent dispensaries, such as pharmacies associated with the prescribing physician's practice or "Mom and Pop" shops.

Based on these data, one may infer that the rising trend of private-label topicals is partially incentivized by financial opportunity. State reforms in recent years have sought to reduce costs associated with physician dispensing by limiting reimbursement rates on select drugs (see *Physician Dispensing: New Challenges in an Ongoing Battle* on page 18).[8] Under these new regulations, private-label topicals may offer an attractive opportunity for profit, due to their high average wholesale prices (AWPs), which are often disproportional to their cost of manufacture.

Regardless of drivers for increased prescribing, or which stakeholder is dispensing, the injured worker patient leaves the office or pharmacy believing they've received a superior medication. In reality, an OTC product from a retail store can offer them comparable efficacy at a much lower cost to the payer.

With prescriptions of private-label topical analgesics continuing to trend upwards, there is a greater need for oversight of these products on the part of the payer and pharmacy benefit manager (PBM). Certain private-label products continue to appear on the list of medications most prescribed. A PBM can work collaboratively with a payer to define appropriate parameters that can best guide decision-making for the claims professional. These parameters should include factors such as patient safety concerns, as well as the fact that evidence-based guidelines do not recommend use of these products. A PBM can also recommended appropriate and more cost-effective OTC alternatives. From a claims professional standpoint, additional education is required regarding private-label topicals, including a familiarity with product names and an understanding regarding the safety and cost implications of these products. Claims professional education is essential to the overall strategy for limiting the use of inappropriate therapies to ensure quality care, while reducing costs associated with these products.

Examples of Private-Label Topicals (PLT) and Comparable OTC Products[4]



The figure above plots risk vs cost for some examples of private-label analgesics observed by Healthesystems within injured workers' claims and suitable OTC alternatives.

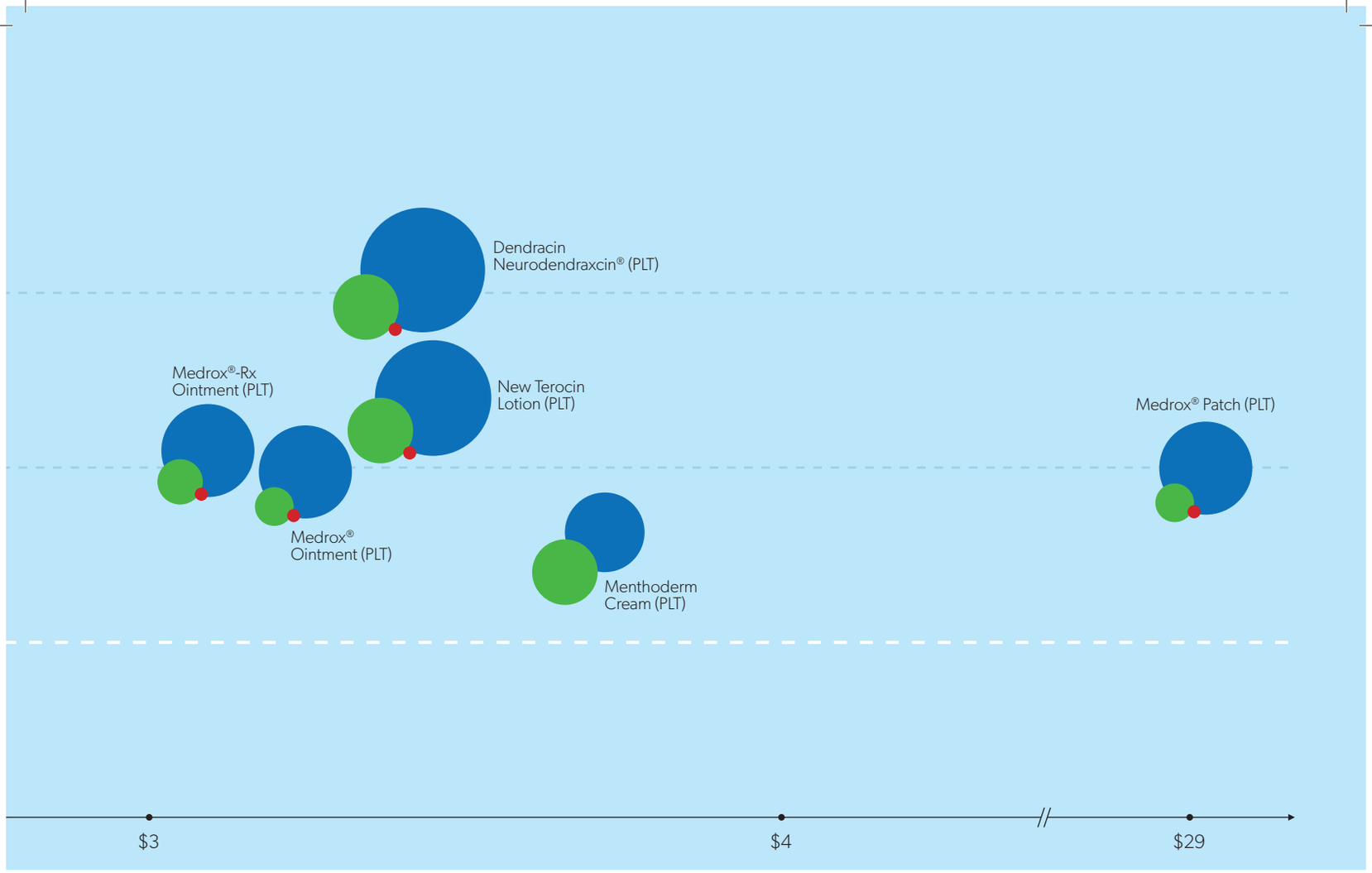
In addition to the examples above, Healthesystems has collected data and developed recommendations on the following private-label topical analgesics: Aleveer Patch, Biotherm lotion, eLenzaPatch®, Keratek™ gel, LenzaGel®, LenzaPatch®, LidoPro® Ointment, Lidoprofen, Medi-Derm Cream, Terocin Lotion, Terocin Patch, Tru-micin® Lotion, Ultracin Lotion.

WORTH THE COST?

While the difference in AWP/unit may only be a couple of dollars, the overall cost adds up. Consider the cost incurred for a prescription of these two very similar products:

Both products share the
same active ingredient and concentration,
trolamine salicylate 10%.

Private-label **Tru-micin®** is **50x** the cost.



TAKING ACTION

Payers may take specific actions to help curb prescribing, including limiting these products from their formularies, or requiring a Letter of Medical Necessity (LOMN) from prescribers to demonstrate a particular patient's medical need. A pharmacy benefits manager can help define criteria based on appropriateness of therapy, patient safety and cost, as well as provide appropriate alternatives to ensure injured workers are receiving cost-effective therapy that addresses their pain management needs.

Curbing Unnecessary Prescribing: A Multi-stakeholder Approach

For Payers

- Work with a PBM to define criteria based on evidence-based guidelines, patient safety and cost
- Limit medications not meeting these criteria
- Require LOMN for select cases where there is demonstrated medical need
- Ensure that claims professionals receive proper education regarding private-label topicals

For Claims Professionals

- Understand the difference between FDA-approved, private-label and OTC topical analgesics
- Become familiar with existing private-label topical analgesics
- Understand ODG recommendations regarding the role of topical analgesics in pain management
- Recognize dispensing trends (i.e., physician and independent pharmacy)

For Prescribers

- Consider the lack of evidence supporting expensive private-label products
- Choose OTC alternatives
- Follow evidence-based recommendations
- Always advise patients on the safety of a product, whether FDA-approved or OTC
- Set reasonable expectations for pain relief

Abuse-deterrent technology:
The safest opioid is the one left
UNPRESCRIBED

FAST FOCUS

The end of 2014 through 2016 introduces a number of new opioid analgesics with abuse-deterrent labeling. The issuance of FDA guidance regarding these products brings some clarity regarding evaluation criteria for abuse-deterrence studies and product claims. What remains unclear, however, is the impact these products have on reducing prescription pain medication misuse among injured workers.

The approval of a new, tamper-resistant formulation of OxyContin® in 2010 marked the first instance the U.S. Food and Drug Administration (FDA) allowed a manufacturer to describe abuse-deterrent features within an opioid product label. Since then, a number of drug manufacturers have come forward with abuse-deterrent formulations of pain medications, which are defined by the FDA as having properties shown to meaningfully deter abuse, even if they do not fully prevent abuse. However, there has remained some ambiguity around the criteria required to achieve an abuse-deterrent label. In 2013, the FDA issued a draft guidance for industry, *Abuse-Deterrent Opioids — Evaluation and Labeling*, in an effort to clarify its perspective regarding abuse potential studies and the requirements for including abuse-deterrent claims within a product label. The final version of this guidance was released in April 2015; in it, the FDA defines different categories of abuse-deterrent formulations and how they work to discourage abuse (see Figure: FDA-Defined Categories of Abuse-Deterrent Technology on page 32). The agency also discusses their process for evaluation of a product's pre-marketing and post-marketing studies, which respectively determine a product's potential for abuse deterrence and demonstrate measures of real-world impact.

LIMITATIONS OF CURRENT ABUSE-DETERRENT TECHNOLOGIES

All opioid products currently approved with abuse-deterrent features fall into just two of five FDA-defined categories: physical/chemical barrier and agonist/antagonist combination (see Figure: FDA-Defined Categories of Abuse-Deterrent Technology on page 32). These two types of existing technology may be effective in discouraging product manipulation for specific purposes, such as intranasal or intravenous use — either through tamper-resistant features that make product manipulation difficult, or by lessening the euphoric feeling conferred by the manipulated product. However, they fall short in a critical area. While restricting the ability to dissolve or crush the product may impact specific methods of street use (e.g., snorting, injecting), these forms of technology are unable to address the number one method of abuse, oral ingestion. The FDA acknowledges this shortcoming in its 2015 industry guidance.[1] The reality remains that tamper-resistant features that only discourage non-oral routes of ingestion target only a small fraction of abusers, limiting the overall impact. According to the National Addictions Vigilance Intervention and Prevention Program (NAVIPPRO) database, only 1% of hydrocodone abusers inject the drug.[2] This reality is also highly relevant among the injured worker population, where forms of misuse most frequently manifest as overutilization of unaltered pills, or through selective adherence to opioid analgesics while not adhering to other medications and/or facets of the overall therapeutic plan (e.g.,patients who continue to use or overuse opioid analgesics while ignoring medications that treat their underlying condition, such as nonsteroidal anti-inflammatory drugs (NSAIDs) for inflammation or appropriate anticonvulsants/antidepressants for neuropathic pain).

A TIMELINE OF ABUSE-DETERRENT OPIOIDS[2-11]

1995 — OxyContin® (oxycodone HCl) extended-release tablets
- *FDA approves original, non-abuse-deterrent formulation*
- *Easily crushed*

2002 — Suboxone® (buprenorphine/naloxone)
- *FDA approves for the treatment of opioid dependence*
- *The low-level euphoria produced by partial agonist buprenorphine can treat withdrawal from full opioid agonists; the opioid antagonist naloxone can reduce the euphoric effects of buprenorphine if injected*

2010 — OxyContin® (oxycodone HCl) extended-release tablets
- *FDA approves new, abuse-deterrent formulation*
- *Increased ability for tablets to resist crushing, breaking, and dissolution*

Exalgo® (hydromorphone HCl) extended-release tablets
- *FDA approves for treatment of severe pain in opioid-tolerant patients*
- *Osmotic extended-release oral delivery system (OROS) allows consistent delivery over a 24-hour period*
- *The only extended-release formulation of hydromorphone available*

2011 — Oxecta® (oxycodone HCl)
- *FDA approves this immediate-release (IR) version of oxycodone*
- *Tablets are considered more difficult to crush or dissolve vs IR oxycodone*

Opana® ER (oxymorphone HCl) extended-release tablets
- *FDA approves this extended-release, abuse-deterrent formulation*
- *Crush-resistant tablets*
- *Manufacturer Endo Pharmaceuticals voluntarily withdraws original, non-abuse-deterrent version (also called Opana® ER)*

2013 — Opana® ER (oxymorphone HCl) extended-release tablets
- *FDA denies petition to stop generic production*
- *Abuse-deterrent properties of new Opana® ER are deemed not effective enough to bar non-abuse-deterrent generics*

Zohydro® ER (hydrocodone bitartrate) extended-release capsules
- *FDA approves non-abuse-deterrent formulation in October amid controversy*
- *Unmet need for a potent, non-acetaminophen formulation of hydrocodone is cited*

2014 — Embeda® (morphine sulfate/naltrexone HCl)
- *FDA approves abuse-deterrent formulation in October*
- *Sequestered naltrexone, an opioid antagonist, is activated when pill is crushed*

Hysingla™ ER (hydrocodone bitartrate) extended-release tablets
- *FDA approves this abuse-deterrent version of hydrocodone*
- *Proprietary RESISTEC™ technology confers tablet hardness and imparts viscosity when dissolved in aqueous solutions*
- *Expected to deter misuse via chewing, snorting, and injection*
- *FDA requests post-marketing data to support amended product label*

2015 — Zohydro® ER (hydrocodone bitartrate) extended-release capsules
- *FDA approves new, abuse-deterrent formulation with BeadTek™ technology in January*
- *BeadTek™ forms a viscous gel when crushed or dissolved*
- *FDA requests post-marketing data in late 2015 to support amended product label*

TBD — ALO-02 (oxycodone HCl/naltrexone HCl)
- *FDA accepts new drug application (NDA) in February for this upcoming, extended-release Pfizer product with abuse-deterrent qualities*

FDA-Defined Categories of Abuse-Deterrent Technology[1,2]

Physical/chemical barrier

Can prevent manipulation of product, including chewing, crushing, cutting, grinding, or extraction via uses of solvents.

Agonist/antagonist combination

An opioid antagonist can be added to interfere with or reduce the euphoria associated with abuse. The antagonist can be sequestered and released only upon manipulation of the product. For example, the antagonist is not clinically active when the product is swallowed but becomes active if the product is crushed for injection or snorting.

Aversion

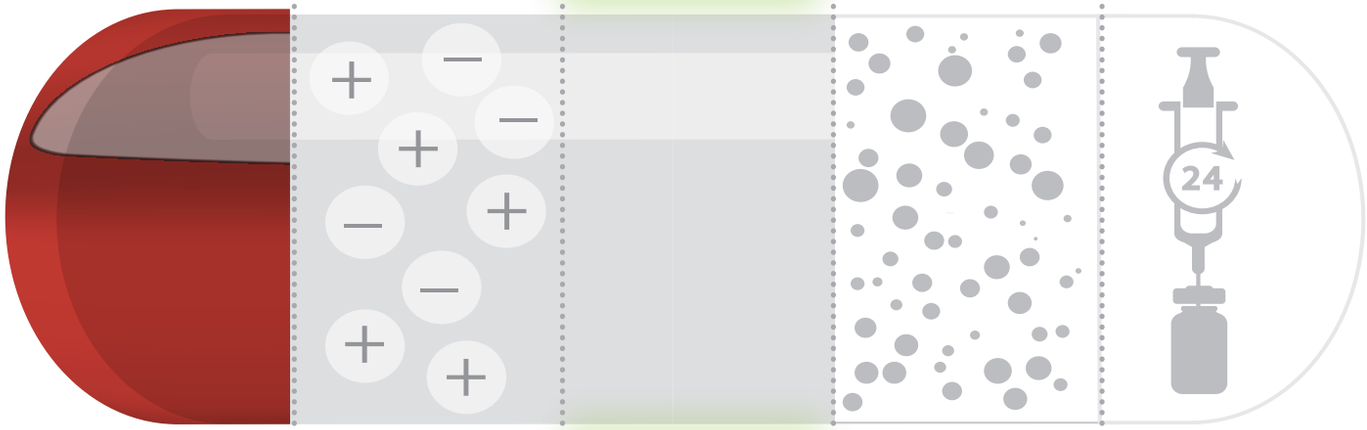
Substances can be combined to produce an unpleasant effect if the dosage form is manipulated prior to ingestion or a higher dosage than directed is used.

New molecular entity (NME) or prodrug

The properties of an NME or prodrug could include the need for enzymatic activation, different receptor binding profiles, slower penetration into the central nervous system, or other novel effects.

Delivery system

Certain drug release designs or the method of drug delivery can offer resistance to abuse. Example: a sustained-release depot injectable formulation that is administered intramuscularly or a subcutaneous implant can be more difficult to manipulate.



Current approved products

OxyContin®(oxycodone)
Exalgo® (hydromorphone)
Oxecta® (oxycodone)
Hysingla™ ER (hydrocodone)
Zohydro® ER (hydrocodone)

Current approved products

Suboxone®(buprenorphine/naloxone)
Embeda® (morphine/naltrexone)
ALO-02 (oxycodone/naltrexone)*
**Not yet approved. FDA accepted Pfizer's NDA filing February 2015.*

No currently approved products

No currently approved products

No currently approved products

The guidance also notes that any of these methods of abuse deterrence can be combined, and that novel approaches not captured in the above categories may be accepted.


Deterrence via intranasal route (snorting)


Deterrence via intravenous route (injecting)


Deterrence via oral ingestion (swallowing)

"Most abuse-deterrent technologies developed to date... **have not yet proven successful** at deterring the most common form of abuse — **swallowing a number of intact pills or tablets to achieve a feeling of euphoria.**"

— FDA Guidance for Industry, *Abuse-Deterrent Opioids — Evaluation and Labeling*

POPULATION DISPARITIES AND SHIFTING PATTERNS OF ABUSE

To date, a number of pre-marketing studies have earned some opioid products abuse-deterrent labeling. These studies are based on the potential for a product to discourage abuse, and while the FDA does outline scientifically rigorous study design parameters, pre-marketing abuse potential studies are primarily conducted in small groups of non-dependent (recreational) opioid abusers.[3,9] This sample population is problematic when attempting to translate the results within workers' compensation, where dependence and addiction factor heavily into misuse among injured workers who are over-utilizing prescription narcotics for chronic pain management rather than for recreation. In the United States, 9 million persons report long-term medical use of opioids and 5 million persons report nonmedical recreational use. These groups represent the two largest populations at-risk for prescription drug overdose in the United States. Yet pre-marketing abuse potential studies only include recreational users and fail to represent a large segment of patients who may be at risk for drug misuse and/or overdose.[12]

However, the even larger struggle for drug companies has been to provide post-marketing evidence that their products produce a meaningful impact on abuse, a factor that should become increasingly important to product evaluation as abuse-deterrent formulations gain more clinical experience with passing time. The recent FDA approval of reformulated Zohydro® ER with BeadTek™ came with an FDA request for drug maker Zogenix to submit post-marketing data within the second half of 2015 in order to receive an amended label. Similarly, the FDA requested that Purdue Pharma conduct post-marketing studies to analyze the effects of abuse-deterrent characteristics of Hysingla™ ER on its potential risk for abuse, as well as the impact of this risk in the general population.[13]

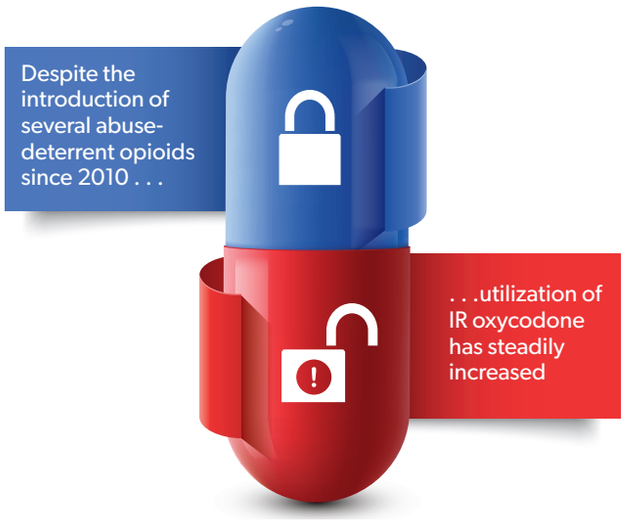
Post-marketing studies that have been published to-date seem to indicate not a lessening of abuse, but rather a shift from abuse of one substance to another. A study published in 2013 analyzed changes in oxycodone and heroin exposures in the National Poison Data system after market introduction of the abuse-deterrent formulation of extended-release OxyContin®. Results indicated a decrease in abuse of extended-release OxyContin® following reformulation. However, the corresponding increase in abuse of other oxycodone formulations and heroin indicate that the abuse isn't being addressed, it's simply being shifted.[14] The results analysis also fails to parse out the method(s) of abuse utilized by the population studied. Given the large shift to heroin abuse, one may infer that a large portion of the study population abused intravenously. The results of this study therefore would be difficult to apply within workers' comp as the populations and methods of abuse are arguably different. Regardless of the medication mix, opioid misuse and abuse still remain a significant challenge in treatment of the injured worker. Only time will tell how significant of a presence the newly approved abuse-deterrent opioids will have in workers' comp, as some of these products have not yet entered the market.

RECOGNIZING POTENTIAL MISUSE AMONG INJURED WORKER CLAIMANTS

Trends analysis can be helpful within claimant populations to help identify potential opioid misuse. For example, are there any patients or prescribers who are specifically requesting a non-abuse-deterrent formulation of a medication? When a new abuse-deterrent product enters the market, do prescribing trends shift?

The ability to analyze these trends among specific populations can help uncover potential misuse among injured worker claimants. **Healthesystems data have demonstrated a change in prescribing trends following introduction of an abuse-deterrent opioid at multiple time points.** The period following introduction of abuse-deterrent OxyContin® in July 2010 reflected an increase in IR oxycodone prescriptions, indicating a shift in utilization toward non-abuse deterrent oxycodone among a segment of patients and/or prescribers. When Opana® ER was replaced on the market with a new, abuse-deterrent-formulation in 2012, IR oxycodone prescription rates rose even higher.[15]

The continued increase in IR oxycodone prescriptions, despite the introduction of several abuse-deterrent opioids, suggests that abuse-deterrent products are not having the intended overall impact on abuse. Resources should instead be focused on comprehensive pain management programs.



EVZIO® AND THE SOBERING REALITY OF OPIOID ABUSE

Ideally, opioid abuse among injured workers is prevented through comprehensive pain management strategies that include both pharmacologic (non-opioid wherever possible) and non-pharmacologic components. This is the purpose of evidence-based recommendations, and nowhere is implementation of these recommendations more critical than in the medical management of the injured worker.

Unfortunately, statistics draw a stark contrast between this ideal and the current reality. Drug overdose deaths are now the leading cause of injury death in the United States, and this statistic is largely driven by prescription drugs.[16]

In April 2014, the U.S. Food and Drug Administration (FDA) approved Evzio®, the first naloxone auto-injector intended for use by a patient, family member, or caregiver in the event of opioid overdose. Until this approval, naloxone has been used in emergency room or ambulatory settings by trained medical personnel only.

Proponents of the device argue that it will facilitate earlier administration of naloxone in an overdose situation. The Evzio® promotional website positions the product as "an additional safeguard" for patients in their pain management journey. That these safeguards are even necessary helps underscore the high level of risk associated with opioid analgesic treatment and why evidence-based guidelines discourage prescribing these powerful and potentially addictive narcotics in the large majority of patients.

While the approval of Evzio® may potentially save the lives of individuals at risk for opioid overdose, it should also serve as a somber reminder to everyone involved in the medical management of injured workers:

We can do better.

The best formula for abuse DETERRENCE:

FAST FOCUS

Rather than trying to apply a "fast fix" for abuse through the prescribing of abuse-deterrent opioids, prescribers must address the underlying factors that contribute to prescription medication abuse. Adoption of a comprehensive, evidence-based pain management program will support the complex needs of the injured worker in their path to functional rehabilitation.

The inability to significantly impact abuse through the prescribing of abuse-deterrent technology is rooted in the very nature of opioid analgesics. As long as these medications continue to act as they are intended — relief of pain by binding to opioid receptors of the brain, which in turn provides a feeling of euphoria — there will always be a potential for abuse. The greatest limitation of current abuse-deterrent technologies is that they do not address the underlying causes for abuse, which include dependence and addiction. These are best addressed by limiting opioid prescribing in the injured worker, and instead developing a comprehensive pain management plan tailored to a patient's needs that includes both pharmacologic and non-pharmacologic components.

PREVENTING ADDICTION, ABUSE THROUGH COMPREHENSIVE PAIN MANAGEMENT

Evidence-based guidance rarely recommends the use of long-term opioid therapy in the treatment of the injured worker, yet 9 million people in the United States report chronic opioid use for medical reasons.[1] With this overutilization of long-term opioid narcotics, it is unsurprising that 7 out of 10 pharmaceutical drug overdose deaths involve these medications.[2]

Too often narcotic analgesics are prescribed as an easy fix. But evidence shows that they aren't truly fixing anything. Long-term treatment with opioids is associated with poorer functional outcomes, including longer duration of disability.[3-5] Achievement of better outcomes requires a better strategy. The road to recovery for the injured worker is often not easy, but extraordinarily complex. A successful treatment strategy must be comprehensive enough to address the many needs of the injured worker, whether those needs are physical or psychosocial. It must also take into consideration the individual challenges faced by each unique patient.

COMPREHENSIVE PAIN MANAGEMENT

An Evidence-Based Guide for Getting Employees Back to Work Safely

Without early clinical intervention, some patients using opioids may **increase dose strength (MED)** by **+400%** within 1 year[7]

Concerns arise during screening, e.g., psychological issues or history of substance abuse

ACTION

Explore non-opioid alternatives to treatment

INITIAL INJURY: PLANNING TREATMENT

- Consider opioid alternatives (NSAIDs, acetaminophen, neuropathic agents)
- Rule out underlying psychological issues/risk of drug misuse
- Establish a treatment plan and timeline

Initiating opioid therapy

- Weigh objective evidence against patient complaints
- Perform baseline assessments including pain, function, mental state, psychosocial factors
- Prescriber should check state PDMP
- Conduct baseline urine drug screen
- Patient signs pain agreement

ACUTE PHASE: 2-6 WEEKS POST INJURY

- Reserve opioid analgesics for short-term use following severe injury or surgery
- Long-acting or extended-release opioids are rarely appropriate

A 2012 NY mandate for prescribers to check the state **PDMP** prior to prescribing painkillers resulted in a **75% reduction** in patients seeing **multiple prescribers** for the **same medications**[6]

SUBACUTE PHASE: 1-3 MONTHS POST INJURY

- Opioid use should not continue beyond acute phase
- Continue only if improvement in pain relief/ function is documented
- Screen for depression, anxiety, substance abuse disorders

(e.g., Current Opioid Misuse Measure, Pain Assessment & Documentation Tool, Addiction Behaviors Checklist, 5-Point Prescription Opiate Abuse Checklist)

Pain persists despite rapidly increasing doses

ACTION

Discontinue opioids

Recommend other therapies (e.g. neuropathic agents, non-opioid analgesics, CAM)

Inclusion of **complementary and alternative medicine** among patients with high disease burden has demonstrated a lower average cost expenditure for combined inpatient, outpatient and imaging services **– a $1,420 reduction**[8]

Patient experiences side effects

ACTION

Consider alternate therapy

Treat side effects with concomitant meds

CHRONIC PHASE: >3 MONTHS POST INJURY

- Opioid analgesics are not recommended as first-line therapy
- Maximize all other treatment options

If opioid therapy is medically justified:

- Opioids should be prescribed at the lowest effective dose
- Routinely screen patients for psychiatric comorbidities, risk of abuse/misuse, adherence to therapy

More than half of patients receiving opioids ≥**90 days** frequently will continue **opioid treatment for years later**[9]

Violation of pain agreement, e.g., frequent early refills or aberrant urine drug screen result, seeking opioids from other prescribers

ACTION

Taper/discontinue opioids

Consider referral for detoxification or to a pain management specialist

Healthcare utilization and costs are significantly **higher among chronic opioid** users vs nonusers

5x more over a 1-year period[10]

Healthesystems drew these recommendations from leading guidelines, including ACOEM, ODG, Agency Medical Directors Group, American Pain Society, and American Academy of Pain Medicine. CAM=complementary and/or alternative medicine; PDMP=Prescription Drug Monitoring Database.

STATE-MANDATED FORMULARIES CONTINUE TO BREAK GROUND

FAST FOCUS

The results garnered by implementation of closed drug formularies in states that include Texas, Ohio, and Washington have additional states considering how a closed formulary could work in their system. Even with these state-mandated reforms in place, the role of payers and pharmacy benefits managers (PBMs) remains important when managing drug utilization and costs in workers' comp.

Several states are now looking at adopting drug formularies for workers' compensation claims in an effort to improve patient care and control costs. The concept of a closed formulary is not new to workers' compensation payers, as carriers have been partnering for years with PBMs to develop evidence-based recommendations and parameters to help guide medically appropriate and cost-effective medication use in the injured worker. However, adoption of closed drug formularies on a state-mandated level has been initiated only in the last decade. Washington state was the trailblazer, having adopted their closed formulary in 2004. Other monopolistic states have followed with the same approach. But Texas was the first of the open market states to implement the concept in 2011 utilizing the Official Disability Guidelines (ODG) closed formulary list. Their results have been both impressive and well publicized.

GROWING IMPACT

Within a year of its 2011 closed formulary implementation, the Texas Division of Workers' Compensation reported a 50% decrease in the prescribing of "N" status drugs during the acute phase of care.[1] They also reported a two-thirds reduction in overall use of these drugs for all claims within the first six months of formulary adoption. The ODG list of "N" status drugs currently includes approximately 160 "not recommended" medications that require preauthorization based on demonstrated medical need. The list includes both opioid and non-opioid agents, and considers factors such as patient safety (risk of misuse, addiction, adverse events) and cost (clinically comparable, lower-cost alternatives available).[2]

The Texas Department of Insurance (TDI) Workers' Compensation Research and Evaluation Group has continued to report annual data demonstrating the impact of the reforms. Most recently, a February 2015 report demonstrated a 76% reduction in "N" status drug prescriptions in new claims, and an 82% decrease in prescribing of the ten most commonly prescribed "N" status medications, which include opioid analgesics, nonsteroidal anti-inflammatory drugs (NSAIDs) and musculoskeletal relaxants.[3]

The reductions in utilization translate into a cost reduction of 83% for "N" status drugs. Perhaps most notably, the savings were not limited to new claims following the 2011 formulary implementation. Legacy claims, which became subject to the closed formulary beginning September 2013, also saw an immediate drop in prescribing of N-drugs and an associated cost decrease. This is important because legacy claims in Texas account for more than half of total pharmacy cost; therefore, having a significant impact on the overall workers' compensation system requires reducing costs among this older population of claims as well as new claims. Texas has been able to successfully effect change within both of these populations.[2,3] The larger impact of reduction in "N" status drugs is reflected in the 11% decrease in total pharmacy costs observed between 2011 and 2013.[2]

NATIONAL RESPONSE

It is no surprise that other states regulators are paying attention to these outcomes, which are not exclusive to the state of Texas. In early 2014, the Ohio Bureau of Workers' Compensation (BWC) reported a total pharmacy drug savings of more than $20 million since formulary implementation in 2011.[4] The BWC also reported a decrease in opioid doses of 10.9 million, reflecting the positive benefits of formulary on patient care and safety, as well as cost.

A number of states have looked at how a closed formulary could work in their system. Delaware adopted its Medicaid-based "preferred drug list" with some modifications for workers' compensation in late 2013. Oklahoma adopted the ODG formulary with a few modifications in 2014. In 2015, California, Montana, Nebraska and North Carolina are considering legislation to require a closed formulary. Arkansas and Tennessee are already in the process of developing rules which would implement a closed formulary. It has been estimated that implementation of a Texas-like formulary could decrease total prescription costs up to 29% in some states,[5] and the California Workers' Compensation Institute (CWCI) estimates that adoption of a prescription drug formulary could save the state an estimated $124 million to $420 million annually.[6]

EVOLVING ROLES OF PAYERS AND PBMs

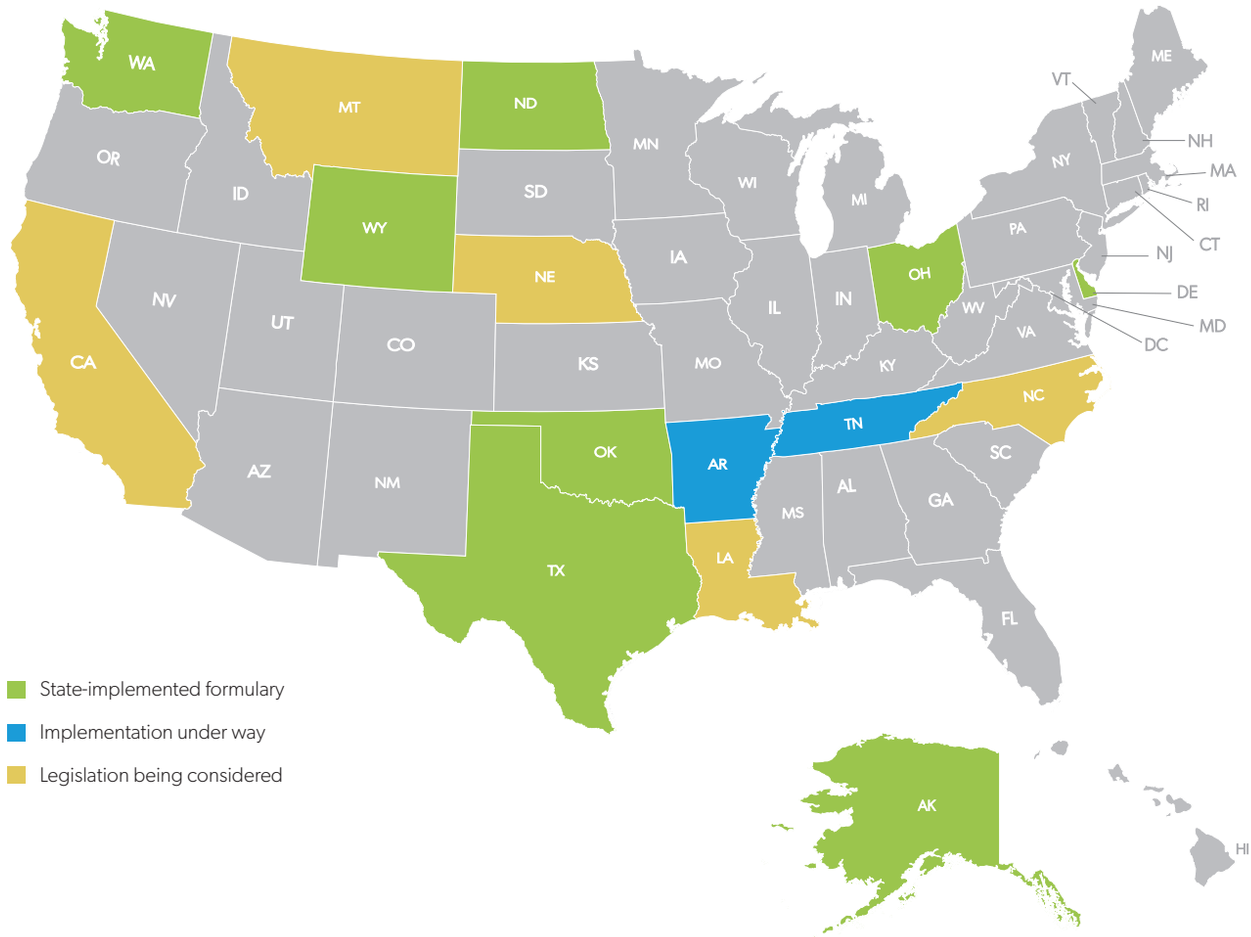
Adoption of a closed drug formulary has proven to have a measurable and significant impact on utilization and costs within workers' compensation. Implementation of formularies through state mandate supports the payer's efforts to control the prescribing of high-cost, high-risk drugs such as opioid analgesics and benzodiazepines. It also brings the added benefit of applying a consistent and universal framework for these decisions throughout the state.

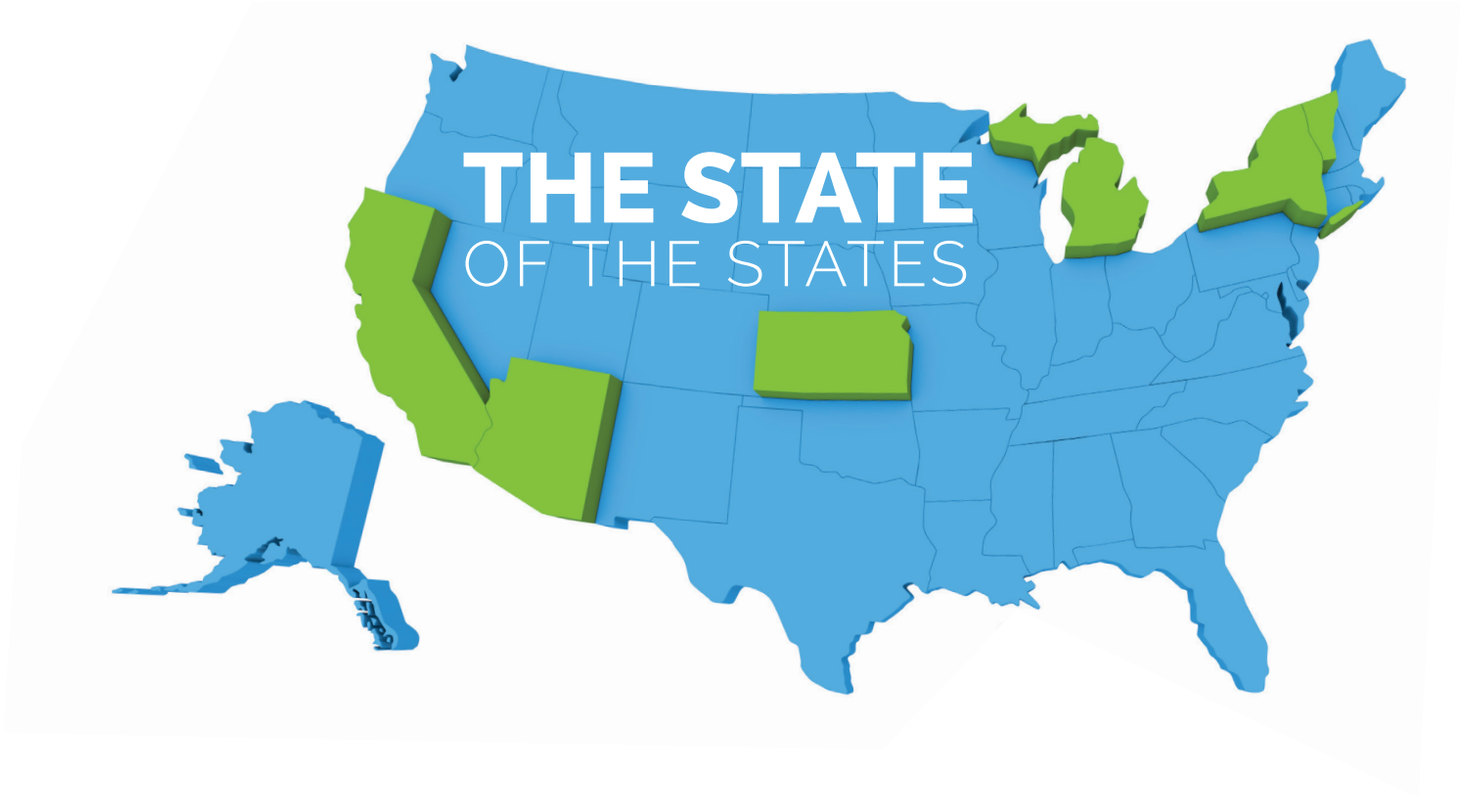
However, prescription drug formularies are not a cure-all, and additional tools and strategies should be employed by payers and PBMs to optimize potential outcomes. Part of the success demonstrated by Texas included efforts to identify and educate high-prescribing physicians to help change prescribing habits. This is a tool that Healthesystems employs with high rates of success (see *Reading Between the Lines of a Workers' Comp Claim* on page 12).

The model of an "N" and "Y" list to denote exclusion or inclusion in a formulary lacks a degree of specificity that takes into consideration the individual patient or injury type. The inclusion of a medication on the list does not guarantee its clinical appropriateness for a given patient. There still must be a level of oversight that is monitoring the appropriate care of injured workers on a claims-level basis that a state formulary may be unable to provide. Partnering with a PBM can help payers to contain pharmacy costs while also ensuring evidence-based care for the injured worker claimant.

At the time this publication was in press, Healthesystems' Director of Regulatory and Legislative Affairs, Sandy Shtab, moderated a panel presentation on the topic of closed drug formularies at the International Association of Industrial Accident Boards and Commissions (IAIABC) Spring Forum. Healthesystems is highly engaged in advocating for good public policy to improve patients' medical outcomes while controlling costs. For more information on the issues that impact the workers' compensation community, visit www.healthesystems.com/news.

There is Still Ground To Cover: Current And Pending State Formularies





ARIZONA

Industrial Commission Reinforces Worker's Right to Choose Provider

Arizona's workers' compensation rules allow most injured workers their choice of medical provider with exceptions for employees of privately self-insured employers. In recent years the Industrial Commission has received numerous complaints that workers are being told they must obtain their care from a preferred provider or within the insurer's network of providers. In response to these complaints, the Commission recently noticed all stakeholders with a firmly worded reminder of the current statutory requirements and penalties associated with any employer or carrier impairing the injured worker's right to select their own provider. The notification also reminded carriers of the consequences associated with bad faith or unfair claims processing practices.

The Arizona legislature considered legislation on this issue earlier this year that would have increased the penalties for bad faith and unfair claim processing violations; however the bill did not have the necessary support to advance through the House and it died in committee. A copy of the Directors' Notice to Community is available at www.ica.state.az.us/PublicNotices/DIRECTOR_NoticeToCommunityReDirectedCareFinal.pdf.

CALIFORNIA

Reform Rollout Continues

California's Division of Workers' Compensation (DWC) continues to roll out provisions of SB863, the major reform bill passed in 2012. Many of the provisions required by the bill have been adopted via rule change in the last two years, including how medical service and fee disputes are resolved, lien filing rules, improvements to medical provider networks (MPNs) and changes to medical providers' professional service fees. Still outstanding are a number of provisions, including the adoption of fee schedules for home health services, interpreters and copy fees. Also on the DWC agenda in 2015 is the adoption of new medical state reporting rules and updates to medical treatment guidelines. The DWC has posted its schedule of rule status and next steps at www.dir.ca.gov/DWC/educonf22/DWC-Update/DWC-Update.pdf.

KANSAS

Provision for Physician-Dispensed Medications

The Division of Workers' Compensation updated their medical fee schedule and policy January 1, 2015. One of the provisions would require providers to obtain pre-approval from carriers before dispensing compounds and physician-dispensed medications. In addition, these medications when dispensed by the physician should be paid at no greater than the rate paid to a pharmacy.

NEW YORK

Developing Recommendations for the Business Process Reengineering Project

The Workers' Compensation Board (WCB) is in the process of developing recommendations for a complete systems overhaul with the intent to increase efficiency and improve the delivery of benefits to injured workers. This effort, referred to as the Business Process Reengineering (BPR) project, began in late 2013 and since that time the Board has made good progress toward advancing its goals. The WCB has a website devoted to the BPR project (www.wcb.ny.gov/BPR/BPR_overview.jsp) with extensive information on the vision for the future state of workers' compensation in New York and the benefits associated with the project. The WCB has also done extensive outreach to systems stakeholders with town-hall type meetings throughout the state in December 2014.

One of the first components of the BPR project is to develop a centralized medical portal which would replace many of the paper processes in place today. Though no formal draft has been developed and there are still many decisions to be made at the WCB, the medical portal is expected to accept provider requests for preauthorization of certain medical services, requests for treatment guideline variances, and could even include an option for providers to attach medical reports. Carriers would then be able to respond in the portal, which is intended to speed the delivery of care to the injured worker. Additionally, the medical portal is expected to be the central repository for medical billing and payment data, commonly referred to as EDI Medical Reporting.

The WCB has an advisory committee that meets regularly to review the project plan, share input from stakeholders and develop their formal recommendations. This project has great potential, but as with any major systems overhaul there are also risks and the committee needs to hear from the stakeholder community to better understand those risks. The WCB has received input from hundreds of stakeholders, including Healthesystems, and they confirmed in stakeholder meetings that they intend to remove inefficiencies rather than creating new burdens for the community. Read more at www.wcb.ny.gov/BPR/HeresWhatWeAreHearingMedicalPortalOutreach.pdf.

It is anticipated that draft requirements will be made available to stakeholders later in the year for public comment. In the meantime, comments and questions on this project can be directed to WCB Project Sponsor Brian Collins at K.Brian.Collins@wcb.ny.gov or to the entire BPR committee at BPR@wcb.ny.gov.

MICHIGAN

Changes to Health Care Service Rules and Fee Schedule

The Michigan Workers' Compensation Agency (WCA) adopted changes to its Health Care Services Rules and Fee Schedule on December 26, 2014. The rule changes primarily impact prescribers and payers and are intended to control utilization and payment processes for compounded topical pain relievers, opioids, biologics and injections in the office setting. The new rules were developed with input from a broad range of stakeholders and took nearly a year to finalize. Healthesystems was integral to the rule development process and provided input directly to the WCA, which was ultimately incorporated into the final regulation. A copy of the complete rule is available at www.michigan.gov/documents/wca/14_rules_477175_7.pdf.

VERMONT

Proposed Rule May Burden Insurers

Vermont is considering a complete rule rewrite that will have a number of implications for carriers. One provision within the rewrite is a requirement for insurers to provide injured workers with a complete list of all approved medications, which would be updated based on changes in the treatment plan. Several stakeholders have voiced concerns over the practicality of providing an injured worker with a list of approved medications, which can change frequently over the course of the claim. There are unanswered questions as to how this would add benefit to the injured worker's medical outcome, to offset the administrative burden it places on the carrier. The proposal is posted on the Vermont website at http://labor.vermont.gov/proposed-workers-compensation-rules. No implementation timeframe is available at this time.

BY THE NUMBERS

PRESCRIPTION COSTS

Rx reimbursements for physician-dispensed medications are

60-300% HIGHER

than the same meds dispensed by a pharmacy

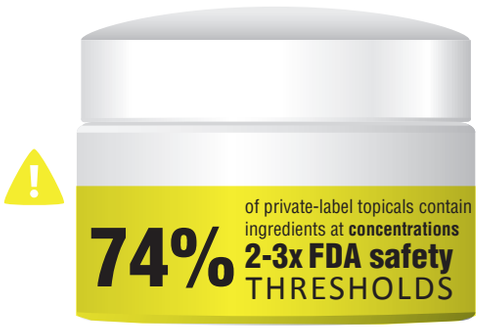
Workers Compensation Research Institute, July 2012

Implementation of a closed formulary can

SAVE STATES ~ 30%
IN PRESCRIPTION COSTS

Workers Compensation Research Institute, June 2014

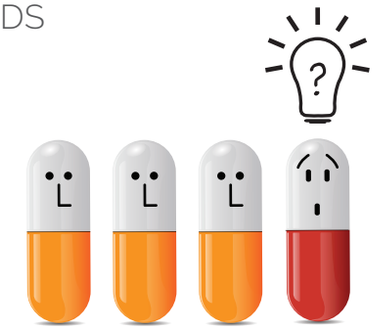
TOPICALS



74% of private-label topicals contain ingredients at **concentrations 2-3x FDA safety** THRESHOLDS

U.S. Food and Drug Administration; Healthesystems data, 2015

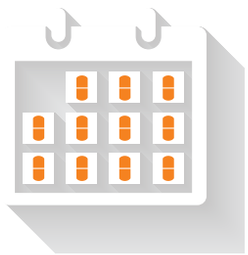
OPIOIDS



1 out of 4

people are **unaware** they have been prescribed an **OPIOID** MEDICATION

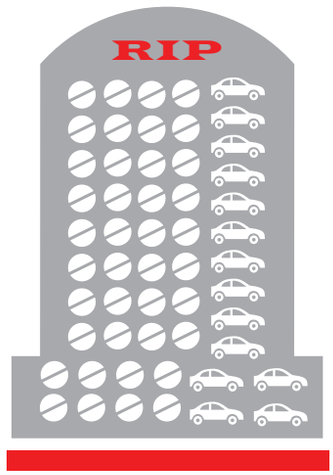
National Safety Council, 2015



9 million

people in the U.S. RECEIVE **CHRONIC OPIOID TREATMENT**

Centers for Disease Control and Prevention



Drug overdose deaths are the **leading cause of injury death** in the U.S. EXCEEDING CAR CRASHES

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