White Paper

OPTUM®

The Emerging Use of Naloxone:

What workers' compensation payers need to know

In an effort to reduce the epidemic number of overdose-related deaths and injuries associated with the misuse of opioid analgesics, many states have been looking to enact legislation to help curb this trend. One way states have tried to accomplish this is to establish prescribing quantity limits on opioid analgesics. They are also establishing guidelines on how and when opioids should be prescribed to treat acute and chronic pain. As regulatory reform is evolving, it is often mandating the review of Prescription Drug Monitoring Programs (PDMPs) by pharmacists and prescribers prior to prescribing and dispensing opioids. There is also increasing discussion, training, funding and access to medications, most notably naloxone, that can prevent death from overdose.

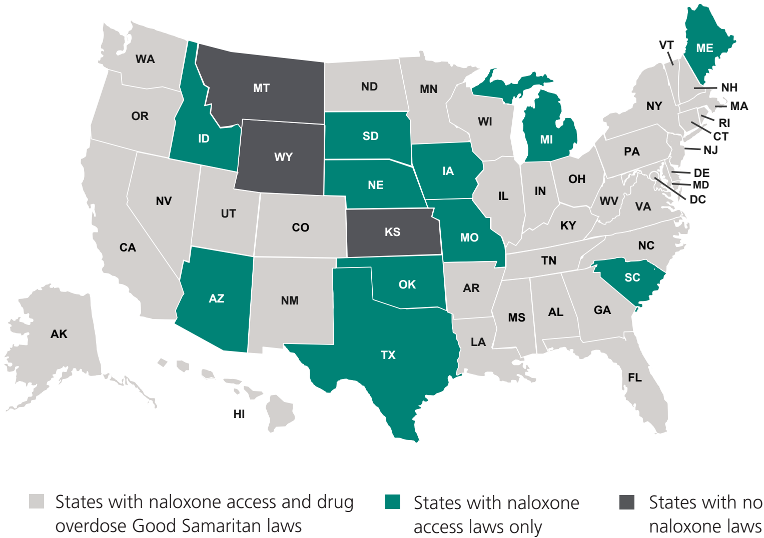
Historically, most laws and regulations limited access of naloxone to physicians. This changed in 2001 when New Mexico became the first state to amend its laws by allowing allied medical professionals to prescribe and dispense naloxone. Family members or caregivers could also administer naloxone without fear of legal repercussions. Then, in 2007, New Mexico again set precedent, becoming the first state to amend its laws to encourage the use of naloxone by protecting Good Samaritans, or those who help people in distress, from liability associated with any adverse consequences of administering naloxone.

Many states have since followed suit, with significant activity occurring in the last twelve months. Alaska, South Dakota, Iowa, Utah, Massachusetts, Maine, North Carolina and Indiana all passed legislation expanding access to naloxone in 2016. Key components of the bills vary, however, all include provisions for:

- Family members, significant others, or friends of individuals who are both using opioid analgesics and at risk of an overdose to receive access to naloxone, training on how to administer the medication and immunity from liability in the event of adverse consequences following their administration of naloxone.
- First responders and emergency personnel to gain access to naloxone, along with training on how to administer the medication.
- Physicians and pharmacists to have Good Samaritan status and the associated immunity from liability in the event of adverse events resulting from their good faith prescribing and dispensing of naloxone.

Noteworthy to workers' compensation, the Colorado Division of Workers' Compensation has also approved an allowance for reimbursement if naloxone is prescribed by an authorized treating physician to an injured worker at risk of experiencing an opioid-related drug overdose, or to another person in a position to assist the injured worker.

Figure 1. As of July 2016, 47 states, and the District of Columbia have naloxone laws in place.[1, 2]



Clinical value and history

To understand the seemingly sudden interest in naloxone for opioid analgesic overdose, it is helpful to understand its clinical value and history. The Food and Drug Administration (FDA) first approved Narcan®, known generically as naloxone, in 1971. Naloxone is an opioid antagonist. The medication works by temporarily reversing the effects of opioid analgesics, specifically the potentially fatal respiratory depression, sedation and low blood pressure associated with overdose. Naloxone does not, however, work to reverse effects of non-opioid medications and may actually increase the effects of non-opioid medications in cases of mixed medication overdose.

While naloxone is not a new medication, it has generally been unavailable as a take-home medication and was reserved for use by EMS or ER medical personnel.[3] This changed in 2014 when Evzio® became the first FDA-approved naloxone auto-injector available in the U.S. market for use by a patient (claimant), family members or caregivers in situations of opioid analgesic overdose.[1,4] The injector device is small and portable, with an unseen retractable needle that injects naloxone when pressed against the skin. Visual and voice instructions for use are provided with the device, as is a trainer device.

Another product formulated as a naloxone nasal spray, Narcan Nasal Spray, entered the market in 2016. Similar to Evzio, Narcan Nasal Spray is a single dose unit that is ready-to-use and does not require any preparation for administration. However, it is administered not as an injection but as a spray into the nose. The medication is also unique in that it is the only naloxone medication currently FDA-approved that is not administered by injection.

While both products make it easier to administer naloxone, there are a couple key differences between the two. Narcan Nasal Spray requires the patient to be lying on their back for proper nasal administration whereas Evzio may be given with the patient in any position.[5] The recommended injection site is the middle of the thigh. Evzio also has a significantly higher Average Wholesale Price (AWP) than Narcan Nasal Spray and other available naloxone injectables.

Regardless of formulation, naloxone is not a substitute for emergency medical care and a repeat dose may be necessary if there is not a response to the first dose. It remains critical for caregivers or bystanders to call 911 in all overdose situations. The period during which naloxone takes effect, and subsequently wears off, is influenced by several factors. These include the type of opioid analgesics, presence of other substances in the body, and the individual's general health condition. As a result, there is the potential for a naloxone dose to wear off before the claimant receives emergency medical care, which is a necessity after any naloxone administration.

Regardless of formulation, or its use, naloxone is not a substitute for emergency medical care.

Emerging use, positive impact

We are seeing an increase in naloxone prescriptions across our book of business, with a notable increase this year. Anesthesiologists, physical medicine and rehabilitation (PMR) physicians, physician assistants, nurse practitioners and pain management specialists are writing the majority of naloxone prescriptions, which is consistent with prescribing patterns for opioid analgesics. The increase may be attributed to several factors:

- Ongoing efforts to mitigate the risk of overdose death due to the misuse and abuse of opioid analgesics and illicit substances
- Elevated awareness and better understanding of how opioid analgesics can affect the major body systems
- Broader availability of naloxone medications
- Regulatory and legislative reform facilitating greater access to naloxone medications
- A heightened sense of social responsibility

Opioid overdose deaths have been shown to decrease in communities where naloxone distribution programs exist and research has shown that the availability of naloxone saves lives. According to the Centers for Disease Control and Prevention, in July 2014, the Harm Reduction Coalition (HRC) surveyed 140 managers of organizations in the United States that provided naloxone kits to laypersons or non-medical personnel.[1] Managers from 136 organizations completed the survey. From 1996 through June 2014, a total of 644 local sites in 30 states and the District of Columbia provided naloxone kits to 152,283 laypersons and received reports of 26,463 overdose reversals. The findings in this report had a few limitations, specifically that the number of opioid reversals may be under-reported as some sites, such as pharmacies, do not collect reversal reports, and half of the responding organizations did not begin operating until after January 2013. Despite these limitations, the survey demonstrates that the number of organizations providing naloxone kits to laypersons increased substantially in the last few years, resulting in a 160 percent (from 10,171 to 26,463) increase in the number of overdose reversals reported.

Another naloxone community study, Project Lazarus,[1] was established in 2008 to address the high rate of drug overdose deaths in Wilkes County, North Carolina, helping create locally-tailored drug overdose prevention programs. According to the Wilkes County Health Department, results indicate that overdose deaths between 2009 and 2011 decreased by 69 percent.

In Massachusetts, 19 communities with at least five fatal opioid overdoses in each of the years 2004 to 2006 evaluated the impact of state-supported Overdose Education and Naloxone Distribution (OEND) programs on rates of opioid-related deaths from overdose. The results indicated the OEND programs trained 2,912 potential bystanders who reported 327 rescues. Moreover, in one pilot study of heroin injection drug users, participants trained to administer naloxone in the presence of an overdose reported intervening in 20 heroin overdoses and saving the lives of all 20 overdose victims.

The future of naloxone in workers' compensation

As we look ahead, we anticipate the trend of rising naloxone prescribing in workers' compensation to continue. Opioid analgesics remain the most frequently prescribed category of medication used to treat pain in workers' compensation. Statistics also show there are far too many situations of death from misuse and abuse of opioids in our country and that naloxone may be a needed medication for the patient with identified risk factors. As we continue to work together to make sure claimants receive safe, efficacious and cost-effective care, payers are encouraged to keep in mind that not every claimant using opioid analgesics is at an elevated risk of overdose, but there are certain risk factors to consider, as shown in **Figure 2**. Also keep in mind:

- The use of opioid analgesics should be carefully considered, especially if the claimant is at an increased risk for overdose.
- Alternative medication therapy, such as antidepressants, anticonvulsants or non-steroidal anti-inflammatories (NSAIDs) and/or nonpharmacologic treatment might be a safer, more efficacious plan of care than opioid analgesic therapy.
- It is often easier to manage a claimant's use of opioid analgesics when there is a goal-oriented plan of care in place.
- Monitoring and managing adherence to the therapy regimen using tools such as medication agreements, pill counts, urine drug testing and ongoing communication with the claimant and their prescriber are also conducive to helping ensure a claimant's medication regimen is safe and effective.
- Clinical case management, a medication review, peer-to-peer review or another type of intervention might be warranted for claimants on a chronic opioid analgesic treatment regimen.

For more information on prescribing naloxone, your pharmacy benefit manager and/or managed care provider may also be a valuable resource.

Figure 2.

Factors indicating a claimant may be at an increased risk for overdose include: [6, 7]

- History of addiction or illegal drug use
- Personal or family history of substance abuse, including tobacco and alcohol use
- Previous overdose
- High doses of opioid analgesics
- Frequent or recent opioid medication rotation (switching from one opioid analgesic to another)
- Ongoing use of opioid analgesics in combination with other central nervous system depressants, alcohol or illegal substances
- The presence of comorbid medical conditions such as lung, kidney or liver disease, or mental illness
- History of opioid detoxification or lapse in opioid analgesic use which may indicate reduced tolerance to opioid analgesics
- Social isolation or living in a remote area with limited or no access to medical care

References

[1] Davis, C.S., Chang, S., & Carr, D. (2016). The Network for Public Health Law. Legal Interventions to reduce overdose mortality: Naloxone access and overdose Good Samaritan laws; 1-16. Retrieved from https://www.networkforphl.org/_asset/qz5pvn/network-naloxone-10-4.pdf

[2] Davis, C.S. & Carr, D. (2015). Legal changes to increase access to naloxone for opioid overdose reversal in the United States. *Drug Alcohol Depend.* 157:112-120.

[3] Gold Standard, Inc. (n.d.). Naloxone. Clinical Pharmacology [database online]. Retrieved from http://www.clinicalpharmacology.com/

[4] Evzio™ [package insert]. Richmond, VA: Kaleo, Inc.; April 2014.

[5] Narcan® Nasal Spray [package insert]. Radnor, PA: Adapt Pharma, Inc.; February 2016.

[6] Substance Abuse and Mental Health Services Administration. (2013). SAMHSA opioid overdose prevention toolkit. HHS Publication No. (SMA) 13-4742. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[7] Becker, W. & Starrels, J.L. (n.d.). Prescription drug misuse: Epidmiology, prevention, identification and management. UpToDate, Waltham, MA.

About Optum for Workers' Compensation and Auto No-Fault

The workers' comp and auto no-fault division of Optum collaborates with our clients to deliver value beyond transactional savings while helping ensure claimants receive safe and effective clinical care. Our innovative and comprehensive medical cost management programs include pharmacy, ancillary and managed care services from first report of injury to settlement.

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