**Ask The Pharmacist**  
8-17-2016

**Question:**

The recently released Drug Trends report shows a decline in opioid utilization and an uptick in non-opioid meds including anticonvulsants and NSAIDs. How are seizure drugs used for pain management?

**Answer:**

It is true that the 2015 Coventry/First Script Drug Trends Analysis showed a decline in overall opioid utilization and an increase in non-opioid drugs that may be used for pain. Opioids are often prescribed for moderate-to-severe pain, and while opioids can be very effective medications, they can also be associated with potential negative effects including the potential for abuse and addiction. The shift away from opioids to the use of more non-opioid alternative medications for pain has likely been contributed to by increased prescriber and patient awareness of the nation’s opioid epidemic and the risks surrounding this therapeutic class, growing regulations and prescribing guideline reforms, and enhanced clinical oversight efforts by pharmacy benefit managers and other managed care entities.

**Pain Medication Categories**

There are three main categories for pharmaceutical management of pain: opioid analgesics, non-opioid analgesics, and adjuvant medications. Opioid analgesics include drugs such as morphine, oxycodone, and hydrocodone. Non-opioid analgesics are comprised of acetaminophen (Tylenol®), NSAIDs (Motrin®, Aleve®, Celebrex®), and salicylates (Aspirin®). These two categories are available in combination as well where an opioid is paired with a non-opioid analgesic in an effort to provide enhanced pain relief while allowing for lower doses of each drug (thus minimizing the potential for dose-related side effects). Examples include hydrocodone-acetaminophen (Vicodin®, Norco®, Lortab®), oxycodone-acetaminophen (Percocet®, Endocet®), and hydrocodone-ibuprofen (Vicoprofen®, Ibudone®). The third category, adjuvant analgesics, represents those medications that are not typically classified as analgesics but that have been shown to provide benefit in patients with certain types of pain conditions. Examples include, but are not limited to, therapeutic classes such as antidepressants, anticonvulsants, corticosteroids, alpha-2 adrenergic agonists (such as clonidine or tizanidine), and topicals (such as capsaicin).

**Anticonvulsants and Pain**

Anticonvulsants include a variety of drugs that have been FDA-approved for the treatment of various forms of seizure disorders. While opioids work centrally (through the brain and spinal cord) to affect the way the body perceives pain, the way in which anticonvulsants provide analgesia is less clear. Some anticonvulsants have been shown to be more effective than others for managing chronic and/or neuropathic pain. The rationale for the use of anticonvulsants for the management of pain lies in the similarities observed between the way some epilepsy conditions and neuropathic pain models behave. In other words, similar pathways and neurotransmitters are involved in each disease state. For example, the Official Disability Guidelines (ODG) recommend the use of gabapentin (Neurontin®) or Lyrica® as first-line anticonvulsant options for pain. These particular anticonvulsants are thought to work centrally (in the spinal cord) by affecting some of the “messengers” (GABA and calcium channels) contributing to seizure or neuropathic pain activity. Anticonvulsants are typically prescribed if the injured worker has sudden, “shock-like” pains that appear to involve damage to, or pressure on, the nerves (e.g., sciatica) or for symptoms of pain associated with numbing, tingling, burning, or weakness. They can be prescribed for chronic pain where signals of pain may remain active in the nervous system for months or years beyond the original offending injury. The 2015 Drug Trends Analysis reports a higher use of anticonvulsants in claims aged two years and older (see chart on next page). This fits with the idea that these types of medications are typically reserved for cases of chronic pain or pain that has not been effectively managed by opioid or non-opioid analgesics alone thus prompting the addition of an adjuvant medication.

Managed Utilization by Claim Age—Top Classes

Percentage of Total Scripts

- Short-Acting Opioids
- NSAIDs
- Muscle Relaxants
- Anticonvulsants
- Sustained-Release Opioids
- Antidepressants, Non-TCA
- Dermatological
- Antiulcer
- Cardiovascular, Antihypertensive
- Anti-anxiety
- Sedative/Hypnotics

Claim Years 0–1
Claim Years 2 and older

Managed population

- Claims younger than one year utilized more
  - Short-acting opioids
  - NSAIDs
  - Muscle relaxants

- Claims older than two years utilized more
  - Anticonvulsants
  - Sustained-release opioids
  - Antidepressants

Download your complimentary copy of Coventry's 2015 Drug Trends Analysis today at coventrywcs.com

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