



## **Prescribing and Dispensing Opioids in the Emergency Department**

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Emergency department (ED) practitioners are at the front lines of the current prescription opioid epidemic. Acute or chronic pain accounts for almost two-thirds of ED visits in the United States,<sup>i</sup> which may explain why ED practitioners were among the top 5 prescribing specialties of outpatient opioid prescriptions written for patients less than 39 years old in 2009.<sup>ii</sup> Opioid prescribing from all sources has increased significantly in the past 15 years, and the tripling of sales of prescription opioids from 1999-2010 has resulted in a concomitant tripling of opioid-related fatal poisonings.<sup>iii</sup> In 2009, poisoning deaths—led primarily by opioids—were more common than deaths from motor vehicle collisions, becoming the leading cause of death from unintentional injury in the US.<sup>iv</sup>

Prescription opioid abuse—a pattern of substance abuse resulting in clinically significant impairment or distress<sup>v</sup>—has had significant effects on ED patient populations. In 2010, there were an estimated total of 5.1 million people in the US classified as prescription opioid abusers, which amounts to approximately 5,500 new opioid abusers per day.<sup>vi</sup> From 2004-2009, ED visits linked to non-medical use of prescription opioids doubled,<sup>vii</sup> accounting for more than 300,000 visits in 2008.<sup>viii</sup>

Nurses, nurse practitioners and physicians practicing in ERs throughout the US are currently faced with the daunting task of ensuring compassionate treatment of their patients without contributing to the self-destructive cycle of opioid dependence and addiction. This Patient Safety Briefing reviews the safety of chronic opioid therapy, describes established guidelines for opioid prescription and dispensation in the ED, and provides further resources for ED practitioners.

### **The Safety of Chronic Opioid Therapy**

Opioids—a diverse group of analgesics that include hydromorphone, hydrocodone, oxycodone, fentanyl, morphine, and methadone—have a variety of side effects, the most dangerous of which is respiratory suppression at high doses.<sup>ix,x</sup> The risk of this side effect is significantly amplified by the potential for opioid tolerance (in which increasing doses are required to achieve the same analgesic effect), dependence and addiction. Recent

studies have shown that daily use can result in physical dependence within weeks or even days, contrary to past assertions that dependence could only manifest after prolonged exposure.<sup>xi,xii</sup>

Estimates of rates of addiction in patients on chronic opioid therapy vary from 4-26% of recipients.<sup>xiii</sup> Extended-release formulations of prescription opioids have not been shown to be safer than instant-release formulations.<sup>xiv</sup> There is minimal evidence supporting the use of prescription opioids for chronic, non-cancer pain.<sup>xv</sup>

## Emergency Department Opioid Prescribing Guidelines

Currently, the most widely-known ED opioid prescribing guidelines are those created by an interagency work group created by the Washington State Department of Health. This collaborative effort—including representatives from EDs, pharmacists, law enforcement, public health officials, Medicaid, mental health, the poison control center, pain and addiction specialists, the medical board, and state government—generated a comprehensive, detailed set of guidelines to set clear, consistent expectations for ED prescribers and patients.<sup>xvi</sup> The Washington State opioid prescribing guidelines (available at <http://washingtonep.org/Postings/edopioidabuseguidelinesfinal.pdf>) consist of 17 individual components, outlined and briefly explained below.

1. One medical provider should provide all opioids to treat a patient's chronic pain.
  - *This provision illustrates that the ED is not an ideal location for the treatment of chronic pain, mainly due to the one-time therapeutic relationships between patient and provider in the ED, and the inability to monitor day-to-day changes in a patient's pain-related level of functioning. This expectation is made in conjunction with accepted guidelines from several governing bodies, including the American Pain Society and the Medical Quality Assurance Commission.*
2. The administration of intravenous and intramuscular opioids in the emergency department for the relief of acute exacerbations of chronic pain is discouraged.
  - *The administration of intravenous (IV) and intramuscular (IM) opioids clearly is correlated to euphoria and associated addiction. In addition, IV/IM formulations of these medications are ideal for rapid pain relief, but have a short duration of effect, and thus are more suited for new acute pain than for exacerbations of chronic pain. Interestingly, studies comparing IV morphine to IV hydromorphone (Dilaudid®) found that while the analgesic capabilities of the two drugs were similar, hydromorphone had significantly more euphoric effects, including feeling "high", having a "pleasant bodily sensation", and increased liking of drug effect.<sup>xviii</sup> This observation suggests that, if IV/IM formulations are required, it would be prudent to use morphine in lieu of hydromorphone whenever possible.*
3. Emergency medical providers should abstain from providing replacement prescriptions for controlled substances that were lost, destroyed or stolen.
  - *Although the theft of prescriptions and prescription medications certainly occurs, there is no means of ascertaining the veracity of a patient's complaint of theft. In addition, repeated claims of lost or stolen*

*prescriptions brings up the question of whether a patient might be diverting prescription drugs. Drug diversion involves channeling medications from legal to illegal marketplaces.<sup>xviii</sup> According to the DEA, the financial cost of prescription drug diversion is approximately \$72 billion per year.<sup>xix</sup> Patients reporting lost or stolen prescriptions should alert their primary care physicians, whose longer-term relationship with the patient may facilitate a more accurate assessment of their claim. In addition, patients who claim lost or stolen prescriptions may, in fact, be using more medication than prescribed, in which case the provision of replacement prescriptions could significantly increase the risk for fatal overdose.*

4. Emergency medical providers should not provide replacement doses of methadone for patients in a methadone treatment program who have missed a dose.
  - *In the US, methadone is administered in a closely-controlled environment for maintenance of opioid withdrawal and, less frequently, for chronic pain control. Claims of missed doses of methadone are extremely difficult to confirm, and the administration of replacement doses is fraught with danger, including the possibility of inadvertent overdose on the basis of doubled or otherwise inaccurate doses.*
5. Long-acting or controlled-release opioids (such as OxyContin®, fentanyl patches, and methadone) should not be prescribed for acute pain.
  - *Much like #1 above, the administration or prescription of long-acting opioid analgesics requires the capability for long-term monitoring for both pain relief and for the signs of dependence and addiction. This type of monitoring cannot be realistically performed by ED practitioners.*
6. Emergency departments are encouraged to share the ED visit history of a patient with other emergency physicians who are treating the patient using the Emergency Department Information Exchange (EDIE).
  - *The Washington State ED Opioid Abuse Work Group was able to create an information exchange forum for ED practitioners who want to ensure that their patients receive appropriate, compassionate pain control without jeopardizing their safety. Many states have similar information exchange programs in place, commonly called Prescription Drug Monitoring Programs (PDMPs). These information repositories are typically computer-based, securely-accessible, state-administered databases charged with collecting and distributing data on controlled substance prescribing. They are typically accessible to prescribers and pharmacies, although accessibility varies by state. PDMPs show tremendous potential in facilitating safe prescribing without compromising appropriate pain control.<sup>xx</sup>*
7. Physicians should send pain agreements they make with patients to the local emergency departments and develop the agreements in cooperation with the ED to include a plan for pain treatment in the ED.
  - *The implementation of and close adherence to pain contracts is a fundamental component of chronic opioid therapy. Sharing this information with ED providers ensures that the acute administration of opioids doesn't interfere with a patient's long-term opioid therapy, while*

*also minimizing the risk for escalations in opioid dosing. Opioid dependence very frequently leads to tolerance, in which ever-increasing doses of medications are required for the same level of pain relief. This phenomenon is increasingly being linked to opioid induced hyperalgesia, in which increasing intake of opioids results in a paradoxical increase in pain.<sup>xxi</sup>*

8. Prescriptions for controlled substances from the emergency department should state the patient is required to provide a government issued picture identification (ID) to the pharmacy filling the prescription.
  - *This component again brings up the question of drug diversion mentioned under #3 above. Requiring patients to present photo ID when filling prescriptions could significantly decrease the value of a stolen prescription.*
9. Emergency departments are encouraged to photograph patients who present for pain related complaints without a government issued photo ID.
  - *Although technological restrictions of electronic medical records (EMRs) may make this component difficult to implement universally, the ability to confirm a patient's identity prior to dispensation of opioids could also serve to decrease drug diversion.*
10. Emergency departments should coordinate the care of patients who frequently visit the ED using an ED care coordination program. This includes recording an ED care plan in a dedicated section of the hospital electronic record.
  - *The use of EMRs for patient records provides a unique opportunity for providing a modicum of increased continuity of care across ED visits. The creation of a dedicated section within an EMR detailing established guidelines—articulated and agreed to with the patient—could significantly decrease variability in treatment from provider to provider, decreasing the likelihood that unsafe prescribing or opioid administration practices would occur.*
11. Emergency departments should maintain a list of clinics that provide primary care for patients of all payer types.
  - *A significant concern with any type of policy restricting access to pain control is the notion that the ED serves as a safety net for an otherwise dysfunctional health care system. Ensuring that EDs can provide a list of alternate sources for pain control to patients with chronic pain conditions should increase the likelihood that patients can find a source for chronic pain control other than the ED.*
12. Emergency departments should perform screening, brief interventions, and referral to treatment for patients with suspected prescription opiate abuse problems. Emergency medical providers should refer patients to have a chemical dependency assessment and maintain a list of local chemical dependency treatment resources.
  - *The ED is the sole point of contact with the health care establishment, and screening for high-risk conditions—including drug and alcohol dependence, tobacco abuse, domestic violence and other unsafe behaviors—is a low-cost intervention that has great potential to avert future medical or social emergencies. The Washington State opioid*

*guidelines acknowledge that the ED plays an essential role in helping to curb the prescription opioid epidemic.*

13. The administration of Demerol® (Meperidine) in the emergency department is discouraged due to its side effect of lowering the seizure threshold.
  - *In addition to the side effect of euphoria,<sup>xxii</sup> the use of IV meperidine has been demonstrated to lower seizure thresholds and to increase the risk of serotonin syndrome in patients on certain antidepressants. Given the availability of safer alternatives—including IV ketorolac and morphine—the utility of IV meperidine in emergency pain management is significantly decreased.*
14. For exacerbations of chronic pain the emergency medical provider should contact the patient’s primary opioid prescriber or pharmacy and prescribe only enough pills to last until the office of the patient’s primary opioid prescriber opens.
  - *Like #1 and #7 above, this point further attempts to strengthen the communication and collaboration between a patient’s primary prescriber and the ED.*
15. No more than 30 pills of opioid medication for acute injuries, such as fractured bones, should be prescribed from the emergency department in most circumstances.
  - *The fact that patients will present to the ED with new painful conditions—including fractures, abscesses, and lacerations—is an inevitability, and these guidelines are not meant to dismiss the utility of short-term prescription opioids in controlling acute pain. Although data regarding the role of the ED in perpetuating prescription opioid dependence are lacking, studies of post-surgical patients report increased opioid use 1 year after surgery when opioids were prescribed within 7 days of the initial operation.<sup>xxiii</sup> Although disconcerting, this observation does not negate the utility of opioids for acute pain control. It is the opinion of the author, however, that ED practitioners should emphasize the use of opioids for breakthrough pain control—as part of a regimen of non-steroidal anti-inflammatory drug (NSAID), acetaminophen, rest, and ice or heat therapy—as opposed to the administration of around-the-clock opioid administration.*
16. ED patients should be screened for a history of substance abuse prior to prescribing opioids for acute pain.
  - *Several patient characteristics—including age less than 65 years, depression, psychotropic medication use, and pain impairment—have been shown to correlate with high rates of prescription opioid dependence.<sup>xxiv</sup> In order to minimize the perpetuation or creation of opioid addiction, the Washington State guidelines recommend that ED practitioners perform brief screening of all patients seen in the ED, and that refer patients to treatment centers accordingly.*
17. The emergency physician is required by law to evaluate an ED patient with who reports pain. The law allows the emergency physician to use their clinical judgment when treating pain and does not require the use of opioids.

- *The final point of these guidelines is an acknowledgement that policies and guidelines cannot replace clinical judgment, or be applied without discretion by the ED practitioner.*

## **Further Recommendations and Guidelines**

Additional recommendations and guidelines for chronic opioid therapy have been created by Physicians for Responsible Opioid Prescribing (PROP), an organization dedicated to the reduction of morbidity and mortality resulting from prescribing of opioids and to the promotion of cautious, safe and responsible opioid prescribing practices. This organization has released a document titled “Cautious, Evidence-Based Opioid Prescribing” (available at [http://www.supportprop.org/educational/PROP\\_OpioidPrescribing.pdf](http://www.supportprop.org/educational/PROP_OpioidPrescribing.pdf)) which seeks to dispel some of the myths associated with chronic opioid therapy.

ED practitioners should also make an effort to understand the availability and accessibility of prescription drug monitoring programs (PDMPs) in their practice areas. The National Alliance for Model State Drug Laws (NAMSDL, <http://www.namsdl.org/>) is a 501(c)(3) organization dedicated to providing information on drug and alcohol laws, policies and programs, with a particular emphasis on defining the characteristics and ensuring access to PDMPs.

## **Conclusion**

Administration and prescription of opioid analgesics in the ED are extremely daunting tasks for ED practitioners, with the specter of an ever-growing prescription opioid epidemic further complicating the issue. Recently-issued guidelines for the administration and prescription of opioids can help to direct prescribers, however all opioid dispensation should be guided by a combination of compassion and strict attention to patient safety.

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<sup>iii</sup> National Institute on Drug Abuse. Prescription medications. Available at: <http://drugabuse.gov/drugpages/prescription.html>. Accessed May 2012.

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<sup>v</sup> Diagnostic and Statistical Manual of Mental Disorders, Fourth edition. Washington, D.C., American Psychiatric Press, 1994.

<sup>vi</sup> Substance Abuse and Mental Health Services Administration. Results from the 2010 national survey on drug use and health: summary of national findings, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011.

<sup>vii</sup> Highlights of the 2009 Drug Abuse Warning Network (DAWN) Findings on Drug-Related Emergency Department Visits, SAMHSA (December 2010).

<sup>viii</sup> Trends in emergency department visits involving nonmedical use of narcotic pain relievers. The DAWN report, SAMHSA. <http://store.samhsa.gov/product/DAWN10-0618>. Accessed March 4, 2011.

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