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## Strategies to Improve Opioid Prescribing

*How do you deal with patients who request parenteral opioids for exacerbation of chronic pain and then want refills of their potent analgesics on discharge? If you are like me, painfully, often with frustration and hostility; this issue should therefore be of interest.*

— J. Stephan Stapczynski, MD, Editor

### Introduction

The emergency physician has the daunting daily task of caring for the acutely ill patient who is often in pain from an injury or a disease process mixed in with patients who have a chronic pain syndrome and other patients who are seeking opioids for nonmedical use or abuse. Opioid analgesics are synthetic drugs that have analgesic properties similar to opium. Commonly prescribed opioid analgesics include oxycodone (Percocet® or OxyContin®) and hydrocodone (Vicodin®). This paper summarizes the epidemic of non-medical use of opioid analgesics, the challenge of recognizing this problem on the frontlines in the emergency department (ED), and strategies to improve opioid prescribing.

### Epidemiology

Opioid prescriptions have skyrocketed in the United States during the past decade. From 2000-2010, opioid prescriptions provided to patients increased in both ambulatory encounters and ED visits.<sup>1,2</sup> In the ambulatory setting, non-opioid analgesic prescribing remained unchanged,<sup>1</sup> whereas in the ED, non-opioid analgesic prescribing decreased.<sup>2</sup>

In cities where the rate of prescription drug abuse is high, such as New York City, the statistics are staggering. Between 2004 and 2009, the rate of opioid analgesic-related ED visits in New York City doubled, from 55 to 110 visits for every 100,000 population.<sup>3</sup> In 2009, one in every four deaths from unintentional overdose (158) in New York City involved prescription opioid analgesics, a 20% increase from 2005.<sup>3</sup> This increase in deaths from prescription opioid analgesics occurred while the heroin poisoning death rate decreased by 24% during the same time period.<sup>3</sup> The Centers for Disease Control (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA) reviewed United States data from 2004-2008 on ED visits involving the non-medical use of prescription drugs from SAMHSA's Drug Abuse Warning Network (DAWN).<sup>4</sup> These data showed that the estimated number of ED visits for nonmedical use of opioid analgesics increased by 111% between 2004 and 2008 (from 144,600 to 305,900 visits).<sup>4</sup> The opioid analgesics most commonly reported for nonmedical use during these ED visits were oxycodone, hydrocodone, and methadone.<sup>4</sup>

In recent months, deaths of high profile figures such as the actor Philip Seymour Hoffman, who died of an overdose at the age of 46 years, has focused attention on the epidemic of opioid abuse, and the link to other illicit drug

## Executive Summary

- Always perform a history and physical exam appropriate to the chief complaint.
- Review past records.
- Query the state-based online Prescription Drug Monitoring Program.
- Risk stratify the patient for opioid abuse potential.
- Use nonopioid analgesic approaches where possible.
- Treat acute pain appropriately.
- Do not use parenteral opioids to treat exacerbations of chronic pain.
- Limit number of tablets prescribed upon ED discharge.
- Avoid high-potency opioid analgesics for nonmalignant chronic pain.

addictions, such as heroin.<sup>5</sup> Experts surmise that the link to the abuse of heroin and prescription painkillers is that addicts have switched to heroin as prescription pills become more expensive and more difficult to obtain.<sup>5</sup> Additionally, heroin is stronger, cheaper, and more plentiful than ever before.<sup>5</sup> National surveys have found that the number of persons meeting criteria for heroin abuse or dependence more than doubled from 2007 to 2012.<sup>6-8</sup> Some studies of heroin users show that prescription opioid abuse often precedes heroin use.<sup>8</sup> Data from the CDC showed that more than seven out of 10 people who reported past-year heroin use also reported using opioids nonmedically during the same year.<sup>8</sup> From 2002 to 2011, first-time heroin use was 19 times higher among those reporting prior non-medical opioid use than among those who did not report using opioids nonmedically.<sup>9</sup>

In light of the widespread epidemic of nonmedical use of opioid analgesics, adoption of guidelines and policies to control opioid prescribing have occurred in states, health care systems, hospitals, and individual practitioners. Recognition of the problem by emergency physicians (EPs) on the frontlines is one critical step to reducing the impact of this opioid analgesic abuse epidemic.

### Regulation of Opioid Prescriptions

In the United States, the Controlled Substances Act (CSA) regulates the prescription of drugs

with potential for abuse or addiction. The CSA was passed by the 91st United States Congress as Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970 and signed into law by President Richard Nixon. The CSA regulates the manufacture, deportation, possession, use, and distribution of drugs that have a potential for abuse.<sup>10,11</sup> The legislation created five schedules or classifications of drugs, with qualifications for classifying prescribed substances. The potential for abuse becomes less for each advancing schedule number. The opioid medications fall into schedule II and III. Schedule II opioids include morphine, oxycodone, oxycodone combination products, and hydro-morphone.<sup>12,13</sup> Schedule III opioids include combination products of hydrocodone and acetaminophen (i.e., Vicodin®, Lortab®).<sup>12,13</sup> Two of the federal agencies, the Drug Enforcement Administration and the Food and Drug Administration, decide which substances are added to or removed from the various schedules.

### Drug Diversion of Opioid Analgesics

One of the greatest challenges that physicians from all specialties face, and especially those in emergency medicine, is ascertaining when a patient is seeking opioid analgesics for nonmedical use. There is no uniformly effective method to distinguish these patients from those presenting to the ED seeking appropriate pain relief. Due

to its purely subjective nature and the many factors that influence it, pain is a difficult quantity to measure. EPs treat patients with pain daily, with up to 42% of ED visits caused by painful medical conditions.<sup>12</sup> Additionally, EPs often do not adequately recognize or treat a patient's pain, according to numerous studies.<sup>14-16</sup> Bias is a factor in the treatment of pain as well. Gender, race, and other patient characteristics are factors that contribute to oligo-analgesia.<sup>17-27</sup> Although screening tests have historically been utilized in pain management and primary care settings, no currently available test provides adequate accuracy to identify a patient who is seeking opioids for nonmedical use.<sup>28,29</sup>

Since the EP usually does not have the benefit of having a historical caregiver relationship with the patient, the determination that the patient is seeking opioids for non-medical use is difficult. Some of the potential methods used to obtain medications include "physician shopping" (seeking out multiple physicians to obtain controlled substances), deception and manipulation of health care providers, and forging, altering, and stealing prescriptions.<sup>30</sup>

Drug diversion is the illegal distribution or abuse of prescription drugs or their use for purposes not intended by the prescriber, such as recreation, fostering addiction, or for financial gain.<sup>31</sup> Diverted drugs may also be provided by others — family or friends, purchased on the street market, or stolen from others.<sup>12,32</sup> (See Table 1.)

## Drug Diversion of Opioid Analgesics by Health Care Providers and Others

Although the patient is often the focus of drug diversion, health care providers and others may be diverting opioid analgesics knowingly or unknowingly. Although the majority of cases occur unknowingly, there are numerous cases of physicians and other health care providers who knowingly diverted opioid analgesics, with serious legal implications. For example, in a recent federal indictment in New York City, 24 defendants were charged with their connection with a massive drug distribution ring that operated out of a fake medical clinic with multiple locations in the Bronx, NY.<sup>34</sup> The company, called Astramed, was owned and operated by a medical doctor who profited millions of dollars by charging cash for the thousands of medically unnecessary prescriptions, including high doses of oxycodone, that were written by the clinic doctors.<sup>34</sup>

On a smaller scale, health care providers have been presented with legal action and loss of licensure from prescribing opioids to family members, friends, and other associates without keeping medical records.<sup>35,36</sup> For example, one physician lost his New York state medical license for writing prescriptions for friends and family members without keeping medical records on them for both controlled and noncontrolled medications.<sup>35</sup> However, other individuals who are not the health care provider or patient may also purposely or unknowingly divert opioids or opioid prescriptions. For example, family sharing of medications is common. The majority of nonmedical use of prescription medications occurs from prescription-sharing among family or friends.<sup>10,37,38</sup>

## Prescription Drug Monitoring Programs

Prescription drug monitoring programs (PDMPs) are state-based monitoring programs for controlled

**Table 1:** Diversion Method and Definition<sup>33</sup>

Diversion Method	Definition
Selling prescription drugs	Patients and other individuals selling prescription drugs that were initially obtained legally
Doctor shopping	Soliciting multiple physicians using a variety of false pretenses to receive prescriptions for controlled substances
Illegal Internet pharmacies	Illegal websites posing as legitimate pharmacies that may provide controlled substances to individuals without prescriptions and evade state licensing requirements and standards by operating across state and international borders
Drug theft	Robberies that occur at any step of the prescription drug supply chain — from a manufacturer to a patient, thefts from relatives, friends, or health care professionals (i.e., nurses, doctors, pharmacists, and other providers)
Prescription pad theft and forgery	Printing or stealing prescription pads to write fraudulent prescriptions, or altering a prescription to obtain an unauthorized quantity of prescribed drugs
Illicit prescribing	Providing unnecessary prescriptions, or prescribing larger quantities of tablets or pills than medically necessary

substances that are prescribed by licensed practitioners and dispensed by pharmacies.<sup>12</sup> Although prescription drug monitoring programs have existed for many years, the White House Office of National Drug Control Policy recommended the use of prescription drug monitoring programs to reduce abuse in 2011.<sup>39</sup>

**Background.** PDMPs have existed in one form or another since the 1930s, when Hawaii and California mandated duplicate or triplicate prescription forms for controlled substances.<sup>40</sup> Programs continued to expand, and in the 1990s, states began to utilize computer technology to monitor prescription writing of controlled substances.<sup>40</sup> Although the specific process by each state to administer its prescription drug monitoring program varies, each PDMP shares common features to

collect, analyze, and disseminate prescribing and dispensing data from pharmacies.<sup>40</sup> These data are made available to individuals or organizations authorized under state law, which may include prescribers, law enforcement officials, licensing boards, or others.<sup>41</sup>

In 2002, Congress established the Harold Rogers PDMP grant, which is administered by the Department of Justice, to assist law enforcement, regulatory entities, and public health officials in analyzing data on prescriptions for controlled substances.<sup>41</sup> In 2005, Congress passed the National All Schedules Prescription Electronic Reporting Act (NASPER) requiring the Secretary of Health and Human Services (HHS) to award grants to states to establish or improve PDMPs.<sup>40,41</sup> Unfortunately, the amount of funding to support

**Table 2:** Guidelines to Improve Opioid Prescription Writing<sup>33</sup>

<b>Protect Prescriptions</b>
<ul style="list-style-type: none"><li>• Protect access to prescription pads.</li><li>• Keep prescription pads in a locked office or drawer.</li><li>• Keep track of prescriptions that are used (prescription numbers).</li></ul>
<b>Take Caution in the Manner that Prescriptions Are Written or Dispensed</b>
<ul style="list-style-type: none"><li>• Limit the number of pills prescribed.</li><li>• Write out the number of pills prescribed ("ten" instead of "10").</li><li>• Write the prescription clearly to reduce forgery.</li><li>• Utilize electronic prescriptions instead of paper if available.</li></ul>
<b>Adhere to Strict Policies Regarding Prescribing</b>
<ul style="list-style-type: none"><li>• Safeguard license and DEA numbers and only utilize them as required by state law.</li><li>• Enforce a strict refill policy and guidelines on lost prescriptions.</li><li>• Obtain unused prescription bottles if the patient switches from one controlled substance to a different one.</li><li>• Use state Prescription Drug Monitoring Programs (PDMPs), where available, to monitor patient prescribing before refilling or adding new medications.</li><li>• Limit the number of refills — ED physicians should probably never prescribe refills.</li><li>• Specify on prescriptions for controlled substances that photo ID needs to be presented prior to dispensing of medication.<sup>56</sup></li></ul>

this program has been limited, and the plan to fully integrate the PDMPs across the country has yet to be realized.<sup>12,40</sup> Currently, 48 states and one territory either have PDMPs or have passed legislation to implement them.<sup>42</sup>

**Goal of Prescription Drug Monitoring Programs.** From a global and systems standpoint, PDMPs allow state agencies to better identify individuals (patients or providers) and pharmacies who divert controlled substances, and allow for evaluation of prescribing trends.<sup>12</sup> At the grass-roots level, most states allow health care providers and pharmacists to access PDMPs in real time for patients directly under their care.<sup>12</sup> For example, in October of 2006, Ohio initiated a statewide prescription monitoring program called the Ohio Automated Rx Reporting System (OARRS). This registry tracks prescription drugs in schedules II, III, IV, and V, and carisoprodol and tramadol products.

New York state's PDMP became effective on August 27, 2013.<sup>43</sup> The NY PDMP, also known as I-STOP, has higher levels of regulation on health care provider prescribing. The NY state regulations require that most health care providers consult the NY PDMP prior to prescribing schedule II, III, or IV controlled substances.<sup>43</sup> Reports allow for prescription data regarding specific patients to be transmitted in an encrypted manner, and available to enrolled health care providers taking care of patients in real time.<sup>30</sup> Although most practitioners who prescribe controlled substances are required to consult I-STOP prior to providing a prescription for or dispensing a controlled substance, the duty to consult was allowed some exceptions.<sup>44</sup> Among these exceptions is that a practitioner may prescribe a controlled substance in the emergency department of a general hospital, provided that the quantity of controlled substance prescribed

does not exceed a five-day supply if the controlled substance were used in accordance with the directions for use.<sup>45</sup>

Because the PDMPs are state-based, their use varies based on state and specialty.<sup>46,47</sup> For example, Washington state uses its PDMP for public health purposes.<sup>48</sup> In its innovative data-sharing initiative, Washington state's PDMP provides data to Medicaid and workers' compensation programs.<sup>48,49</sup> The initiative has already shown results as evidenced by the Patient Review Coordination Program for Medicaid enrollees.<sup>48,49</sup> The Patient Review Coordination Program has already resulted in decreased ED visits, decreased physician visits, and a reduction in unnecessary prescriptions (average savings of \$6000 per patient/year).<sup>48-50</sup>

## Local Strategies

**Oxycodone-free Emergency Departments.** Some frustrated health care providers and emergency departments have taken initiatives into their own hands to reduce drug diversion. One of these strategies is providing an "oxycodone-free" emergency department. For example, Dr. Gary Swart, medical director for the emergency departments at Wheaton Franciscan's Elmbrook Memorial, St. Joseph, and The Wisconsin Heart Hospital campuses, is part of a network of emergency department administrators who will be implementing tighter restrictions on how prescription pain medications are used.<sup>51</sup> In the oxy-free ED environments such as the southeastern Wisconsin area EDs, patients are informed even prior to registration that they will not receive intravenous pain medications for chronic pain, the ED will not refill lost or stolen prescriptions for oxycodone and OxyContin®, and the ED will not provide methadone or suboxone therapy.<sup>51</sup>

The oxy-free EDs try to relieve chronic pain with non-narcotic solutions.<sup>51</sup> Other hospitals and health systems have implemented similar strategies in response to opioid

diversion and abuse problems, such as creating algorithms to treat pain.<sup>52-54</sup> For example, the physicians at the Swedish Medical Center's four EDs (Ballard, Cherry Hill, First Hill, and Issaquah) in Seattle, Washington, have created an algorithm for the rational use of scheduled drugs.<sup>53</sup> The algorithm categorizes patients presenting with acute pain as either opiate naïve or opiate tolerant, and sets parameters for prescribing pain medication.<sup>53</sup> Opiate-naïve patients receive the lowest effective dose and amount to relieve pain. Opiate-tolerant patients and patients with chronic pain are treated conservatively in the ED and referred back to their personal physicians.<sup>53</sup> This approach ensures that the opiate-tolerant patient is linked with one provider and one pharmacy to help prevent abuse or increased drug dependency.<sup>53</sup> Although it is considered somewhat controversial to create an oxycodone-free emergency department, more and more EDs are following suit.<sup>55</sup>

#### Prescriber's Role to Improve

##### Opioid Prescription Writing.

The Department of Health and Human Services and The Centers for Medicare and Medicaid Services have published guidelines for the prescriber to prevent the diversion of opioids and other controlled substances.<sup>33</sup> (See Table 2.)

#### Improving Clinical Practice to Reduce Drug Diversion.

Identifying patients in the ED who are at risk for diverting drugs is a first step. The history and physical examination, social history, and screening tools for opioid abuse may assist in identifying prescription abuse. Additionally, trends in use and abuse of opioids may help physicians identify prescription abuse.

According to DAWN data, prescription drug abusers tend to have the following characteristics:<sup>10,37,57</sup>

- white;
- use opiates;
- women (tranquilizers and sedatives);
- mix medications with alcohol;
- use prescription medication, over-the-counter medication, and

**Table 3:** Opioid Risk Tool<sup>59</sup>

Category	Item	Item score if female	Item score if male
Family history of substance abuse	Alcohol	1	3
	Illegal drugs	2	3
	Prescription drugs	4	4
Personal history of substance abuse	Alcohol	3	3
	Illegal drugs	4	4
	Prescription drugs	5	5
Age	Between 16 and 45	1	1
History of preadolescent sexual abuse	Yes	3	0
Personal history of a psychological disorder	Attention deficit disorder, OR obsessive compulsive disorder, OR schizophrenia	2	2
	Depression	1	1
<b>TOTAL</b>			
	Low risk	0-3	0-3
	Moderate risk	4-7	4-7
	High risk	≥ 8	≥ 8

alcohol to attempt suicide;

- obtain prescription medication from health care providers, friends, or by purchasing on the black market.

Although data such as the DAWN data may be helpful, more information is necessary to provide a risk assessment of the patient. If opioids are considered for a patient, the risks of opioid abuse, misuse, and diversion should be carefully assessed.<sup>58</sup> ED physicians should assess patients for known risk factors for opioid abuse, including smoking, psychiatric disease, and personal or family history of substance abuse.<sup>58-61</sup>

Although not commonly used in the ED setting, screening tests are available to aid in risk assessment for opioid abuse.<sup>59,62-66</sup> Some of these screens include the Opioid Risk Tool (ORT), the Screener and

Opioid Assessment for Patients with Pain-Revised (SOAPP-R), and the Screening Instrument for Substance Abuse Potential (SISAP).<sup>59,62,66</sup>

In a busy ED, the ORT, a self-administered, five-question test that measures risk factors associated with substance abuse, may be useful if honest answers are provided.<sup>59</sup> (See Table 3.) This screening tool has a high degree of sensitivity and specificity for determining which patients are at risk for opioid abuse, misuse, and diversion.<sup>59</sup> THE SISAP is a five-item, physician-administered instrument that identifies patients at risk by inquiring about age and drug, alcohol, and cigarette use, but does not ask about psychiatric comorbidities.<sup>66</sup>

Screening, Brief Intervention, and Referral to Treatment (SBIRT) for alcohol and drug addiction has

existed for many years, but has gained popularity in recent years in the ED setting.<sup>67,68</sup> SBIRT is an evidence-based practice that identifies patients who use substances in ways that increase their risk of physical and emotional health problems, work, family, and social problems, and may assist in reducing their use. SBI is based upon motivational interviewing techniques and is not intended to replace specialized chemical dependency treatment. Rather, it is intended to identify patients with at-risk substance use and to provide such patients with information about the risks of alcohol or drug use and about appropriate treatment alternatives. Research, summarized in systematic reviews, has documented evidence of positive outcomes (primarily reduced alcohol consumption) associated with SBIRT.<sup>69-72</sup> Although many of the studies focus on alcohol abuse, SBIRT is also intended to screen and provide intervention for other substance use and abuse, including prescription opioid abuse.<sup>72</sup> SBIRT has been shown to be effective not only in the primary care setting, but in the ED setting as well.<sup>70,73,74</sup> SBIRT also takes screening for substance abuse a step further by providing the motivational interviewing intervention in even busy settings such as the ED.<sup>75,76,77</sup>

**Utilize Guidelines.** ED providers should also keep up to date regarding local, regional, state, or national guidelines that may assist in the clinical care of their patients regarding analgesia. For example, The American College of Emergency Physicians (ACEP), in collaboration with The American Society for Pain Management Nursing (ASPMN), the Emergency Nurses Association (ENA), and the American Pain Society (APS), has a position statement regarding optimizing the treatment of pain in patients with acute presentations.<sup>78</sup> The core principle revolves around recognizing the prompt need for safe and effective pain management.<sup>78</sup> Additionally, each patient's self-report of pain is a critical component of a comprehensive pain assessment, along with the

clinical assessment and treatment.<sup>78</sup> Although there is no evidence that guidelines diminish opioid misuse, emergency physicians report that they are useful communication tools to explain to patients why they will not receive outpatient opioid prescriptions.<sup>79</sup> Special attention should be given to vulnerable patient populations such as children, the elderly, and the cognitively impaired. Awareness should also be made to the cultural differences in the expression of pain.<sup>78</sup>

## **Steps the Health Care Provider Can Take When Drug Diversion Is Suspected**

When the emergency physician is faced in real time with a patient that he or she suspects of drug diversion in the ED, the first priority should be to take care of the patient's medical complaint to the best of the physician's ability. When drug diversion is considered, a review of past medical records, screening tests for substance abuse, and utilizing the PDMP may assist.

Additionally, if a prescriber suspects that drug diversion has occurred, the activity can be documented and a report should be made to the appropriate agencies. These agencies include:

- Local law enforcement and local fraud alert networks;
- DEA, for reporting theft or loss of controlled substances, at <https://www.deadiversion.usdoj.gov/web-forms/dtlLogin.jsp> on the DEA Office of Diversion Control website;
- HHS-OIG National Hotline, by calling 1-800-HHS-TIPS (1-800-447-8477) or TTY 1-800-377-4950 or by visiting <https://forms.oig.hhs.gov/hotlineoperations/> on the HHS-OIG website.<sup>32</sup>

## **Other Strategies**

**Pain Agreements, Pain Contracts, Medication Contracts, or Opioid Contracts.** A contractual agreement in the medical setting is defined as an "explicit bilateral commitment to a well-defined course

of action."<sup>80</sup> Contracts are widely used in the chronic administration of drugs with potential for abuse in the primary care and pain management setting.<sup>81-83</sup> Although not well-studied, some data show that they can be effective.<sup>84,85</sup> For example, a retrospective cohort study by Hariharan, et al revealed that more than 60% of 330 patients who were placed on pain contracts in an internal medicine clinic adhered to the agreement, with a median follow-up of 22.5 months.<sup>84</sup>

EPs would likely not be initiating the pain contracts, but if patients are being referred from primary care physicians and pain management specialists to the ED, the pain agreements should be shared with the ED provider.<sup>56</sup> Washington state's Department of Health has made it clear in its guidelines for opioid prescribing that the EP should try to identify and delineate any pain contracts that patients might have, and the primary care physician should forward the pain contracts with their patients who present to the ED.<sup>56</sup>

**ED Care Coordination Program.** Some experts have advocated the use of an ED care coordination program for patients who frequently utilize the emergency department.<sup>56,86</sup> Washington state has a model that delineates guidelines for such a program.<sup>56</sup> Use of such programs should empower the EP to contact the patient's primary care physician, notify the physician of the patient's ED over-utilization, and formulate an ED care plan.<sup>56</sup> When the patient does not have a primary care provider, the program advocates that an ED care plan should be created by an ED physician.<sup>56</sup> These programs advocate the importance of seeing a primary care provider for chronic medical conditions and chronic pain management instead of utilizing the ED.<sup>56</sup> The Washington state guidelines also support the use of a dedicated section of the hospital electronic health record to document the ED care plan.<sup>56</sup>

Although the electronic medical record may assist in tracking patients who are frequent utilizers of the

emergency department for opioid use and misuse, opponents have argued against the ethical concerns that such a system raises.<sup>86</sup>

Physicians need to put personal biases and preconceptions aside and treat pain to the best of their ability. They must also assure that harm does not come to patients as a result of either undertreating or inappropriately labeling them.<sup>86</sup> When there is doubt about whether a patient's pain is real, despite the physician's best effort to determine this, it is better to administer an analgesic agent to a patient who may be diverting drugs, rather than to withhold or delay treatment for a person who is truly suffering.<sup>86,87</sup> Some EDs have created an unofficial registry of frequent, "difficult," or "problem" patients, but the maintenance and value of such files is questionable.<sup>88-92</sup>

Patients who become part of an ED care coordination program should not be entered arbitrarily into the program or the electronic medical record.<sup>86</sup> Patients should be reviewed on a regular basis with a committee that may include ED physicians, nurses, social workers, community partners, and ED and hospital administrators. For entry into the medical record, Geiderman suggests that the following be verified prior:<sup>86</sup>

- patients whose private physicians have verified a pattern of drug abuse or nontherapeutic drug-seeking behavior;
- patients with numerous visits for multiple subjective painful conditions that are repeatedly accompanied by a specific analgesic regimen (along with outpatient prescriptions) and who often claim a long list of undocumented drug allergies (i.e., ketorolac, ibuprofen, metoclopramide, dihydroergotamine, and sumatriptan);
  - repeated claims to various physicians of lost or stolen prescriptions;
  - a pattern of making verbal contracts with treating physicians that are not maintained (i.e., promising outpatient follow-up; or
    - discovery of a patient who is overtly diverting drugs.<sup>86</sup>

**ED Analgesia Protocols.** Some experts and national organizations such as ACEP have recommended the development and use of analgesia protocols.<sup>78</sup> The use of analgesia protocols in the emergency department for diseases such as sickle cell disease and trauma has shown some benefit, such as a significant reduction in pain scores and reduction in delay to administration of pain medication.<sup>93-97</sup> Although more research needs to be conducted regarding the use of analgesia protocols in the emergency department, hospitals and health systems have adopted such practices.<sup>98</sup> For example, the Banner Health System has a clinical practice guideline for the management of the adult with acute pain.<sup>98</sup> In this guideline, patients with acute pain that is rated 7 or greater on a 10-point pain scale receive a first dose of 0.1 mg/kg to a maximum 10 mg if they are 54 years or younger, and a first dose of 0.05 mg/kg to a maximum of 10 mg if they are 55 years or older.<sup>98</sup>

Pain scales such as the Visual Analog Scale (VAS), the Verbal Numeric Rating Pain Scale, and the Wong-Baker Faces Pain Rating Scale have been validated and used extensively in the ED, and may assist in guiding the use of opioid medications.<sup>99,100</sup> However, some critics have argued that the pain scales may have limitations such as not reliably predicting the level of pain and need for pain medication.<sup>101-105</sup>

**Addiction and Preventative Treatment.** Some experts have advocated the distribution of antidotes and treatment for heroin and opioid overdose and abuse such as naloxone and buprenorphine.<sup>106,107</sup> Given its effectiveness and minimal risk of complications, some have advocated the distribution of naloxone intranasal kits, which can be easily administered by a bystander to a victim of an opioid overdose.<sup>106,107</sup> One such program was initiated by the Boston Public Health Commission in August of 2006.<sup>107</sup> The program provided training and intranasal naloxone to 385 participants who reported 74 successful overdose reversals.<sup>107</sup>

#### Overdose education and naloxone

distribution (OEND) programs educate people at risk for overdose, and bystanders in how to prevent, recognize, and respond to an overdose.<sup>108</sup> Participants in OEND are trained to recognize signs of overdose, seek help, rescue breathe, use naloxone kits, and stay with the person who has overdosed until help arrives.<sup>108</sup> OEND has shown some benefit. Between 1996 to 2010, more than 50,000 potential bystanders were trained by OEND programs in the United States, resulting in more than 10,000 opioid overdose rescues with naloxone.<sup>108</sup> Studies of OEND programs have demonstrated feasibility, increased knowledge, and a reduction in fatal overdoses.<sup>107,109-117</sup>

Buprenorphine in tablet form was approved by the Food and Drug Administration in 2002 for the long-term treatment of opioid addiction.<sup>118,119</sup> Certain physicians were permitted to provide treatment following the Drug Addiction Act of 2000.<sup>120</sup> This act permits physicians who meet certain qualifications to treat opioid addiction with Schedule III, IV, and V narcotic medications that have been specifically approved by the Food and Drug Administration for that indication.<sup>120</sup> Although emergency physicians would not be primarily prescribing buprenorphine, referrals to treatment from the ED could provide benefit. Results from the National Drug Abuse Clinical Trials Network (CTN) have shown success in the inpatient and outpatient settings.<sup>118,121</sup>

## Summary and Conclusions

The emergency physician is frequently faced with the challenge of caring for the patient who is at risk for opioid drug diversion. Although drug diversion is difficult to recognize and ascertain in the fast-paced setting of the ED, many tools and resources exist to assist the emergency physician. The emergency physician should be familiar with state and local guidelines and policies, as well as those within their own hospital or health care system to

improve their own opioid prescribing. Emergency physicians should perform an appropriate history and physical examination, attempt not to maintain any bias or preconceived notions regarding patients, refer to the state PDMP if available, and report suspected drug diversion when appropriate.

## References

1. Daubresse M, Chang HY, Yu Y, et al. Ambulatory diagnosis and treatment of nonmalignant pain in the United States, 2000-2010. *Med Care* 2013;51:870-878.
2. Chang HY, Daubresse M, Kruszewski SP, et al. Prevalence and treatment of pain in EDs in the United States, 2000 to 2010. *Am J Emerg Med* 2014 May;32(5):421-431.
3. Paone D OBD, Shah S, Heller D. Opioid analgesics in New York City: Misuse, morbidity and mortality update. *Epi Data Brief* 2011;4:1-2.
4. Cai EC, Poneleit K, Paulozzi L. Emergency department visits involving nonmedical use of selected prescription drugs — United States, 2004–2008. *MMWR* June 18, 2010;59:705-709.
5. Koebler J. Hoffman's death highlights growing heroin epidemic. *US News & World Report* February 7, 2014.
6. Results from the 2007 National Survey on Drug Use and Health: National Findings. In: Studies OoA, ed. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2008.
7. Results from the 2007 National Survey on Drug Use and Health: National Findings. In: Studies OoA, ed. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2013.
8. Examining the growing problems of prescription drug and heroin abuse. Centers for Disease Control and Prevention, April 29, 2014. Accessed May 16, 2014, at <http://www.cdc.gov/washington/testimony/2014/t20140429.htm>.
9. Muhuri PKG, Davies JC. Associations of Nonmedical Pain Reliever Use and Initiation of Heroin Use in the United States. In: Quality CfBHSA, ed.: CBHSQ Data Review; August 2013.
10. Use, Abuse, Misuse, and Disposal of Prescription Pain Medication Time Tool: A Resource from the American College of Preventive Medicine. In: American College of Preventive Medicine; 2011.
11. Manchikanti L, Whitfield E, Pallone F. Evolution of the National All Schedules Prescription Electronic Reporting Act (NAPSER): A public law for balancing treatment of pain and drug abuse and diversion. *Pain Physician* 2005;8:335-347.
12. Cantrill SV, Brown MD, Carlisle RJ, et al. Clinical policy: Critical issues in the prescribing of opioids for adult patients in the emergency department. *Ann Emerg Med* 2012;60:499-525.
13. Controlled Substances Act. U.S. Food and Drug Administration, 2009. Accessed May 18, 2014, at <http://www.fda.gov/regulatoryinformation/legislation/ucm148726.htm>.
14. Singer AJ, Gulla J, Thode HC, Jr. Parents and practitioners are poor judges of young children's pain severity. *Acad Emerg Med* 2002;9:609-612.
15. Guru V, Dubinsky I. The patient vs. caregiver perception of acute pain in the emergency department. *J Emerg Med* 2000;18:7-12.
16. Todd KH, Ducharme J, Choiniere M, et al. Pain in the emergency department: Results of the pain and emergency medicine initiative (PEMI) multicenter study. *J Pain* 2007;8:460-466.
17. Chen EH, Shofer FS, Dean AJ, et al. Gender disparity in analgesic treatment of emergency department patients with acute abdominal pain. *Acad Emerg Med* 2008;15:414-418.
18. Heins A, Grammas M, Heins JK, et al. Determinants of variation in analgesic and opioid prescribing practice in an emergency department. *J Opioid Manag* 2006;2:335-340.
19. Miner J, Biros MH, Trainor A, et al. Patient and physician perceptions as risk factors for oligoanalgesia: A prospective observational study of the relief of pain in the emergency department. *Acad Emerg Med* 2006;13:140-146.
20. Arends G, Fry M. Factors associated with delay to opiate analgesia in emergency departments. *J Pain* 2006;7:682-686.
21. Ortega HW, Vander Velden H, Lin CW, et al. Race, ethnicity, and analgesia provision at discharge among children with long-bone fractures requiring emergency care. *Pediatr Emerg Care* 2013;29:492-497.
22. Todd KH, Deaton C, D'Adamo AP, et al. Ethnicity and analgesic practice. *Ann Emerg Med* 2000;35:11-16.
23. Tsai CL, Sullivan AF, Gordon JA, et al. Racial/ethnic differences in emergency care for joint dislocation in 53 US EDs. *Am J Emerg Med* 2012;30:1970-1980.
24. Tamayo-Sarver JH, Hinze SW, Cydulka RK, et al. Racial and ethnic disparities in emergency department analgesic prescription. *Am J Public Health* 2003;93:2067-2073.
25. Hwang U, Richardson LD, Sonuyi TO, et al. The effect of emergency department crowding on the management of pain in older adults with hip fracture. *J Am Geriatr Soc* 2006;54:270-275.
26. Rupp T, Delaney KA. Inadequate analgesia in emergency medicine. *Ann Emerg Med* 2004;43:494-503.
27. Todd KH, Samaroo N, Hoffman JR. Ethnicity as a risk factor for inadequate emergency department analgesia. *JAMA* 1993;269:1537-1539.
28. Manchikanti L, Abdi S, Atluri S, et al. American Society of Interventional Pain Physicians (ASIPP) guidelines for responsible opioid prescribing in chronic non-cancer pain: Part I — evidence assessment. *Pain Physician* 2012;15:S1-65.
29. Manchikanti L, Abdi S, Atluri S, et al. American Society of Interventional Pain Physicians (ASIPP) guidelines for responsible opioid prescribing in chronic non-cancer pain: Part 2 — guidance. *Pain Physician* 2012;15:S67-116.
30. Baehren DF, Marco CA, Droz DE, et al. A statewide prescription monitoring program affects emergency department prescribing behaviors. *Ann Emerg Med* 2010;56:19-23 e1-3.
31. Drug diversion in the Medicaid program: State strategies for reducing prescription drug diversion in Medicaid. January 2012. Accessed April 14, 2014, at <http://www4a.cms.gov/Medicare-Medicaid-Coordination/Fraud-Prevention/MedicaidIntegrityProgram/downloads/drugdiversion.pdf>.
32. Wilsey BL, Fishman SM, Gilson AM, et al. Profiling multiple provider prescribing of opioids, benzodiazepines, stimulants, and anorectics. *Drug Alcohol Depend* 2010;112:99-106.
33. What is the prescriber's role in preventing the diversion of prescription drugs? Centers for Medicare and Medicaid Services, January 2014. Accessed April 2, 2014, at <http://www.cms.gov/Medicare-Medicaid-Coordination/Fraud-Prevention/Medicaid-Integrity-Education/Provider-Education-Toolkits/Downloads/prescriber-role-drugdiversion.pdf>.
34. Manhattan U.S. Attorney announces charges against owner of Bronx clinic and 23 other individuals involved in illegal distribution of more than five million oxycodone pills. February 5, 2014. Accessed at <http://www.justice.gov/usao/nys/pressreleases/February14/KevinLowenthalCharges.php>.
35. Kirschenbaum J. Doctor loses right to practice in NY for failing to maintain records for prescribing to self and family. In: Health NYSDO, ed. Kirchenbaum & Kirchenbaum, PC. Garden City, NY: Kirschenbaum & Kirschenbaum, P.C.; March 3, 2014.
36. Hiser M. In the matter of Howard Bennett Kaplan. In: Health NYSDO, ed.; January 13, 2014.
37. Lessenger JE, Feinberg SD. Abuse of prescription and over-the-counter medications. *J Am Board Fam Med* 2008;21:45-54.
38. Manchikanti L, Fellows B, Ailinani H, et al. Therapeutic use, abuse, and nonmedical use of opioids: A ten-year perspective. *Pain Physician* 2010;13:401-435.
39. Prescription drug abuse prevention plan. Office of National Drug Control Policy, 2011. Accessed at [http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx\\_abuse\\_plan.pdf](http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx_abuse_plan.pdf).

40. Todd KH. Pain and prescription monitoring programs in the emergency department. *Ann Emerg Med* 2010;56:24-26.
41. Finklea KB, Sacco E. Prescription Drug Monitoring Programs. In: Congress CRSRF, ed.; January 3, 2013:1-26.
42. Alliance of States with Prescription Monitoring Programs. Accessed April 12, 2014, at <http://ppmpalliance.org/about-the-aspm>.
43. I-STOP/PMP — Internet System for Tracking Over-Prescribing — Prescription Monitoring Program. New York State Department of Health. Accessed April 12, 2014, 2014, at [http://www.health.ny.gov/professionals/narcotic/prescription\\_monitoring/](http://www.health.ny.gov/professionals/narcotic/prescription_monitoring/).
44. Frequently asked questions for the NYS PMP. February 2014. Accessed at [http://www.health.ny.gov/professionals/narcotic/prescription\\_monitoring/docs/pmp\\_registry\\_faq.pdf](http://www.health.ny.gov/professionals/narcotic/prescription_monitoring/docs/pmp_registry_faq.pdf).
45. Summary of Express Terms. August 7, 2013. Accessed at [http://www.health.ny.gov/regulations/recently\\_adopted/docs/2013-08-27\\_prescription\\_monitoring\\_program.pdf](http://www.health.ny.gov/regulations/recently_adopted/docs/2013-08-27_prescription_monitoring_program.pdf).
46. Perrone J, Nelson LS. Medication reconciliation for controlled substances — an “ideal” prescription-drug monitoring program. *N Engl J Med* 2012;366:2341-2343.
47. Feldman L, Williams KS, Coates J, et al. Awareness and utilization of a prescription monitoring program among physicians. *J Pain Palliat Care Pharmacother* 2011;25:313-317.
48. Finklea KS, LN. Bagalman, E. Prescription Drug Monitoring Programs. In: Congressional Research Service; March 24, 2014:1-27.
49. Using PDMPs to Improve Medical Care: Washington State’s Data Sharing Initiative with Medicaid and Workers’ Compensation. In: PDMP Center of Excellence Brandeis University. The Heller School for Social Policy and Management; April 2013.
50. Collaborative effort in Washington state slashes non-essential use of the ED by Medicaid patients, delivering millions in projected savings. *ED Manag* 2013;25:41-4.
51. Lockwood D. Area ER doctors to limit who gets prescription pain meds. *Caledonia Patch* July 28, 2012.
52. New guidelines create an ‘Oxy-free’ ED. *ED Manag* 2010;22:136-137.
53. Carlisle R. Saving lives by creating oxy-free EDs. In: Swedish Medical Center Update: Swedish Medical Center; November 2010. Found at: <http://www.swedish.org/media-files/documents/healthprofessionals/physpractice-magazine/ppj-nov10.pdf>.
54. System MH. MHS takes lead in establishing oxy-free ED. In: McKenzie Health System; February 15, 2013.
55. Gabler EF, J. ERs in Milwaukee County restricting opioid prescription. *Journal Sentinel* September 2, 2012.
56. Washington Emergency Department Opioid Prescribing Guidelines. Washington State Department of Health. Accessed May 18, 2014, at <http://washingtonacep.org/Postings/edopioidabuse-guidelinesfinal.pdf>.
57. Drug Abuse Warning Network, 2011. Substance Abuse and Mental Health Services Administration, 2011. Accessed May 1, 2014, 2014, at <http://www.samhsa.gov/data/dawn.aspx>.
58. Passik SD. Issues in long-term opioid therapy: Unmet needs, risks, and solutions. *Mayo Clin Proc* 2009;84:593-601.
59. Webster LR, Webster RM. Predicting aberrant behaviors in opioid-treated patients: Preliminary validation of the Opioid Risk Tool. *Pain Med* 2005;6:432-442.
60. Akbik H, Butler SF, Budman SH, et al. Validation and clinical application of the Screener and Opioid Assessment for Patients with Pain (SOAPP). *J Pain Symptom Manage* 2006;32:287-293.
61. Rohsenow DJ, Colby SM, Martin RA, et al. Nicotine and other substance interaction expectancies questionnaire: Relationship of expectancies to substance use. *Addict Behav* 2005;30:629-641.
62. Butler SF, Fernandez K, Benoit C, et al. Validation of the revised Screener and Opioid Assessment for Patients with Pain (SOAPP-R). *J Pain* 2008;9:360-372.
63. Butler SF, Zacharoff KL, Budman SH, et al. Spanish translation and linguistic validation of the screener and opioid assessment for patients with pain-revised (SOAPP-R). *Pain Med* 2013;14:1032-1038.
64. Butler SF, Budman SH, Fernandez K, et al. Validation of a screener and opioid assessment measure for patients with chronic pain. *Pain* 2004;112:65-75.
65. Butler SF, Zacharoff K, Charity S, et al. Electronic opioid risk assessment program for chronic pain patients: Barriers and benefits of implementation. *Pain Pract* 2014;14:E98-E105.
66. Coambs RBJ, Santhiappillai JL, Abrahamsohn AC, et al. The SISAP: A new screening instrument for identifying potential opioid abusers in the management of chronic nonmalignant pain within general medical practice. *Pain Res Manage* 1996;1:155-162.
67. Johnson JA, Woychek A, Vaughan D, et al. Screening for at-risk alcohol use and drug use in an emergency department: Integration of screening questions into electronic triage forms achieves high screening rates. *Ann Emerg Med* 2013;62:262-266.
68. Murphy MK, Bijur PE, Rosenbloom D, et al. Feasibility of a computer-assisted alcohol SBIRT program in an urban emergency department: Patient and research staff perspectives. *Addict Sci Clin Pract* 2013;8:2.
69. Bertholet N, Daepen JB, Wietlisbach V, et al. Reduction of alcohol consumption by brief alcohol intervention in primary care: Systematic review and meta-analysis. *Arch Intern Med* 2005;165:986-995.
70. Crawford MJ, Patton R, Touquet R, et al. Screening and referral for brief intervention of alcohol-misusing patients in an emergency department: A pragmatic randomised controlled trial. *Lancet* 2004;364:1334-1339.
71. Bien TH, Miller WR, Tonigan JS. Brief interventions for alcohol problems: A review. *Addiction* 1993;88:315-335.
72. Babor TF, McRee BG, Kassebaum PA, et al. Screening, Brief Intervention, and Referral to Treatment (SBIRT): Toward a public health approach to the management of substance abuse. *Subst Abuse* 2007;28:7-30.
73. Nilsen P, Baird J, Mello MJ, et al. A systematic review of emergency care brief alcohol interventions for injury patients. *J Subst Abuse Treat* 2008;35:184-201.
74. Spirito A, Monti PM, Barnett NP, et al. A randomized clinical trial of a brief motivational intervention for alcohol-positive adolescents treated in an emergency department. *J Pediatr* 2004;145:396-402.
75. Jones CM. Heroin use and heroin use risk behaviors among nonmedical users of prescription opioid pain relievers — United States, 2002-2004 and 2008-2010. *Drug Alcohol Depend* 2013;132:95-100.
76. Emmons KM, Rollnick S. Motivational interviewing in health care settings. Opportunities and limitations. *Am J Prev Med* 2001;20:68-74.
77. Hettema J, Steele J, Miller WR. Motivational interviewing. *Ann Rev Clin Psychol* 2005;1:91-111.
78. Optimizing the treatment of pain in patients with acute presentations. ACEP, June 2009. Accessed May 18, 2014, at <http://www.acep.org/Clinical--Practice-Management/Optimizing-the-Treatment-of-Pain-in-Patients-with-Acute-Presentations/>.
79. Kilaru AS, Gadsden SM, Perrone J, et al. How do physicians adopt and apply opioid prescription guidelines in the emergency department? A qualitative study. *Ann Emerg Med* 2014 [epub March 15, 2014].
80. Quill TE. Partnerships in patient care: A contractual approach. *Ann Intern Med* 1983;98:228-234.
81. Fishman SM, Kreis PG. The opioid contract. *Clin J Pain* 2002;18:S70-S75.
82. Fishman SM, Mahajan G, Jung SW, et al. The trilateral opioid contract. Bridging the pain clinic and the primary care physician through the opioid contract. *J Pain Symptom Manage* 2002;24:335-344.
83. Fishman SM, Bandman TB, Edwards A, et al. The opioid contract in the management of chronic pain. *J Pain Symptom Manage* 1999;18:27-37.
84. Hariharan J, Lamb GC, Neuner JM. Long-term opioid contract use for chronic pain management in primary care practice. A five year experience. *J Gen Intern Med* 2007;22:485-490.

85. Kirkpatrick AF, Derasari M, Kovacs PL, et al. A protocol-contract for opioid use in patients with chronic pain not due to malignancy. *J Clin Anesth* 1998;10: 435-443.
86. Geiderman JM. Keeping lists and naming names: Habitual patient files for suspected nontherapeutic drug-seeking patients. *Ann Emerg Med* 2003;41:873-881.
87. Geiderman JM. Sympathetic dystrophy. *Ann Emerg Med* 2001;37:412-414.
88. Purdie FR, Honigman B, Rosen P. The chronic emergency department patient. *Ann Emerg Med* 1981;10:298-301.
89. Longo LP, Parran T, Jr., Johnson B, et al. Addiction: Part II. Identification and management of the drug-seeking patient. *Am Fam Physician* 2000;61:2401-2408.
90. Gruber MA, Gjerde C, Bergus G, et al. The use of unofficial "problem patient" files and interinstitutional information transfer in emergency medicine in Iowa. *Am J Emerg Med* 1995;13:509-511.
91. Schaulis MD, Snoey ER. Three years, a thousand visits: A case study of the ultimate frequent flyer. *Ann Emerg Med* 2001;38:87-89.
92. Zechnick AD, Hedges JR. Community-wide emergency department visits by patients suspected of drug-seeking behavior. *Acad Emerg Med* 1996;3:312-317.
93. Tanabe P, Artz N, Mark Courtney D, et al. Adult emergency department patients with sickle cell pain crisis: A learning collaborative model to improve analgesic management. *Acad Emerg Med* 2010;17:399-407.
94. Tanabe P, Hafner JW, Martinovich Z, et al. Adult emergency department patients with sickle cell pain crisis: results from a quality improvement learning collaborative model to improve analgesic management. *Acad Emerg Med* 2012;19:430-438.
95. Yanuka M, Soffer D, Halpern P. An intervention study to improve the quality of analgesia in the emergency department. *CJEM* 2008;10:435-439.
96. Muntlin A, Carlsson M, Safwenberg U, et al. Outcomes of a nurse-initiated intravenous analgesic protocol for abdominal pain in an emergency department: A quasi-experimental study. *Int J Nurs Stud* 2011;48:13-23.
97. Morrissey LK, Shea JO, Kalish LA, et al. Clinical practice guideline improves the treatment of sickle cell disease vaso-occlusive pain. *Pediatr Blood Cancer* 2009;52:369-372.
98. Clinical Practice Title: ED Acute Pain Treatment — Adult. Banner Health System, 2012. [www.bannerhealth.com/NR/rdonlyres/D5109879-E0D2-4AF1-879E-72D423EBFD6A/63359/EDAcutePainTreatmentClinicalPractice8232012.pdf](http://www.bannerhealth.com/NR/rdonlyres/D5109879-E0D2-4AF1-879E-72D423EBFD6A/63359/EDAcutePainTreatmentClinicalPractice8232012.pdf). Accessed May 18, 2014.
99. Bijur PE, Latimer CT, Gallagher EJ. Validation of a verbally administered numerical rating scale of acute pain for use in the emergency department. *Acad Emerg Med* 2003;10:390-392.
100. Wong DL, Baker CM. Pain in children: comparison of assessment scales. *Pediatr Nurs* 1988;14:9-17.
101. Blumstein HA, Moore D. Visual analog pain scores do not define desire for analgesia in patients with acute pain. *Acad Emerg Med* 2003;10:211-214.
102. Lee JS, Hobden E, Siell IG, et al. Clinically important change in the visual analog scale after adequate pain control. *Acad Emerg Med* 2003;10:1128-1130.
103. Silka PA, Roth MM, Moreno G, et al. Pain scores improve analgesic administration patterns for trauma patients in the emergency department. *Acad Emerg Med* 2004;11:264-270.
104. Kaplan CP, Sison C, Platt SL. Does a pain scale improve pain assessment in the pediatric emergency department? *Pediatr Emerg Care* 2008;24:605-608.
105. Takahashi JM, Yamamoto LG. Correlation and consistency of pain severity ratings by teens using different pain scales. *Hawaii Med J* 2006;65:257-259.
106. Hoffman RS. How to Stop Heroin Deaths. *The New York Times* 2014.
107. Doe-Simkins M, Walley AY, Epstein A, et al. Saved by the nose: Bystander-administered intranasal naloxone hydrochloride for opioid overdose. *Am J Public Health* 2009;99:788-791.
108. Walley AY, Xuan Z, Hackman HH, et al. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. *BMJ* 2013;346:f174.
109. Piper TM, Stancil S, Rudenstine S, et al. Evaluation of a naloxone distribution and administration program in New York City. *Subst Use Misuse* 2008;43:858-870.
110. Piper TM, Rudenstine S, Stancil S, et al. Overdose prevention for injection drug users: Lessons learned from naloxone training and distribution programs in New York City. *Harm Reduct J* 2007;4:3.
111. Enteen L, Bauer J, McLean R, et al. Overdose prevention and naloxone prescription for opioid users in San Francisco. *J Urban Health* 2010;87: 931-941.
112. Bennett AS, Bell A, Tomedi L, et al. Characteristics of an overdose prevention, response, and naloxone distribution program in Pittsburgh and Allegheny County, Pennsylvania. *J Urban Health* 2011;88:1020-1030.
113. Strang J, Manning V, Mayet S, et al. Overdose training and take-home naloxone for opiate users: Prospective cohort study of impact on knowledge and attitudes and subsequent management of overdoses. *Addiction* 2008;103: 1648-1657.
114. Green TC, Heimer R, Grau LE. Distinguishing signs of opioid overdose and indication for naloxone: An evaluation of six overdose training and naloxone distribution programs in the United States. *Addiction* 2008;103:979-989.
115. Tobin KE, Sherman SG, Beilenson P, et al. Evaluation of the Staying Alive programme: Training injection drug users to properly administer naloxone and save lives. *Int J Drug Policy* 2009;20:131-136.
116. Wagner KD, Valente TW, Casanova M, et al. Evaluation of an overdose prevention and response training programme for injection drug users in the Skid Row area of Los Angeles, CA. *Int J Drug Policy* 2010;21:186-193.
117. Maxwell S, Bigg D, Stanczykiewicz K, et al. Prescribing naloxone to actively injecting heroin users: A program to reduce heroin overdose deaths. *J Addict Dis* 2006;25:89-96.
118. Amass L, Ling W, Freese TE, et al. Bringing buprenorphine-naloxone detoxification to community treatment providers: The NIDA Clinical Trials Network field experience. *Am J Addict* 2004;13 Suppl 1:S42-66.
119. Williams AV, Marsden J, Strang J. Training family members to manage heroin overdose and administer naloxone: Randomized trial of effects on knowledge and attitudes. *Addiction* 2014;109: 250-259.
120. Buprenorphine. SAMHSA. Accessed May 15, 2014, at <http://buprenorphine.samhsa.gov/data.html>.
121. Ling W, Amass L, Shoptaw S, et al. A multi-center randomized trial of buprenorphine-naloxone versus clonidine for opioid detoxification: Findings from the National Institute on Drug Abuse Clinical Trials Network. *Addiction* 2005;100:1090-1100.

## CME Questions

- How many states have PDMPs?
  - fewer than 5
  - between 10 and 20
  - between 20 and 30
  - between 30 and 40
  - Most states have functional PDMPs.
- Which is the correct definition of drug diversion?
  - the use of drugs for oncological pain
  - the use of drugs for chronic back pain
  - the use of prescription drugs for recreational purposes
  - the unlawful channeling of regulated pharmaceuticals from legal sources to the illicit marketplace
  - C and D
- Which of the following is *not* a drug diversion strategy?
  - doctor shopping
  - illegal Internet pharmacies
  - stealing prescription pads
  - renewing a prescription for opioids for a patient that you have been following for chronic pain
  - writing for a higher quantity of medication that a patient needs for a patient that you have been following for chronic pain

4. Which of the following can be used to treat opioid overdose?
- naloxone alone
  - buprenorphine alone
  - naloxone and buprenorphine
  - methadone
  - none of the above
5. Which of the following is *not* a local or individual strategy for reducing drug diversion?
- oxycodone-free EDs
  - blocking patients from the ED
  - utilizing the PDMP
  - limiting the number of pills prescribed
  - not allowing refills on controlled substances
6. According to DAWN data, which of the following is *not* a typical characteristic of a prescription drug abuser?
- white
  - black
  - female
  - young
  - obtain medications from friends
7. The purpose of OEND programs is to:
- distribute needles
  - take back drugs from the streets
  - educate people at risk for overdose, and bystanders in how to prevent, recognize, and respond to an overdose
  - create oxy-free EDs
  - none of the above
8. Which state has an innovative data-sharing initiative that provides data to Medicaid and workers' compensation programs?
- Hawaii
  - Kansas
  - New Jersey
  - Washington, D.C.
  - Washington
9. Over the past decade (2000-2010), opioid prescriptions have:
- nearly doubled
  - increased slightly
  - stayed level
  - decreased slightly
  - nearly tripled
10. Which of the following is *not* used to screen for opioid abuse?
- ORT
  - SISAP
  - SOAPP-R
  - SBIRT
  - CSDD

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## Emergency Medicine Reports

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*Upon completion of this educational activity, participants should be able to:*

- recognize specific conditions in patients presenting to the emergency department;
- apply state-of-the-art diagnostic and therapeutic techniques to patients with the particular medical problems discussed in the publication;
- discuss the differential diagnosis of the particular medical problems discussed in the publication;
- explain both the likely and rare complications that may be associated with the particular medical problems discussed in the publication.

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# Emergency Medicine Reports

Practical, Evidence-Based Reviews in Emergency Care

**Strategies  
to Improve Opioid  
Prescribing**

## Diversion Method and Definition

Diversion Method	Definition
Selling prescription drugs	Patients and other individuals selling prescription drugs that were initially obtained legally
Doctor shopping	Soliciting multiple physicians using a variety of false pretenses to receive prescriptions for controlled substances
Illegal Internet pharmacies	Illegal websites posing as legitimate pharmacies that may provide controlled substances to individuals without prescriptions and evade state licensing requirements and standards by operating across state and international borders
Drug theft	Robberies that occur at any step of the prescription drug supply chain — from a manufacturer to a patient, thefts from relatives, friends, or health care professionals (i.e., nurses, doctors, pharmacists, and other providers)
Prescription pad theft and forgery	Printing or stealing prescription pads to write fraudulent prescriptions, or altering a prescription to obtain an unauthorized quantity of prescribed drugs
Illicit prescribing	Providing unnecessary prescriptions, or prescribing larger quantities of tablets or pills than medically necessary

## Guidelines to Improve Opioid Prescription Writing

### Protect Prescriptions

- Protect access to prescription pads.
- Keep prescription pads in a locked office or drawer.
- Keep track of prescriptions that are used (prescription numbers).

### Take Caution in the Manner that Prescriptions Are Written or Dispensed

- Limit the number of pills prescribed.
- Write out the number of pills prescribed ("ten" instead of "10").
- Write the prescription clearly to reduce forgery.
- Utilize electronic prescriptions instead of paper if available.

### Adhere to Strict Policies Regarding Prescribing

- Safeguard license and DEA numbers and only utilize them as required by state law.
- Enforce a strict refill policy and guidelines on lost prescriptions.
- Obtain unused prescription bottles if the patient switches from one controlled substance to a different one.
- Use state Prescription Drug Monitoring Programs (PDMPs), where available, to monitor patient prescribing before refilling or adding new medications.
- Limit the number of refills — ED physicians should probably never prescribe refills.
- Specify on prescriptions for controlled substances that photo ID needs to be presented prior to dispensing of medication.

## Opioid Risk Tool

Category	Item	Item score if female	Item score if male
Family history of substance abuse	Alcohol	1	3
	Illegal drugs	2	3
	Prescription drugs	4	4
Personal history of substance abuse	Alcohol	3	3
	Illegal drugs	4	4
	Prescription drugs	5	5
Age	Between 16 and 45	1	1
History of preadolescent sexual abuse	Yes	3	0
Personal history of a psychological disorder	Attention deficit disorder, OR obsessive compulsive disorder, OR schizophrenia	2	2
	Depression	1	1
<b>TOTAL</b>			
	Low risk	0-3	0-3
	Moderate risk	4-7	4-7
	High risk	≥ 8	≥ 8

Supplement to *Emergency Medicine Reports*, June 1, 2014: "Strategies to Improve Opioid Prescribing." **Authors:** Salvatore Pardo, MD, FACEP, Vice Chair, Emergency Department, Long Island Jewish Medical Center, Assistant Professor, Emergency Medicine, North Shore-LIJ School of Medicine at Hofstra University; and Nancy Kwon, MD, MPA, Associate Chair of Academics and Research, Department of Emergency Medicine, Long Island Jewish Medical Center, Assistant Professor, Hofstra North Shore-LIJ School of Medicine at Hofstra University.

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