# West Virginia: Best Practices for Prescribing Controlled Substances and Preventing Drug Diversion, 3 units

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This course meets the nursing requirement for coursework in drug diversion and best practice prescribing of controlled substances mandated by West Virginia Senate Bill 437. If you are in a profession other than nursing, please check with your board before taking this course.

#### **Course Summary**

Evidence-based information about the problem of drug diversion and the best practices for prescribing controlled substances, including safeguards to prevent diversion, misuse, abuse, addiction, and overdose deaths.

#### **COI Support**

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#### **Commercial Support**

No commercial support was received for this activity.

#### **Criteria for Successful Completions**

80% or higher on the post test, a completed evaluation form, and payment where required. No partial credit will be awarded.

# **Course Objectives**

When you finish this course you will be able to:

- 1. Describe the 5 Schedules of medications under the Controlled Substances Act and give examples of each.
- 2. Compare and contrast acute and chronic pain and discuss the trends in treatment of chronic pain.
- 3. Identify the demographic of drug abusers in U.S. society and cite five groups from whom they may get drugs.
- 4. State 7 symptoms of drug withdrawal from opioids at and least 4 best practice recommendations by the West Virginia Board of Medicine.
- 5. Name 3 categories of risk factors for opioid abuse and addiction and demonstrate ability to create a treatment plan for an abuser.
- 6. Explain informed consent and name 5 elements set forth by the Federation of State Medical Boards.
- 7. List the 7 assessment tools for monitoring ongoing opioid therapy.
- 8. State at least 5 precautions to follow when tapering the patient off of opioids.
- 9. Describe West Virginia's Prescription Drug Monitoring Program (PDMP) and explain drug take-back programs.
- 10. Define diversion, opioid use disorder, recovery, and relapse.

# **Abuse of Controlled Substances**

The misuse and abuse of drugs is a crisis, in our country and around the world. By 2020 mental health and substance abuse disorders will surpass all physical diseases as a major cause of disability worldwide. Abuse of prescription drugs is the largest drug problem in the United States, and one that is growing. According to the United States Centers for Disease Control and Prevention (CDC), people from all age groups, ethnic backgrounds, and genders are affected by this disease.

The 2016 National Survey on Drug Use and Health (NSDUH) indicates 28.6 million people aged 12 or older used an illicit drug in the past 30 days, which corresponds to about 1 in 10 Americans overall (10.6%); moreover, an estimated 11.8 million people misused opioids in the past year, including 11.5 million pain reliever misusers and 948,000 heroin users. Additional information is gathered in NSDUH on the misuse of pain relievers in the past year. Among people aged 12 or older who misused pain relievers in the past year, about 6 out of 10 people indicated that the main reason they misused pain relievers the last time was to relieve physical pain (62.3%), and about half (53.0%) indicated that they obtained the last pain relievers they misused from a friend or relative (SAMHSA, 2017b).

Accidental overdose and misuse of prescription drugs leads to the severe consequences of death and addiction. In 2016 there were more than 63,600 drug overdose deaths in the United States. The age-adjusted rate of drug overdose deaths in 2016 (19.8 per 100,000) was 21% higher than the rate in 2015 (16.3) (Hedegaard et al., 2017). The New York Times recently reported that opioids are now the leading cause of death of Americans under the age of 50 (Katz, 2017).

## **Defining the Problem**

Health professionals face a dilemma because they need prescription drugs for patients in pain but they also need to prevent the diversion and misuse of the drugs. Among the prescription drugs diverted and misused are opioid analgesics, powerful painkillers that are medically indicated in the treatment of chronic pain; however, when the patient takes the wrong dose, or the wrong person takes the opioid pain medication, consequences can be deadly. While the sales of opioid analgesics increased four-fold between 1999 and 2010, the United States concurrently experienced an almost four-fold increase in opioid overdose deaths. Other consequences of the abundance of opioids include emergency department visits and admissions, falls and fractures in older adults, and initiating injection drug use, which increases risk for infections such as hepatitis C and HIV, as well as a rising incidence of newborns experiencing withdrawal syndrome due to opioid use and misuse during pregnancy.

West Virginia's SB437, the Governor's Substance Abuse Prevention Bill, passed in March 2012, was a response to the state's need for additional education about drug diversion and abuse mitigation. More recent legislation, Senate Bill 273, also known as the Opioid Reduction Act, became effective June 7, 2018. Introduced at the request of Governor Jim Justice, the legislation sets limitations on opioid prescriptions and authorizes a "nonopioid directive" patients can put in their medical files, formally notifying healthcare professionals they do not want to be prescribed or administered opioid medications (WVDHHR, 2018).

The following are some statistics for West Virginia:

- In 2016 West Virginia had the highest rate of opioid-related overdose deaths in the United States—a rate of 52.0 deaths per 100,000 population, which is up from 1.8 deaths per 100,000 in 1999.
- The peak number of overdose deaths was 733 in 2016. The majority of these deaths were from synthetic opioids and heroin.
- Since 2010, deaths related to synthetic opioids quadrupled from 102 to 435 and deaths related to heroin rose from 28 to 235.
- In 2013 West Virginia providers wrote 110 opioid prescriptions per 100 persons (2.8 million prescriptions). The average U.S. rate for opioid prescriptions was 70 per 100 persons in the same year (NIDA, 2018b).
- West Virginia Department of Health and Human Resources (DHHR) county-level Neonatal Abstinence Syndrome (NAS)\* data for 2017 shows the overall incidence rate of NAS was 50.6 cases per 1,000 live births (5.06%) for West Virginia residents (WVDHHR, 2018).

\* Neonatal Abstinence Syndrome (NAS) is a withdrawal syndrome that occurs after prenatal exposure to drugs is discontinued suddenly at birth.

#### **Drug Overdoses**

In 2016 alone, drug overdoses killed more Americans than the entire Vietnam War and car crashes, gun violence, and HIV/AIDS ever did in a single year. In total, more than 170 people are estimated to die from overdoses every day in the US, and most of the deaths are linked to opioids.

Source: Lopez, 2017.

What is the role of nurses in the problem of prescription drug diversion, misuse, and abuse? Because nurses are the health professionals who treat the most patients, they are in a unique position to educate, identify, and intervene with patients and colleagues who are at risk for prescription drug misuse and abuse. Recognizing the signs of misuse and risk factors of drug abuse and diversion by patients and fellow healthcare professionals is an important responsibility of nurses. Educated nurses can be instrumental in changing patterns of misuse and abuse of prescription drugs for individuals, colleagues, and communities, and thereby reduce the public health epidemic.

### **Glossary of Terms**

**Aberrant drug-related behaviors:** any medication-related behaviors that depart from strict adherence to the physician-prescribed plan of care, ranging from mildly problematic behavior (such as hoarding medications) to illegal acts (such as selling medications).

**Addiction:** a primary, chronic, neurobiologic disease whose development and manifestation is influenced by genetic, psychosocial, and environmental factors. Addiction behaviors often include impaired control over use, compulsive use, continued use despite resulting harm, and craving (Corsini & Zacharoff, 2014). Like other chronic diseases, addiction often involves cycles of relapse and remission. The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DMS-5) does not use the term addiction for diagnosis (SAMHSA, 2018).

**Substance use disorder/abuse/nonmedical use:** the use of an illicit drug or the intentional self-administration of a prescription (or over-the counter) medication for any nonmedical purpose, such as altering one's state of consciousness, eg, "getting high." The DSM-5 no longer uses the terms *substance abuse* and *substance dependence*. Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. A diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacologic criteria.

**Chronic pain:** any pain that lasts several months (variously defined as 3 to 6 months), but may last for months or years. Whereas acute pain is a normal sensation that alerts the body to injury or damage, chronic pain persists. Chronic pain may result from an injury or an ongoing cause such as illness, or there may be no clear cause (NIH, 2018).

**Diversion:** the intentional removal of a medication from legitimate distribution and dispensing channels. Diversion also involves the sharing or purchasing of prescription medication between family members and friends or individual theft from family and friends (Corsini & Zacharoff, 2014). Diversion can also occur in healthcare settings if health professionals divert medication from the intended recipient.

**Opioid use disorder (OUD):** per the DSM-5, a disorder characterized by loss of control of opioid use, risky opioid use, impaired social functioning, tolerance, and withdrawal. Tolerance and withdrawal do not count toward the diagnosis in people experiencing these symptoms when using opioids under appropriate medical supervision. OUD covers a range of severity and replaces what DSM-IV termed "opioid abuse" and "opioid dependence." An OUD diagnosis is applicable to a person who uses opioids and experiences at least 2 of the 11 symptoms in a 12-month period (SAMHSA, 2018).

**Misuse:** any therapeutic use of a medication other than as directed or indicated, whether intentional or unintentional, and regardless of whether it results in harm. Increasing a medication dose without clinician approval is misuse, whether the reason is dependence, tolerance, desire to achieve greater therapeutic effect, or forgetfulness (Corsini & Zacharoff, 2014).

**Physical dependence:** a state in which the body has adapted to a drug or class of drugs to the degree that withdrawal syndrome occurs upon abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist (Corsini & Zacharoff, 2014).

**Loss of tolerance:** when a person stops taking a drug or class of drugs after taking it for a long time, loss of tolerance occurs. Serious adverse effects, including overdose, can occur if the person takes the previously tolerated dose of the drug (SAMHSA, 2018).

**Recovery:** a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome their SUDs and regain health and social function. Although abstinence from all substance misuse is a cardinal feature of recovery lifestyle, it is not the only healthy, prosocial feature. Patients taking FDA-approved medication to treat OUD can be considered in recovery (SAMHSA, 2018).

**Relapse:** a process in which a person with OUD who has been in remission experiences a return of symptoms or loss of remission. A relapse is different from a return to opioid use in that it involves more than a single incident of use. Relapses occur over a period of time and can be interrupted. Relapse need not be long lasting (SAMHSA, 2018).

**Remission:** a medical term meaning a disappearance of signs and symptoms of the disease. DSM-5 defines remission as present in people who previously met OUD criteria but no longer meet any OUD criteria (with the possible exception of craving). Remission is an essential element of recovery (SAMHSA, 2018).

**Return to opioid use:** one or more instances of opioid misuse without a return of symptoms of OUD. A return to opioid use may lead to relapse (SAMHSA, 2018).

**Tolerance:** alteration of the body's responsiveness to alcohol or other drugs (including opioids) such that higher doses are required to produce the same effect achieved during initial use. Tolerance develops when someone uses an opioid drug regularly, so that their body becomes accustomed to the drug and needs a larger or more frequent dose to continue to experience the same effect (SAMHSA, 2018).

### **Controlled Substances**

Drug abuse is not a new problem. The United States Congress passed the first Controlled Substances Act in 1970, but addictive drugs were first outlawed in America in the early 1900s. The Controlled Substances Act has five schedules, known as schedules I, II, III, IV, and V.

Controlled Substances, 2018		
DEA Schedule	Medical use/abuse potential	Examples of abused drugs
Schedule I	No accepted therapeutic use. Lack of safety even under medical supervision. High potential for abuse; abuse may lead to severe psychological or physical dependence	Heroin, lysergic acid diethylamide (LSD), marijuana (cannabis), peyote, methaqualone, and 3,4- methylenedioxymethamphetamine ("Ecstasy")
Schedule II	Accepted therapeutic use. Highly restricted. High potential for abuse; abuse may lead to severe psychological or physical dependence	Amphetamine (Dexedrine, Adderall), methamphetamine (Desoxyn), methylphenidate (Ritalin), amobarbital, glutethimide, pentobarbital, and hydrocodone (Vicodin, Lortab), oxycodone (OxyContin, Percocet, Tylox)
Schedule III	Accepted therapeutic use. Highly restricted. Less high potential for abuse; abuse may lead to moderate or low physical dependence or high psychological dependence.	Products containing not more than 90 milligrams of codeine per dosage unit (Tylenol with Codeine), and buprenorphine (Suboxone), benzphetamine (Didrex), phendimetrazine, ketamine, and anabolic steroids such as depo- testosterone
Schedule IV	Accepted therapeutic use. Low potential for abuse relative to Schedule I, II, and III drugs; abuse may lead to limited physical dependence or psychological dependence.	alprazolam (Xanax), carisoprodol (Soma), clonazepam (Klonopin), clorazepate (Tranxene), diazepam (Valium), lorazepam (Ativan), midazolam (Versed), temazepam (Restoril), and triazolam (Halcion)
Schedule V	Accepted therapeutic use. Low potential for abuse relative to Schedule I, II, III, and IV drugs; abuse may lead to limited physical dependence or psychological dependence.	Cough preparations containing not more than 200 milligrams of codeine per 100 milliliters or per 100 grams (Robitussin AC, Phenergan with Codeine), and ezogabine

On August 22, 2014 the U.S. Drug Enforcement Agency (DEA) formally rescheduled hydrocodone combination products (HCPs), moving them from Schedule III to Schedule II of the Controlled Substances Act.

# **The Treatment of Pain**

Pain is part of the human condition; at some point, for short or long periods of time, we all experience pain and suffer its consequences. While pain can serve as a warning to protect us from further harm, it also can contribute to severe and even relentless suffering, surpassing its underlying cause to become a disease in its own domains and dimensions. . . .

Severe or chronic pain can overtake our lives, having an impact on us as individuals as well as on our family, friends, and community. Through the ages, pain and suffering have been the substrates for great works of fiction, but the reality of the experience, especially when persistent, has little redeeming or romantic quality. The personal story of pain can be transformative or can blunt the human values of joy, happiness, and even human connectedness.

#### Institute of Medicine, 2011

The National Institutes of Health, National Center for Complementary and Integrative Health (NCCIH), reports the following statistics about chronic pain in the United States:

- About 25.3 million U.S. adults (11.2%) had pain every day for the previous 3 months.
- Nearly 40 million adults (17.6%) had severe pain.
- Individuals with severe pain had worse health, used more healthcare, and had more disability than those with less severe pain.
- The annual economic cost of chronic pain in the United States, including both treatment and lost productivity, has been estimated at nearly \$635 billion. (NCCIH, 2018)

## **When Pain Becomes Chronic**

Pain is a normal physiologic sensation that signals injury or disease. It serves a vital function, warning of the need for medical treatment. The International Association for the Study of Pain defines **pain** as

an unpleasant sensory experience associated with actual or potential tissue damage, or described in terms of such damage. . . . Pain is always subjective. . . . It is unquestionably a sensation in a part or parts of the body, but it is also unpleasant and therefore also an emotional experience. (IASP, 2012)

The Institutes of Medicine define **pain** this way:

Pain's occurrence, severity, duration, response to treatment, and disabling consequences vary from person to person because pain, like other severe chronic conditions, is much more than a biological phenomenon and has profound emotional and cognitive effects. Pain can be mild and easily handled with over-the-counter medications; it can be acute and recede with treatment; it can be recurrent over months or years; or it can be chronic and debilitating, requiring almost constant attention and accommodation. (IOM, 2011)

**Chronic pain** is pain that persists, often for weeks, months, or years. The presence of chronic pain is a disease state in itself. When the pain's warning function is completed, continued pain is an abnormal state. Its distinct pathology causes changes in the nervous system that often worsen. Its effects on a patient's psychology and cognitive ability are significant, and include anxiety, depression, and anger.

Effective pain management is a moral imperative because the alleviation of suffering is the guiding star of medicine. Chronic pain prevention and management often require a comprehensive, interdisciplinary approach due to its diverse effects and the combination of biologic, psychological, and social factors. Chronic diseases, including chronic pain, involve many physical, cognitive, and emotional factors, but chronic pain often lacks reliable "objective" measures.

Knowledge of pain prevention and management is not always applied effectively; many people suffer pain needlessly. Chronic pain can result from age, genetic predisposition, or as part of a separate chronic disease, surgery, or injury. Healthcare providers must understand "pain is a uniquely individual, subjective experience" that depends upon many factors such as general health, genetic characteristics, previous pain experiences, the brain's processing system, the context, and cultural and social background (IOM, 2011).

## **Trends in Pain Management and Prescribing**

In past decades, concern about undertreatment of pain despite the numerous pharmaceuticals developed to treat it led to increases in prescribing of analgesics as part of a movement to treat pain, especially chronic pain, more aggressively. In 1998 the Federation of State Medical Boards (FSMB) released guidelines that supported the use of opioids for chronic, noncancer pain. In the late 1990s, pharmaceutical companies reassured the medical community that patients would not become addicted to opioid pain relievers. This contributed to the increase in opioid prescriptions that followed. The Joint Commission, an accrediting body, then issued the **Pain Standard**, which evaluated healthcare organizations (including hospitals, ambulatory care centers, behavioral health, and home care) on the basis of their consistent, documented assessment of patients' pain (Zimmerman, 2017).

The FSMB *Model Policy on the Use of Opioid Analgesics in the Treatment of Chronic Pain* has been revised twice since 1998, once in 2004 and again in July 2013. The model policy features the following key points:

- Many Americans suffer from chronic pain that is inadequately or ineffectively treated.
- Since the 2004 revision, evidence for risk associated with opioids has surged, while evidence for benefits has remained controversial and insufficient.
- Approximately one-fourth of all patients seen in primary care settings suffers from pain that interferes with their activities of daily living.
- While under-treatment of pain exists, nevertheless chronic pain is often intractable and burdensome and current medical knowledge and therapies, including opioid analgesics, do not completely eliminate pain in most cases.
- Furthermore, intractable pain is not always evidence of undertreatment, and may in fact result from over-treatment in procedures and medication. (FSMB, 2013)

**Balance** is the goal in treating patients' pain and preventing drug diversion. On January 1, 2018 The Joint Commission implemented a new and revised pain assessment and management standards. The new standards, which revise the original standards established in 2001, state that hospitals must:

- Establish a clinical leadership team
- Actively engage medical staff and hospital leadership in improving pain assessment and management, including strategies to decrease opioid use and minimize risks associated with opioid use
- Provide at least one non-pharmacologic pain treatment modality
- Facilitate access to prescription drug monitoring programs

- Improve pain assessment by concentrating more on how pain is affecting patients' physical function
- Engage patients in treatment decisions about their pain management
- Address patient education and engagement, including storage and disposal of opioids to prevent these medications from being stolen or misused by others
- Facilitate referral of patients addicted to opioids to treatment programs. (Joint Commission, 2018)

NCCIH is part of the National Institutes of Health Pain Consortium, which coordinates pain research across NIH. NCCIH-supported studies are helping to build an evidence base on the effectiveness and safety of complementary modalities for treating chronic pain. The scientific evidence suggests that some complementary health approaches may help people manage chronic pain (eg, mindfulness-based interventions, hypnosis, canabinoids (NCCIH, 2018).

. . . The amount of opioids being prescribed by our nation's doctors, dentists, and nurses is excessive. While opioids offer relief to many patients with pain and should remain an available and acceptable option for pain management when medically indicated, it is clear from prescribing data and related addiction treatment admission and overdose death data that the medical community has over-relied on opioids to treat pain.

Letter to Chris Christie, Chair President's Commission on Combating Drug Addiction and the Opioid Crisis ASAM, 2017

Opioids are very effective in the treatment of acute pain. The International Association for the Study of Pain issued a statement in February 2018:

Opioids are indispensable for the treatment of severe short-lived pain during acute painful events and at the end of life (eg, pain associated with cancer). Currently, no other oral medication offers immediate and effective relief of severe pain. Although opioids can be highly addictive, opioid addiction rarely emerges when opioids are used for short-term treatment of pain, except among a few highly susceptible individuals. For these reasons, IASP supports the use and availability of opioids at all ages for the relief of severe pain during short-lived painful events and at the end of life. IASP's 2010 *Declaration of Montreal* states that access to pain management is a fundamental human right. In some cases, there is no substitute for opioids in achieving satisfactory pain relief. (IASP, 2018)

Widespread prescribing of opioid analgesics for chronic pain is controversial. Their increased use is in part due to the pharmaceutical industry's widely marketing opioids to physicians and offering incentives for prescribing. "Between 1996 and 2002, Purdue Pharma funded more than 20,000 pain-related educational programs through direct sponsorship or financial grants and launched a multifaceted campaign to encourage longterm use of [opioid painkillers] for chronic non-cancer pain" (Lopez, 2018). Purdue provided financial support to the American Pain Society, the American Academy of Pain Medicine, the Federation of State Medical Boards, The Joint Commission, pain patient groups, and other organizations. These groups advocated for more aggressive identification and treatment of pain, especially prescription opioids (Lopez, 2018).

U.S. cities, counties, and states have filed lawsuits against narcotics manufacturers, claiming that these pharmaceutical companies engaged in a "campaign of deception" to boost sales of prescription analgesics such as OxyContin and thereby caused the national public health epidemic of prescription drug abuse. The lawsuits allege that the companies actively worked to expand their market by engaging in a dishonest campaign to encourage doctors to prescribe opioids for pain relief by hiring physicians to give speeches and write papers to encourage more liberal prescribing practices (Glover & Girion, 2014).

A similar suit against five narcotics manufacturers was filed in June 2014 by the city of Chicago. The city sought damages and accused the drug companies of deceiving the public about the risks associated with the use of pain medications while overstating their benefits. In May 2018, six more states announced suits against Purdue Pharma, the creator of OxyContin, bringing the total number of lawsuits that have been filed across the United States against opioid makers and distributers to hundreds. Lawsuits allege that pharmaceutical makers claimed that concerns about the potential for opioid addiction were "opiophopia" and directly and aggressively marketed to doctors through videos, pamphlets, and other materials, to foster the idea that opioids were safe and effective, persuading doctors to prescribe more of the drugs (Lopez, 2018).

While some lawsuits have been settled and some executives have been convicted for their involvement in the opioid epidemic, opioid companies reject the argument that they have carelessly fueled the current crisis (Lopez, 2018).

Even with the increased awareness of the opioid epidemic, prescribing remains high. In 2016 prescribers wrote 66.5 opioid and 25.2 sedative prescriptions for every 100 Americans (CDC, 2017a). Data show that prescribing varies widely from county to county. In 2015, 6 times more opioids per resident were dispensed in the highest-prescribing counties than in the lowest-prescribing counties. County-level characteristics, such as rural versus urban, income level, and demographics, only explained about a third of the differences. This suggests that people receive different care depending on where they live (CDC, 2017c).

Some characteristics of counties with higher opioid prescribing:

- Small cities or large towns
- Higher percent of white residents
- More dentists and primary care physicians
- More people who are uninsured or unemployed
- More people who have diabetes, arthritis, or disability (CDC, 2017c)

In 2017 FSMB issued *Guidelines for the Chronic Use of Opioid Analgesics*. The guidelines may apply most directly to the treatment of chronic pain, however many of the strategies mentioned in the 2017 guidelines are also relevant to responsible prescribing and the mitigation of risks associated with other controlled substances in the treatment of pain.

The diagnosis and treatment of pain is integral to the practice of medicine. In order to implement best practices for responsible opioid prescribing, clinicians must understand the relevant pharmacologic and clinical issues in the use of opioid pain medications and should obtain sufficient targeted continuing education and training on the safe prescribing of opioids and other analgesics as well as training in multimodal treatments (FSMB, 2017).

# **Prescription Drug Abuse and Misuse**

Because of changes in pain treatment, prescriptions of opioid analgesics have increased dramatically from the 1990s. This has resulted in their greater availability for nonmedical users (NIDA, 2018a).

The U.S. culture of drug use, faith in pharmaceutical solutions, and desire for rapid relief from pain has contributed to the increase in opioid prescriptions. Alcohol use plays a role in drug abuse. Manufacturers of pharmaceuticals market directly to consumers in all types of media. This, combined with information about medications that is widely available on the Internet, leads to patients' asking doctors for drugs by name. The increase of prescription opioids has exacted a severe toll. Unintentional overdose deaths have quadrupled since 1999. The CDC considers prescription drug abuse to be epidemic. According to the CDC, approximately 116 Americans died from opioid-related causes every day in 2016.

The drugs involved in overdose deaths in the United States have changed in recent years. The rate of drug overdose deaths involving synthetic opioids other than methadone (eg, fentanyl, fentanyl analogs, tramadol) doubled in a single year from 3.1 per 100,000 in 2015 to 6.2 in 2016. Overdose deaths involving heroin increased from 4.1 per 100,000 in 2015 to 4.9 in 2016. Overdose deaths involving natural and semisynthetic opioids (eg, morphine, codeine, hydrocodone, oxycodone) increased from 3.9 per 100,000 in 2015 to 4.4 in 2016 (Hedegaard et al., 2017).

In response to this crisis, the federal government has taken steps to inform more judicious opioid prescribing through the development of the CDC's Guideline for Prescribing Opioids for Chronic Pain. Current data shows that the rates of prescribing are decreasing. Between 2006 and 2016, the annual prescribing rate per 100 persons decreased from 72.4 to 66.5 for all opioids, which is an overall 8.1% reduction (CDC, 2017a).

The State of West Virginia is facing a significant drug abuse problem. In 2013 West Virginia providers wrote 110 opioid prescriptions per 100 persons (2.08 million prescriptions). In the same year, the average U.S. rate was 70 opioid prescriptions per 100 persons. **In 2016 West Virginia had the highest rate of opioid-related overdose deaths in the nation** (SAMHSA, 2017a).

"Other opiates accounted for the highest percentage of treatment admissions in West Virginia in 2010 (34.9%), which was 4 times higher than the national percentage (8.7%)" (WVBHHF, 2013). The most prevalent drugs involved in overdose deaths in the state are fentanyl, heroin, hydrocodone, oxycodone, morphine, methadone. Raleigh, Kanawa, and Cabell counties accounted for 29% of the reported deaths from oxycodone from 2001to 2015 (WVBPH, 2017).

In recent years the number of individuals using heroin has increased dramatically; in West Virginia in 2014–2015, an annual average of about 6,000 individuals aged 12 or older (0.36% of all individuals in this age group) had used heroin in the past year. In 2013 through 2015, heroin has become the second leading opioid contributing to overdose deaths. There were 3.4 times more heroin reported deaths in 2011–2015 than in the previous 10 years (WVBPH, 2017).

## Societal and Economic Impacts of Drug Abuse

Drug use affects not only the drug abuser but also the family unit and the community at large. Overdose and accidental death impacts family members and caregivers as well as our healthcare system. Drug abuse also impacts on-the-job performance and missed work.

A study published in 2016 found the total economic burden of the opioid crisis in the United States is estimated to be \$78.5 billion, using data from 2013. More than one-third of this amount is due to increased healthcare and substance abuse treatment costs (\$28.9 billion) (Florence et al., 2016).

A U.S. Council of Economic Advisers (CEA) report estimates that in 2015 the economic cost of the national opioid crisis was \$504.0 billion, or 2.8% of GDP that year. This is more than 6 times larger than the most recently estimated economic cost of the epidemic (CEA, 2017).

West Virginia University's chief economist, John Deskins, said the opioid epidemic in West Virginia has cost the state's economy nearly \$1 billion. The estimate includes more than \$322 million in productivity loss due to fatalities, more than \$316 million in productivity lost in people who are not working at peak levels because they are addicts, and more than \$320 million in resources tied up in the opioid crisis that could be devoted to solving other problems (WVUToday, 2017).

The 2018 National Institute on Drug Abuse (NIDA) report on opioids in West Virginia reveals some societal costs of drug abuse in the state. Other health consequences include increases in cases of hepatitis C (HCV) and HIV. In 2015 West Virginia reported 6,347 cases of chronic HCV and 63 cases of acute HCV, or rates of 344.2 cases of chronic HCV per 100,000 population and 3.4 cases of acute HCV per 100,000. Among acute cases, nearly 40% were attributed to intravenous drug use. Of the 39,513 new cases of HIV in 2015 in the United States, 74 occurred in West Virginia (NIDA, 2018b).

Analysis of the impact of West Virginia overdose fatalities in 2016 published in the *West Virginia Medical Journal* shows that the public health tragedy affects families, communities, and state resources. The number of children in foster care has climbed by 63%, the number of children requiring early intervention services has risen 36%, and the number of autopsies has increased by 53%. Fourteen percent of all West Virginia infants are born substance-exposed (Gupta & Mullins, 2018).

## What Drugs Are Most Diverted or Abused?

After marijuana, prescription drugs are the second-most abused category of drugs in the United States (SAMHSA, 2017b). The three classes of the most commonly abused prescription drugs are:

- Opioids that include oxycodone (Percocet, Tylox, OxyContin), hydrocodone (Vicodin, Lortab), and methadone (Dolophine);
- Central nervous system depressants that include butalbital (Fiorinal/Fioricet), diazepam (Valium), and alprazolam (Xanax);
- Stimulants that include methylphenidate (Ritalin) and amphetamine/dextroamphetamine (Adderall). (SAMHSA, 2017b; NIDA, 2018a)

One way to understand the scope of the problem of prescription drug misuse and abuse is to look at data on drug-related hospitalizations and emergency department (ED) visits. The 2017 *Annual Surveillance Report of Drug-Related Risks and Outcomes* reports an estimated 259,665 hospitalizations for nonfatal, unintentional drug poisoning occurred in 2014. Opioid poisoning accounted for 20.4% (53,000) of these hospitalizations. Heroin was specified as the involved opioid for 21.7% (11,475) of opioid hospitalizations (CDC, 2017a).

An estimated 418,313 ED visits for nonfatal, unintentional drug poisoning occurred in 2014. Opioids accounted for 22.1% (92,262) of these ED visits. Heroin was specified as the involved opioid for 58.5% (53,930) of opioid ED visits. Cocaine accounted for 6,424 and methamphetamines for 11,012 visits (CDC, 2017a).

### Who Are the Drug Abusers?

People of all ages, genders, and backgrounds use illicit or prescription drugs nonmedically. During 2015 an estimated 2,038,000 persons in the U.S. aged 12 years or older had a substance use disorder involving prescription pain relievers, with an estimated rate of 0.8 per 100 persons (CDC, 2017a).

- During 2015, nearly 48 million people in the United States aged 12 years or older used illicit drugs or misused prescription drugs in the past year, with an estimated rate of 17.8 per 100 persons. Among males, the estimated rate was 20.5; among females, it was 15.3. By race and ethnicity, the estimated rates were 20.7 for non-Hispanic blacks, 17.9 for non-Hispanic whites, and 17.2 for Hispanics. (CDC, 2017a)
- During 201 an estimated 3.3 million people aged 12 or older were current misusers of prescription pain relievers. (SAMHSA, 2017b)
- In 2016 an estimated 239,000 adolescents aged 12 to 17 were current misusers of pain relievers, which corresponds to 1.0% of adolescents. An estimated 631,000 young adults aged 18 to 25 misused pain relievers in the past month, which represents 1.8% of young adults. For comparison, in 2013 the rate of past-year nonmedical pain reliever use among youth aged 12 to 17 was 4.6. For young adults ages 18 to 25, the rate was 8.8%. (SAMHSA, 2017b)

- In 2016, 11.5 million people aged 12 or older misused prescription pain relievers in the past year compared with 948,000 people who used heroin. The majority of prescription pain reliever misusers had misused prescription pain relievers in the past year but had not used heroin (10.9 million). Approximately 641,000 people had misused prescription pain relievers and also used heroin in the past year. (SAMHSA, 2017b)
- Overall, more males than females misuse prescription drugs in all age groups except adolescence (12–17 years); adolescent girls exceed boys in the nonmedical use of all prescription drugs, including pain relievers, sedatives, and stimulants. Among nonmedical users of prescription drugs, females 12 to 17 years old are also more likely to meet substance use disorder criteria for prescription drugs. Additionally, while more men than women die of prescription opioid overdose, the rate of overdose is increasing more sharply in women than in men. (NIDA, 2018a)

### **How Drug Abusers Get Drugs**

**Drug diversion** is the intentional removal of a prescription medication from the legitimate channels of distribution and dispensing. Diversion also occurs when family or friends share or purchase prescription medication, or when medication is stolen from its intended recipient or is otherwise illegally acquired (Corsini & Zacharoff, 2014). Diversion can also occur in healthcare settings if health professionals divert medication from the intended recipient for personal use or financial gain.

#### **Friends and Family**

Although we might assume that drug users acquire their prescription drugs from street dealers, this is not usually the case. Because prescription pain medications are fairly commonly prescribed, often nonmedical users merely have to look in the medicine cabinet of a family member or friend.

In 2015 among people aged 12 and older who had misused prescription pain relievers in the past 12 months, the following sources were reported for the most recent misuse:

- 40.5% reported they obtained drugs free of charge from a relative or friend.
- 36.4% reported they obtained drugs through a healthcare provider via prescription or by stealing.
- 34% reported they obtained drugs from one doctor.
- 9.4% reported they bought or stole drugs from a relative or friend.
- Only 1.7% reported getting drugs from more than 1 doctor.
- Only 4.9% reported buying drugs from a dealer or stranger.

Strikingly, these data suggest that drug dealers are a relatively small source of illicitly used prescription opioids. Diversion through family and friends is now the greatest source of illicit opioids (Dixon, 2018).

## **Doctor Shopping**

Another source for prescription opioids is legitimate prescriptions obtained illicitly. Patients may request prescriptions from more than one physician, and thereby receive more than one prescription for pharmaceuticals. This is known as "doctor shopping." The patient does not inform the physicians of the multiple prescribers and fills multiple prescriptions for the same or similar medication at different pharmacies.

A study by McDonald and Carlson found that 1 out of every 143 U.S. patients who received a prescription for an opioid pain medicine in 2008 obtained prescriptions from multiple prescribers, suggesting misuse or abuse of the drugs. The study identified a group of "extreme" patients who averaged 10 prescribers through a 10-month period. When researchers looked at those who had paid cash for their prescriptions, the average rose to 15 prescribers per patient. Researchers concluded that improvements in healthcare information technology should focus on prescription monitoring programs that allow physicians to pull up a patient's prescription history. Doctor shoppers are exploiting the lack of good data management. McDonald says, "Ultimately, healthcare providers are the front-line defense against prescription drug diversion" (McDonald & Carlson, 2013).

Recent data show, however, the majority of opioids are obtained by prescription from one physician, not from "doctor shopping" (Dixon, 2018).

#### Fraud

Patients seeking to feed a habit of drug misuse or abuse may attempt to pass fraudulent prescriptions at the pharmacy. Fraudulent prescriptions come in the following forms:

- Fraudulent prescriptions written for a fictitious patient on a legitimate prescription pad stolen from a prescriber's office
- Legitimate prescription that has been altered to obtain additional amounts of a drug
- Legitimate prescription pad with an altered call-back phone number to verify the prescription
- Fraudulent prescription called in by the drug abuser, who gives his or her own callback number
- Fraudulent prescription created by a computer for a fictitious doctor or copied from a legitimate doctor

It is incumbent on pharmacists and pharmacy technicians to be cautious about filling prescriptions for controlled substances and to look for signs of fraud or suspicious patient activity (US DEA, n.d.).

### **Healthcare Professionals**

Drug diversion isn't only a problem in patients, however. Pharmacists, doctors, nurses, and other health care professionals often have access to prescription drugs, including opioid analgesics, and while these individuals usually have greater knowledge than the public, they are still subject to the same propensities, temptations, genetic and medical histories, and physical and mental health problems as patients.

Prescribers may be involved in drug diversion by providing drugs to patients engaging in the practices of fraud or doctor shopping, who may be selling or sharing drugs. "Recommended clinical practices include protecting access to prescription pads, adhering to strict refill policies, and thoroughly documenting when prescribing narcotics. Prescribers can also curb drug diversion by adhering to prescribing principles for opioids and other controlled substances" (HSS CMS, 2014).

Health professionals may also divert drugs for their own use. Nurses and other healthcare professionals have about the same prevalence of substance abuse and addiction as the general public. But, there are unique workplace factors that actually increase a nurse's opportunity and risk for addiction (NCSBN, 2014, 2011). The behavior that results from this disease has far-reaching and negative effects, mot only on clinicians themselves, but also upon the patients who depend on the nurse for safe, competent care.

Substance use disorder can affect nurses regardless of age, occupation, economic circumstances, ethnic background, or gender. The earlier substance use disorder in a nurse is identified and treatment is started, the sooner patients are protected and the better the chances are of the nurse returning to work (NCSBN, 2014).

The 2017 Annual Drug Diversion Digest analyzed publicly available drug diversion incidents involving healthcare workers. The study analyzed 365 diversion incidents reported in online news stories; of the 365 incidents, 306 had data for the type of institution involved. Most diversion incidents occurred at hospitals or medical centers (37.25%). Long-term care settings, which include assisted living, nursing home, rehab facilities, respite care, and hospice facilities, were involved in 26.80% of incidents. Medical practices accounted for 16.67%, pharmacies had 13.73%, ambulance services had 2.61%, and other institutions (eg, school nurse and doctor's offices and jail medical offices) had 2.94% (Protenus, 2018).

The same study included data for the drug diverter's role in healthcare for 361 incidents. Nurses were the most common drug diverters, accounting for 41% of the diversions. Doctors were the second most common drug diverters (20.32%), pharmacists (6.65%), and pharmacy technicians (5.26%). In 12.19% of diversion cases, the role of the drug diverter in the healthcare organization was unknown. Of the 365 incidents, 267 included information on the drug type; 91.76% of the incidents involved opioids (Protenus, 2018).

The lack of diversion reporting by healthcare facilities in America is nothing new. This has gone on for decades, and can negatively impact innocent patients while providing no effective rehabilitation for the offender, putting them sadly closer to personal devastation or even death due to their addiction.

> John Burke, President International Health Facility Diversion Association (Protenus, 2018)

Nurses must be trained to recognize substance misuse and abuse among fellow nurses because substance abuse on the job and untreated addiction disorder jeopardizes patient safety. When nurses have been given guidelines and a means of reporting suspected substance use, it can result in earlier detection of nurses with substance use disorders and their appropriate treatment. Without such guidelines, nurses are more likely to cover up for colleagues.

General symptoms of substance use problems among nurses include the following:

- Defensiveness
- Isolation
- Irritability
- Difficulty following through on work assignments

Signs and symptoms of a prescription drug substance use disorder among nurses can include the following:

- Coming to work on days off
- Volunteering for overtime
- Incorrect narcotic counts
- Volunteering to administer medications
- Waiting to be alone to open a narcotics cabinet
- Lacking witnesses to verify the wasting of unused medications
- Absences from the unit for extended periods

- Frequent trips to the bathroom
- Arriving late or leaving early
- Excessive number of mistakes including medication errors

Negative impacts on patient safety may result from any of the following:

- Impaired judgment
- Slowed reaction time
- Diverting drugs from patients who need them
- Neglect of patients
- Nursing errors (NCSBN, 2014, 2011)

Nurses whose substance abuse problems are detected early and treated have a higher likelihood of successful treatment outcomes (NCSBN, 2014, 2011).

Nurse managers and colleagues should also watch for subtle changes in appearance over time and [for] behavioral changes, such as wearing long sleeves in warm weather, increasing isolation from colleagues, inappropriate verbal or emotional response, or diminished alertness, confusion, or memory lapses (NCSBN, 2014).

#### Many nurses with substance use disorder are unidentified, unreported, untreated, and may continue to practice where their impairment may endanger the lives of their patients.

#### NCSBN, 2014

Addiction and substance abuse have been called an occupational hazard for all health professionals. In addition to general risk factors that all members of the population are subject to (eg, depression, anxiety, stress, low self-esteem, use of other substances, early age of first misuse, alcohol and drug use by peers, family use, genetic predisposition to alcohol or drug dependence), nurses face specific risk factors in their workplace environments:

- Role strain, including burnout, work overload, feeling of insignificance, and inadequate support at work
- Problems of daily living, such as loss of a significant other, poor coping skills, insecurity, and isolation
- Enabling by peers and managers, such as overlooking symptoms out of loyalty and fear of job loss

- Attitudes toward drugs and drug use; eg, that substance use is an acceptable means of coping with life
- Faith in drugs for promoting healing due to witnessing positive effects of drugs on patients
- Sense of entitlement, that the nurse must continue to work, leading to rationalization
- Special status of nurses as invulnerable to illnesses of patients
- Professional training about drugs leading to self-diagnosis and self-medication for pain or stress/fatigue from workplace demands
- Lack of education regarding substance use disorder, including lack of understanding about the addiction process and how to recognize signs and symptoms of abuse
- Lack of controls and security of controlled substances and their ready availability
- Physician prescribing practices, such as obtaining prescriptions from physician friends without proper assessment and diagnosis protocols

Of these risk factors, the top four are access to drugs, attitude, stress, and lack of education about addiction The National Council of State Boards of Nursing (NCSBN) had made the NCSBN courses "Understanding Substance Use Disorder in Nursing" and "Nurse Manager Guidelines for Substance Use Disorder" free of charge for all nurses and nursing students (https://www.ncsbn.org/) (NCSBN, 2014, 2011).

# **A Closer Look at Addiction**

## **Health Risks of Opioids**

Health effects related to opioid misuse and abuse include pain relief, drowsiness, nausea, constipation, and euphoria. An acute effect, when taken in ways other than prescribed, is life-threatening respiratory depression leading to coma and death. Long-term effects include drug tolerance and addiction. In combination with alcohol, opioid use can cause life-threatening slowing of the heart rate and respiration with potential coma and/or death.

Certain populations have additional health risks. Youth often think that prescription drugs are safer to use than illegal drugs because they are prescribed by a physician and manufactured by legitimate pharmaceutical companies. Pregnant women who use opioids nonmedically can have spontaneous abortions and low-birth-weight babies. Older adults are at greater risk for severe health consequences due to accidental misuse or abuse of opioids because of age-related changes in metabolism, alcohol use, or drug interactions with multiple prescriptions (NIDA, 2018c). Addiction and accidental overdose occurs in all populations. Addiction is a primary, chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is often characterized by behaviors that include one or more of the following:

- Impaired control over use
- Compulsive use
- Continued use despite harm
- Craving

Addiction medicine is a specialty field in the mechanism and treatment of addiction. The American Society of Addiction Medicine's definition of addiction:

Addiction is a primary, chronic disease of brain reward, motivation, memory, and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death. (ASAM, 2015)

## **How Addicting Are Opioids?**

Opioids are a class of drugs that broadly includes heroin, hydrocodone, oxycodone, and other morphine-derived drugs. Brain abnormalities can result from chronic use of such drugs and they cause **dependence** (the need to keep taking drugs to avoid withdrawal syndrome) and **addiction**. Dependence can resolve after detoxification. Addiction, however, has complex and long-lasting effects, involving craving that can lead to relapse long after the patient's dependence resolves (NIDA, 2018d, 2016).

The opiate travels through the bloodstream to the brain, where chemicals attach to proteins called mu opioid receptors on the surfaces of opiate-sensitive neurons. When the chemicals link with the receptors, a biochemical process of the release of dopamine into the nucleus accumbens rewards the individual with feelings of pleasure, in the same manner as when they experience sex and food. Although the opioid may be prescribed to relieve pain, the pleasure reward process is activated, building motivation for repeated use of the drug for pleasure.

The brain creates lasting associations of the feelings of pleasure with the circumstances and environment in which they occur, further cementing the motivation to continue taking the opioid, despite the risks and obstacles.

Although taking drugs for pleasure is the first stage of drug abuse, the behavior becomes compulsive, which leads to tolerance and dependence. Repeated doses of opioids alter the brain. It begins to function normally when the drugs are present and abnormally when they are not. Higher dosages are needed to achieve the surge of dopamine for the same pleasurable effect; this is known as **tolerance**. The brain's opioid receptors gradually become less responsive to the opioid. The dopamine rush has a diminished impact on the reward circuit, which means the drug user experiences a reduced ability to enjoy not only the drug but also other pleasurable life experiences. This user might take more of the drug, trying to achieve the same dopamine high.

Drug **dependence** is the condition of being so accustomed to the drug that withdrawal symptoms occur if the drug is not used. Another brain change in the locus ceruleus from use of opioids results in withdrawal symptoms of jitters, anxiety, muscle cramps, and diarrhea because excessive levels of noradrenaline are produced. Dependence leads to daily drug use to avoid unpleasant symptoms of withdrawal (NIDA, 2018d, 2016).

Symptoms of drug withdrawal from opioids include:

- Anxiety
- Irritability
- Craving for the drug
- Rapid breathing
- Yawning
- Runny nose
- Salivation
- Gooseflesh
- Nasal stuffiness
- Muscle aches
- Vomiting
- Abdominal cramping
- Diarrhea
- Sweating
- Confusion

- Enlarged pupils
- Tremors
- Loss of appetite (WebMD, 2017)

According to the National Institute on Drug Abuse (2018d), long-term use also causes changes in other brain chemical systems and circuits, affecting functions that include:

- Learning
- Judgment
- Decision-making
- Stress
- Memory
- Behavior

It is important to understand the opioid dependence and addiction are chronic medical disorders. Although initially people may voluntarily take a drug to treat pain or to feel pleasure, the brain changes that result from opioid use can create a physiologic and psychological need that is difficult to resist (NIDA, 2016, 2018d).

#### **Best Practices in Pain Management and Addiction**

The West Virginia Board of Medicine expects that physicians to incorporate safeguards into their practices to minimize the potential for the abuse and diversion of controlled substances (WVBM, 2017). A comprehensive approach is necessary to achieve safe pain management and optimal patient functioning (physical, psychosocial, social, and workrelated) while guarding against misuse, abuse, addiction, and overdose.

It is not enough merely to diagnose and treat patients' pain. It is incumbent on clinicians to understand the treatment of pain, alternatives to opioids, and medical indications for using opioids in the treatment of chronic pain, including the drugs' general characteristics, toxicities, and interactions. Medical provider training and education on prescription drug abuse is provided by the West Virginia Department of Health and Human Services Bureau for Behavioral Health and Health Facilities.

Of use to all healthcare providers is the *Opioid Overdose Prevention Toolkit*. It aims to educate healthcare providers, patients, and family members about the risks of opioid analgesic misuse, abuse, and overdose, how to identify overdose, how to treat it, how to appropriately prescribe and monitor the use of opioids (SAMHSA, 2016a).

In brief, the best practices approved by the West Virginia Board of Medicine and SAMHSA include the following:

- Evaluation
- Treatment plan
- Informed consent
- Agreement for treatment
- Periodic review
- Consultation
- Medical records
- Compliance with controlled substance laws and regulations

These best practice recommendations are echoed in publications by the Federation of State Medical Boards (2017) and the American Society of Addiction Medicine. New legislation in West Virginia, SB 273, the Opioid Reduction Act, codifies prescribing opioid practices.

Prior to prescribing opioids, clinicians must first prescribe treatment alternatives such as physical therapy. A prescribed opioid must not exceed a 7-day supply at the lowest effective dose, and the provider must explain the associated risks.

The provider must document the patient's medical history, conduct and document a physical examination, develop a treatment plan and access relevant prescription monitoring information under the Controlled Substance Monitoring Program Database.

Subsequent prescriptions may only be issued at least 6 days following the initial prescription and the provider must document that it is necessary and appropriate for the patient's treatment. A third prescription for ongoing treatment requires consideration of referral to a pain clinic or specialist.

For supplies greater than 7 days, a patient must sign a narcotics contract with the prescribing provider agreeing to get medication **only** from that doctor, use the same pharmacy each time, and notify the provider of any emergency where the patient has been prescribed a controlled substance. Adults receiving an initial opioid prescription in an emergency department or urgent care facility are limited to a 4-day supply of opioid pain medicine. Minors are limited to a 3-day supply (WV DHHR, 2018).

# A Clinical Approach to Mitigate Abuse

## **Patient Evaluation and Health History**

To adequately address pain and best outcomes, a physician must complete a thorough patient evaluation before any treatment plan can be made or medications prescribed. Such an evaluation must include a complete medical history and a physical examination. The physician should make a thorough examination of the patient's medical record, nature and intensity of the pain, current and past treatments for pain, underlying or co-existing diseases or conditions, the effect of the pain on the patient's physical and psychological functioning, and history of substance abuse. One or more recognized indications for the use of a controlled substance should be present in the medical record to justify prescribing (WVBM, 2017).

The use of opioid analgesics for other than legitimate medical purposes poses a significant health risk to individual patients and to society. Inappropriate prescribing can lead to drug diversion and abuse by individuals seeking to use opioids nonmedically. It falls to physicians, nurses, and other health professionals to use systematic precautions to minimize the possibility for abuse and diversion of controlled substances (WVBM, 2017).

Prescribers of opioid pain relievers must balance the benefits of these drugs to treat chronic pain against the risks of serious adverse outcomes including addiction, unintentional overdose, and death. Health professionals have an obligation to ensure that these medications are used safely and effectively by their patients to control pain, and to mitigate risks.

The patient evaluation should include most of the following elements:

- Medical history and physical examination targeted to the pain condition
- Nature and intensity of the pain
- Current and past treatments, including interventional treatments, with response to each treatment
- Underlying or co-existing diseases or conditions, including those that could complicate treatment (ie, obesity, renal disease, sleep apnea, COPD)
- Effect of pain on physical and psychological functioning
- Personal and family history of substance use disorder
- History of psychiatric disorders (bipolar, ADD/ADHD, sociopathic, borderline, major depressive disorder)
- Post-traumatic stress disorder (PTSD)
- Medical indication(s) for use of opioids
- Review of the PDMP results
- Obtain consultation with other clinicians when applicable

Urine, blood or other types of biological samples and diagnostic markers (WVBM, 2017)

Clinicians should use caution when prescribing opioids in women of childbearing age, as chronic opioid therapy during pregnancy increases risk of harm to the newborn. Further, opioids should be administered with caution in breastfeeding women, as some opioids may be transferred to the baby in breast milk. When chronic opioid therapy is used for an elderly patient, clinicians should carefully consider the initial dose, titrating slowly upwards if necessary, using a longer dosing interval, and monitoring more frequently. Patients at risk for sleep disordered breathing are at increased risk for harm with the use of chronic opioid therapy. Clinicians should consider the use of a screening tool for obstructive sleep apnea and refer patients for proper evaluation and treatment when indicated (WVBM, 2017).

## **Risk Evaluation and Mitigation Strategy (REMS)**

The FDA requires that extended-release oral forms of pain medications containing hydromorphone, morphine, oxycodone, oxymorphone, or tapentadol; fentanyl and buprenorphine-containing transdermal delivery systems; and methadone tablets or liquid that are indicated for use as pain medicines are subject to a risk management program to ensure that the benefits of a drug for a patient outweigh its risks.

REMS involves:

- Knowing how to assess patients for treatment with opioid analgesics.
- Knowing how to initiate therapy, modify dose, and discontinue use of opioid analgesics.
- Knowing how to manage ongoing opioid therapy.
- Knowing how to educate patients and caregivers about the safe use of opioids analgesics, including proper storage, protection from theft, and disposal.
- Knowing general and product-specific drug information. (FDA, 2014)

All opioids are powerful medications; however, extended-release long-acting (ER/LA) opioid analgesics contain more opioid than immediate-release formulations, which carries a high potential for accidental overdose, life-threatening respiratory depression, abuse by patient or people known to the patient, misuse and addiction, physical dependence and tolerance, interactions with other medications, risk of neonatal opioid withdrawal syndrome with prolonged use during pregnancy, and inadvertent exposure/ingestion by household contacts, especially children (FDA, 2014).

## **Risk Factors of Opioid Abuse**

Research shows the following categories of risk factors for opioid abuse and addiction:

- Genetic predisposition
- Certain brain characteristics that can make someone more vulnerable to addictive substances than the average person
- Psychological factors (eg, stress, personality trait like high impulsivity or sensation seeking, depression, anxiety, eating disorders, personality, other psychiatric disorders)
- Environmental influences (eg, exposure to physical, sexual, or emotional abuse or trauma, substance use or addiction in the family or among peers, access to an addictive substance; exposure to popular culture references that encourage substance use)
- Starting alcohol, nicotine, or other drug use at an early age (CASA, 2017)

One factor that is strongly predictive of opioid abuse, misuse, or other aberrant drugrelated behavior is a personal or family history of alcohol or drug abuse. Although family history of substance abuse and psychiatric disorders are relevant to the appropriateness of opioid pain medications, prescribers should recognize that "a history of substance abuse does not prohibit treatment with extended release opioid analgesics but may require additional monitoring and expert consultation" (FDA, 2014).

## **Pain Assessment Tools**

When treating chronic pain, healthcare providers must assess the nature and level of patient pain. Common assessment tools include a numeric pain rating scale (0-10), the PEG 3-question scale, the Wong-Baker FACES Pain Rating Scale, and the 20-question Pain Quality Assessment Scale (PQAS). Other useful tools help clinicians evaluate patient risk for adverse effects when considering prescribing opioid analgesics.

These tools allow healthcare providers to ask useful, clinically relevant questions in order to gain a full understanding of the patient before prescribing a potent drug. Here are brief summaries of some assessment tools that healthcare providers can use before initiating opioid therapy:

National Institute on Drug Abuse (NIDA) Quick Screen: This is a free online tool that helps primary care providers screen patients for drug use in general medical settings. The tool asks a pre-screening question regarding alcohol, tobacco, nonmedical prescription drug, and illegal drug use.

- Screener and Opioid Assessment for Patients in Pain (SOAPP-R): This is a brief tool to facilitate assessment and planning for patients being considered for long-term opioid treatment for chronic pain. Before initiating opioid pain analgesics, providers can distinguish between high-risk and low-risk patients.
- Diagnosis, Intractability, Risk, Efficacy (DIRE): This primary care tool assesses the risk of opioid abuse and whether patients are suitable candidates for long-term opioid therapy.
- Opioid Risk Tool (ORT): This tool assesses the risk that patients will develop aberrant drug behaviors when using opioid medication for chronic pain.

SAMHSA's *Opioid Overdose Prevention Toolkit* recommends that a thorough patient assessment and health history include specific questions. For example:

- "In the past 6 months, have you taken any medications to help you calm down, keep from getting nervous or upset, raise your spirits, make you feel better, and the like?"
- "Have you been taking any medications to help you sleep? Have you been using alcohol for this purpose?"
- "Have you ever taken a medication to help you with a drug or alcohol problem?"
- "Have you ever taken a medication for a nervous stomach?"
- "Have you taken a medication to give you more energy or to cut down on your appetite?
- "Have you ever been treated for a possible or suspected opioid overdose?"

Further, a patient history should include questions about the patient's use of alcohol, tobacco, and over-the-counter medicines. Useful screening tools include NIAAA, AUDIT, USPSTF, and ASSIST. Caution must be observed because many OTC medications and alcohol can depress the central nervous system and must not be used in combination with prescription opioid analgesics (SAMHSA, 2016a).

## **Physical Examination**

During a physical examination, providers and nurses should also be on the lookout for the following signs in patients being seen for chronic pain:

- Needle marks in neck, hands, feet, and antecubital fossae
- Signs of opioid intoxication, including pinpoint pupils, sweating, drowsiness, nodding off, slurred speech, respiratory depression, stupor, and coma
- Signs of opioid withdrawal, including goose bumps, sweating, diarrhea, sniffles, dilated pupils, lacrimation, muscle tenderness, increased bowel sounds, rapid

heartbeat, shivering, nausea, emesis, restlessness, and hypertension

- Signs of liver disease, including jaundice, enlarged liver and spleen, "stigmata" of chronic liver disease, and ascites (Dixon, 2018)
- Review of medical records. When considering prescribing opioid analgesics for a new patient, clinicians should carefully review the patient's medical records. Consulting with the patient's previous physician could reveal important information.

#### **Treatment Plans with Functional Goals**

After a thorough examination, a clinician must develop a written treatment plan. The plan must include goals that can be used to measure treatment success. Goals might include pain relief and improved physical and psychosocial function. The treatment plan should also indicate other diagnostic evaluations or treatments.

Treatment plans should incorporate pharmacologic and nonpharmacologic pain management modalities. Nonpharmacologic therapies may include cognitive behavioral therapy, massage, exercise, multimodal pain treatment, and osteopathic manipulative treatment (WVBM, 2017). The Physicians for Responsible Opioid Prescribing advocate a cautious approach to pain management. They believe that the increased prescribing of opioid analgesics for chronic noncancer pain lacks high-quality evidence to justify the therapeutic change and that, while opioids may provide short-term pain relief, the longterm benefits of opioid therapy have not been established. They advocate that low doses should be considered only for carefully evaluated, closely monitored patients when a structured approach is employed and clear benefits for pain and function are documented. To better educate prescribers about the risks versus benefits of opioids for chronic pain, they have published the *Cautious, Evidence-Based Opioid Prescribing*, containing do's and don'ts for acute and chronic pain management (PROP, 2014).

#### **Cautious, Evidence-Based Opioid Prescribing for Chronic Pain**

#### Do's

- Do screen patients for depression and other psychiatric disorders before initiating COT (chronic opioid therapy)
- Do talk with patients about therapeutic goals, opioid risks, realistic benefits, and prescribing ground rules.
- Do realize that patients are reluctant to disclose a history of substance abuse.
- Do perform a thorough medical evaluation and a urine drug screen before initiating COT.
- Do explain to patients that discontinuing opioids may be difficult.
- Do perform random urine drug screens on patients receiving COT.

#### Don'ts

- Don't initiate chronic opioid therapy (COT) before considering safer alternatives.
- Don't continue with COT with patients who show no progress toward treatment goals.
- Don't assume patients know how to use opioids safely.
- Don't assume patients use opioids as you intend.
- Don't start a treatment that you are not prepared to stop.
- Don't assume patients are doing well with COT without careful evaluation.
- Don't abandon patients with a prescription drug problem. (PROP, 2014)

# **Informed Consent and Prescribing Agreements**

As part of any treatment plan, providers must educate patients on the prescription opioid, its safe use (including dosage, frequency of use, expected therapeutic effects, risks, and side effects); its potential interactions with other drugs and alcohol; its proper storage according to manufacturer instructions; and the proper disposal of the medication. As we have mentioned, diversion of opioids by family members, caregivers, or visitors can be a serious problem with serious consequences for the patient, who should be using the drug as directed, and for the nonmedical user, who may be risking injury or accidental death by illegally using a drug not prescribed.

It is imperative that patients receive education so that they may give informed consent to the treatment plan recommended by the physician.

### What Is Informed Consent?

**Informed consent** involves informing the patient about the risks and benefits of the proposed therapy and the legal obligations such therapy imposes on both physician and patient. Informed consent serves multiple purposes: (1) it provides the patient with information about the risks and benefits of opioid therapy; (2) it fosters adherence to the treatment plan; (3) it limits potential for inadvertent drug misuse; and (4) it improves the efficacy of the treatment program. (SAMHSA, 2016a)

Health providers have the responsibility of informing patients about opioid pain medications. The Federation of State Medical Boards specifies that informed consent documents typically address the following points:

- The limited evidence as to the benefit of opioids or other pharmaceutical therapies in the management of chronic pain (except for cancer)
- The potential risks and anticipated benefits of chronic opioid therapy
- Potential side effects (both short- and long-term) of the medication, such as constipation and cognitive impairment
- The likelihood that tolerance to and physical dependence on the medication will develop
- The risk of drug interactions and over-sedation
- The risk of impaired motor skills (affecting driving and other tasks)
- The risk of substance use disorder, overdose, and death
- The clinician's prescribing policies and expectations, including the number and frequency of prescription refills, as well as the clinician's policy on early refills and replacement of lost or stolen medications
- Specific reasons for which drug therapy may be changed or discontinued (including violation of the treatment agreement) or that treatment may be discontinued without agreement by the patient
- Education of the patient that the complete elimination of pain is not to be expected (FSMB, 2017; WVBM, 2017)

Patients need to understand that opioid pain medications work to relieve pain by binding to specific receptors in the brain, spinal cord, and gastrointestinal tract. But stimulating the receptors, or reward centers, in the brain can also affect other body systems, such as those responsible for regulating mood, breathing, and blood pressure.

### **Signs of Overdose**

Opioids can cause pleasure, nausea, vomiting, allergic reaction, and even overdose, which can cause breathing and heartbeat to slow or stop. Opioids may significantly reduce pain, but they may not eradicate all pain.

Life-threatening overdose can occur when:

- A patient accidentally takes an extra dose or doses
- A patient accidentally takes doses more frequently than prescribed
- A patient deliberately takes more medication than prescribed
- A patient takes the medication in combination with other drugs or alcohol
- Any person who is not prescribed the medication takes it

Patients and their caregivers must be taught that an overdose of opioid pain medication is an emergency. If an overdose is suspected, immediately call 911. Signs of overdose include:

- Slow or stopped breathing
- Slow or stopped heartbeat
- Limp body
- Extremely pale and/or clammy face
- Blue or purple lips or fingernails
- Vomiting or emitting gurgling noises
- Cannot be awakened
- Unable to speak

## Signs of Overmedication

Overmedication is a condition that may progress to life-threatening overdose. Signs of overmedication include:

- Slow or shallow breathing
- Slow heartbeat
- Low blood pressure
- Unusual sleepiness, nodding off
- Confusion
- Slurred speech
- Behavior resembling intoxication
- Pupils pinpoint size
- Difficulty awakening from sleep

Patient education must include the following points:

- Take medicine only if it has been prescribed by a doctor.
- Do not take more medicine or take it more often than instructed.
- Call a doctor if pain gets worse.
- Never mix pain medicines with alcohol, sleeping pills, or any illicit substance.
- Store medicine in a safe place where children and pets cannot reach it.
- Know the signs of overdose and how to use naloxone to keep it from becoming fatal.
- Teach family and friends how to respond to an overdose.
- Dispose of unused medication properly. (SAMHSA, 2016a)

## **Patient-Prescriber Agreements**

The use of a patient–clinician agreement, or treatment agreement, helps to reinforce patient education. The FDA has convened a working group to develop tools for patients and prescribers when considering opioid analgesics for the treatment of pain, including a model opioid **patient-prescriber agreement (PPA)** that is patient-focused to increase awareness of risks and benefits of opioid analgesics and serve to emphasize the responsibilities of both patient and prescriber (FDA, 2014). Although the FDA's Safe Use Initiative Opioid Patient-Prescriber Agreement is in progress, at the time of this writing it was not yet finalized.

SAMSHA's Opioid Overdose Prevention Toolkit outlines what such an agreement should include.

The agreement instructs the patient to stop taking all other pain medications, unless explicitly told to continue by the physician. Such a statement reinforces the need to adhere to a single treatment regimen.

- The patient agrees to obtain the prescribed medication from only one physician and, if possible, from one designated pharmacy.
- The patient agrees to take the medication only as prescribed (for some patients, it may be possible to offer latitude to adjust the dose as symptoms dictate).
- The agreement makes it clear that the patient is responsible for safeguarding the written prescription and the supply of medications and arranging refills during regular office hours.
- This responsibility includes planning ahead so as not to run out of medication during weekends or vacation.
- The agreement specifies the consequences for failing to adhere to the treatment plan, which may include:
  - Signature of the physician
  - Name and quantity of the drug prescribed
  - Directions for use
  - Refill information
  - Effective date if other than the date on which the prescription was written (SAMHSA, 2016a)

# **Periodic Review and Monitoring of Patients**

Any treatment for pain should periodically be reviewed and evaluated by the clinician. New information about the patient's state of health, condition or cause of pain, psychosocial and mental health, nature of pain is noted, and the patient's overall health and level of function. The clinician should look at the patient's dosage, the medication schedule (to determine if the patient is indeed taking the prescription as directed and whether the current treatment should be continued or modified). This decision depends on evaluation of the progress toward the treatment objectives previously outlined in the plan of care. At such a review, it is critical to reinforce correct medication usage.

When possible, collateral information about the patient's response to opioid therapy may be obtained from family members or other close contacts, as well as review of the state PDMP. The patient may be seen more frequently while the treatment plan is being initiated and the opioid dose adjusted. As the patient is stabilized in the treatment regimen, followup visits may be scheduled as indicated by stability and risk level. Monitoring plans for a given patient should take into account the generally increased risk for dependence developing a substance use disorder and misuse the longer the patient uses them. Continuation, modification, or termination of opioid therapy for pain is contingent on the clinician's evaluation of (1) evidence of the patient's progress toward treatment objectives and (2) the absence of substantial risks or adverse events, such as signs of substance use disorder and/or diversion. A satisfactory response to treatment would be indicated by a reduced level of pain, increased level of function, and/or improved quality of life. Information from family members or other caregivers may be considered in evaluating the patient's response to treatment. Use of measurement tools to assess the patient's level of pain, function, and quality of life may be helpful in documenting therapeutic outcomes (WVBM, 2017).

## **Monitoring Treatment**

Regular monitoring and ongoing assessment to determine if the treatment plan is on track and the patient is achieving results is essential. Providers should incorporate the following practices in their patient monitoring:

- Clinicians should continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.
- Clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when considering increasing dosage to ≥50 morphine milligram equivalents (MME)/day, and should avoid increasing dosage to ≥90 MME/day or carefully justify a decision to titrate dosage to ≥90 MME/day.
- Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.
- Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently. If benefits do not outweigh harms of continued opioid therapy, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids.
- Clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether patients are receiving opioid dosages or dangerous combinations that put them at high risk for overdose. Clinicians should review PDMP data when starting opioid

therapy for chronic pain and periodically during opioid therapy for chronic pain, ranging from every prescription to every 3 months.

- When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.
- Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible. Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder. (CDC, 2017b)

## **Identifying Diversion and Drug-Seeking Behaviors**

The purpose of risk assessment is to determine the likelihood that a patient will develop or display aberrant drug-related behaviors. Healthcare providers must be observant at all times for signs of nonadherance to treatment plans and dosage instructions. Aberrant drug-related behaviors include the following:

- Escalating the dose without a clinician's order, especially rapidly escalating the dose. Psychoactive tolerance develops quickly, forcing a drug abuser to take more of the medication to achieve the same effect, often in doses significantly higher than a therapeutic dose for pain. In contrast, analgesic tolerance develops slowly. It would be expected that patients with stable pain would stay on the same dose for months or years.
- Taking the drug in larger doses than prescribed and running out of medication early.
  Patients abusing opioids may aggressively request refills earlier than expected or request additional doctor visits.
- Acquiring opioids from sources other than by order of the clinician, such as an emergency department, acquiring additional doctors, or buy purchasing the drug on the street.
- Altering or acquiring prescriptions by means of theft, fraud, or purchase.
- Using the drug in any method other than that which was prescribed, such as by snorting, injecting, or chewing oral medications for quicker effect. (CAMH, 2011)

As is evident above, not all aberrant drug-related behaviors by patients signify addiction. They may instead signify that the patient:

Is experiencing increased pain

- Has accidentally been misusing the medication by taking more than intended
- Is developing a physical tolerance to the opioid analgesic, which is not as effective as it once was
- Is rationing doses to save money, for example, or selling doses for income
- May have someone in his or her household or living situation who is stealing medication from the patient (Corsini & Zacharoff, 2014)

Clinicians need to look closely to determine the reason for the unexpected or aberrant behaviors. Such behaviors are important clinical signs.

It is important to consider all behaviors, and the multitude of reasons that patients may not take their medications as they are prescribed. Understanding the specific reason for each unexpected behavior can help the clinician to take the correct next step, and make decisions that help minimize risk, improve safety, and most of all benefit the patient (Corsini & Zacharoff, 2014).

### **General Symptoms of Narcotic Abuse**

Healthcare professionals must be on the lookout for the following signs and symptoms of opioid use disorder:

- Analgesia (feeling no pain)
- Sedation
- Euphoria (feeling high)
- Respiratory depression (shallow or slow breathing)
- Small pupils
- Nausea, vomiting
- Itching or flushed skin
- Constipation
- Slurred speech
- Confusion or poor judgment

## **Tools for Monitoring Ongoing Opioid Therapy**

Prescribers have a number of tools at their disposal to help with ongoing assessment of chronic pain patients who are receiving opioid analgesic therapy. Here are a few of those tools.

### **Addiction Behaviors Checklist (ABC)**

Developed by Bruce D. Naliboff with support from VA Health Services Research and Development, this is a 20-item, yes/no assessment tool that can increase a provider's confidence in determinations of appropriate vs. inappropriate opioid use (Wu et al., 2006).

## **Opioid Risk Tool (ORT)**

Developed by Lynn Webster, this questionnaire filled out by the patient allows healthcare professionals to determine risk of addiction to prescription opioid medication (Webster, n.d.).

## Pain Medication Questionnaire (PMQ)

This is a 26-item self-report assessment tool for ongoing monitoring of aberrant behaviors. It helps clinicians to identify whether a long-term chronic pain patient is exhibiting aberrant behaviors associated with opioid medication misuse (Dowling et al., 2007).

### Prescription Drug Use Questionnaire (PDUQ)

The PDUQ assesses problematic opioid misuse, abuse, and dependence in chronic pain patients. Evidence suggests the PDUQ's key screening indicators are excellent predictors for the presence of addiction (Compton et al., 2008).

#### **DAST Drug Abuse Screening Test**

A self-administered questionnaire consisting of 28 items with binary (yes/no) answers created by Harvey A. Skinner in 1982. Scores of 6 or more indicate the presence of substance dependence or abuse with satisfactory measures of reliability and high levels of validity, sensitivity, and specificity (Yudko et al., 2007). A shorter 10-question DAST (DAST-10) is also used.

#### **Current Opioid Misuse Measure (COMM)**

A 17-item patient self-assessment that helps clinicians identify whether a patient, currently on long-term opioid therapy, may be exhibiting aberrant behaviors associated with misuse of opioid medications. Since the COMM examines concurrent misuse, it is ideal for helping clinicians monitor patients' aberrant medication-related behaviors over the course of treatment (Butler et al., 2007).

## **Urine Screens**

Periodic and unannounced drug testing (including chromatography) are useful in monitoring adherence to the treatment plan, as well as in detecting the use of nonprescribed drugs. Drug testing is an important monitoring tool because self-reporting of medication use is not always reliable and behavioral observations may detect some problems but not others. It is strongly recommended that patients being treated for addiction be tested as frequently as necessary to ensure therapeutic adherence, but for patients being treated for pain, clinical judgment trumps recommendations for frequency of testing (WVBM, 2017; FSMB, 2017).

Urine screening can indicate drug diversion, misuse, or abuse, and the presence of an illegal drug might indicate addiction. Any nonprescribed opioid use may signal drug abuse or doctor shopping. Of course, providers using routine urine drug screening must remember that all diagnosis and treatment must be based on a careful assessment of the patient. UDS tools can deliver false negatives or false positives.

Ideally, urine drug screening is part of the patient-prescriber agreement that is already in place. Clinicians should be aware of the limitations of available tests (such as their limited sensitivity for many opioids) and to order tests appropriately. For example, when a drug test is ordered, it is important to specify that it include the opioid being prescribed.

Test results that suggest opioid misuse should be discussed with the patient. It is helpful to approach such a discussion in a positive, supportive fashion, so as to strengthen the relationship between the patient and the clinician and encourage healthy behaviors (as well as behavioral change where that is needed). It is recommended that both the test results and subsequent discussion with the patient be documented in the medical record (WVBM, 2017).

# When Patient Care Is Ending

#### Documentation

Nurses have an important role to play in keeping medical records complete and accurate. Patient medical records should remain current and be accessible for review, and should include the following:

- Copies of the signed informed consent and treatment agreement
- The patient's medical history
- Results of the physical examination and all laboratory tests
- Results of the risk assessment, including results of any screening instruments used

- A description of the treatments provided, including all medications prescribed or administered (including the date, type, dose, and quantity)
- Instructions to the patient, including discussions of risks and benefits with the patient and any significant others
- Results of ongoing monitoring of patient progress (or lack of progress) in terms of pain management and functional improvement
- Notes on evaluations by and consultations with specialists
- Results of queries to the state PDMP
- Any other information used to support the initiation, continuation, revision, or termination of treatment and the steps taken in response to any aberrant medication use behaviors. These may include actual copies of, or references to, medical records of past hospitalizations or treatments by other providers
- Authorization for release of information to other treatment providers (FSMB, 2017)

The medical record must include all prescription orders for opioid analgesics and other controlled substances, whether written or telephoned. In addition, written instructions for the use of all medications should be given to the patient and documented in the record.

The name, telephone number, and address of the patient's primary pharmacy should also be recorded to facilitate contact as needed. Records should be up to date and maintained in an accessible manner so as to be readily available for review (FSMB, 2017).

## **Referral to Pain Management Specialists**

Clinicians should be willing to refer patients to pain management specialists if they are uncertain about the pain diagnosis or the prescribing, monitoring, or discontinuing of opioid analgesics for patient pain. CDC guidelines recommend caution when prescribing 50 mg or more morphine equivalents a day and avoiding 90 mg or more (CDC, 2017b). Referral of patients hitting these thresholds may be advisable because these thresholds indicate greater risk and may indicate a failure of opioids to achieve functional goals. Patients who need a procedure or surgery may need a referral to a pain specialist. Primary care and pain specialists should foster good communication. This encourages collaboration on what may be a challenging patient population. Collaboration includes sharing medical records, jointly determining treatment plans, and care coordination (AAPM, 2016).

## **Discontinuation of Opioids**

If the patient experiences a resolution of the underlying painful condition then opioid analgesics should be discontinued. Discontinuing opioid therapy is also appropriate if there is a lack of therapeutic effectiveness or if risk increases. Also, if the patient reports continued severe pain despite a trial of several different opioids, and experiences no functional improvement, discontinuing the opioid therapy by careful, safe tapering is indicated (FSMB, 2017).

Another reason to taper is if the patient is experiencing unmanageable adverse side effects, complications such as depressed mood, sleep apnea, sedation, or is displaying aberrant drug-related behavior or signs of addiction, or fails to comply with the treatment agreement despite a reasonable dose.

Clinicians must exercise the following precautions in tapering opioids:

- Tapering decisions must be made on an individual basis.
- Clear, written and verbal instructions should be given to patients and their families to educate them about tapering and to minimize withdrawal symptoms.
- Be prepared to provide supportive counseling and frequent (weekly) follow-up visits. Ask about pain, withdrawal symptoms, and any beneficial effects of the tapering, such as improved mood, energy level and alertness and decreased pain.
- Prepare a detailed tapering plan, including type of opioid, scheduled doses, and a frequent dispensing schedule.
- Switch to morphine if the patient is dependent on hydromorphone or oxycodone.
- Use slow tapering for patients who have cardio-respiratory conditions.
- Adjust dose up or down as necessary to relieve withdrawal symptoms without inducing sedation.
- Refer patients with complicated withdrawal symptoms to a pain specialist or a medical center that specializes in treating withdrawal.
- Refer patients with opioid addiction for substance abuse disorder treatment. Addiction is best managed by opioid agonist treatment such as methadone or buprenorphine. (VA/DoD, 2017; SAMHSA, 2018; FSMB, 2017; WVMB, 2017)

# **Compliance with State and Federal Laws**

To prescribe, dispense, or administer controlled substances, the prescriber must be licensed in the State of West Virginia and comply with all applicable state and federal regulations. The Practitioner's Manual of the U.S. Drug Enforcement Administration provides specific regulations governing the medical use of controlled substances (DEA, 2006 [most recent]). Prescribers must register with and use the West Virginia Controlled Substances Monitoring Program established in West Virginia Code Chapter 60A, Article 9.

## **Prescription Drug Monitoring Programs (PDMPs)**

Clinicians should request a report of a patient's medication history from the state's PDMP before prescribing opioids. PDMPs track controlled substances prescribed by authorized practitioners and dispensed by pharmacies. PDMP programs employ electronic data transfer systems, under which prescription information is transmitted from the dispensing pharmacy to a state agency, which collates and analyzes the information. PDMPs assist in patient care, provide early-warning signs of drug epidemics, and help to detecting drug diversion and insurance fraud.

The Government Accountability Office (GAO) concluded that such programs have the potential to help law enforcement and regulatory agencies rapidly identify and investigate activities that may involve illegal prescribing, dispensing, or consumption of controlled substances. PDMPs also can help to prevent prescription drug misuse, overdose, and diversion by allowing clinicians to determine whether a patient is receiving prescriptions for controlled substances from other clinicians, as well as whether the patient has filled or refilled an order for an opioid the clinician has prescribed (FSMB, 2017).

West Virginia's Prescription Drug Monitoring Program, the Controlled Substance Automated Prescription Program (CSAPP), was established in 1995 by the State Board of Pharmacy for the monitoring of Schedule II–IV Controlled Substances. The goal of CSAPP is to provide prescribers and dispensers with access to information that will help them make better prescribing decisions and positively impact West Virginia's drug problem. Furthermore, CSAPP can help to identify patients who may benefit from a substance abuse referral (CSAPP, 2018).

## **When Drug Diversion Is Suspected**

If a healthcare professional suspects that drug diversion has occurred, he or she must document the suspicion and make a report to the following agencies:

Local law enforcement and local fraud alert networks

 DEA (theft or loss of controlled substances) on the DEA Office of Diversion Control website. https://www.deadiversion.usdoj.gov/webforms/dtlLogin.jsp

HHS-OIG National Hotline (800 HHS-TIPS, or 800 447 8477) or TTY 800 377 4950 or https://forms.oig.hhs.gov/hotlineoperations/index.aspx

Other resources for information and assistance (SAMHSA, 2016a) include:

- Substance Abuse and Mental Health Services Administration (SAMHSA) National Helpline: 800 662-HELP (4357) or TDD 800 487 4889 (for hearing impaired)
- Behavioral Health Treatment Locator: https://findtreatment.samhsa.gov to search by address, city, or zip code
- Buprenorphine Treatment Physician Locator: http://www.samhsa.gov/medicationassisted-treatment/physician-program-data/treatment-physician-locator
- State Substance Abuse Agencies: https://findtreatment.samhsa.gov/TreatmentLocator/faces/about.jspx
- Center for Behavioral Health Statistics and Quality (CBHSQ) http://www.samhsa.gov/data
- SAMHSA Publications: http://store.samhsa.gov1; 877-SAMHSA (877 726 4727)
- Centers for Disease Control and Prevention (CDC) http://www.cdc.gov/drugoverdose/epidemic http://www.cdc.gov/homeandrecreationalsafety/poisoning

## **Drug Take-Back Programs**

Combating prescription drug abuse necessitates the proper disposal of unused, unneeded, or expired medications. Patients must have a secure and convenient way to dispose of controlled substances. The Drug Enforcement Agency has strict regulations for drug takeback programs, including National Prescription Drug Take Back Days. Healthcare providers should encourage patients to use such take-back disposal services when available.

If no take-back program is available, patients should be warned to take precautions that help prevent environmental impact and drug diversion, including mixing pharmaceuticals with undesirable substances such as coffee grounds or cat litter; sealing them in a bag, empty can, or other nonleaking container; and removing all personal information (name, phone number, prescription number) from product packaging and labels (FDA, 2018).

The 14th National Take Back Day, which took place October 28, 2017, collected 912,305 pounds (456 tons) of prescription drugs nationwide. In West Virginia 5,473 pounds of prescription drugs were collected (DEA, 2018b).

DEA is committed to the citizens of West Virginia. This [Take Back] program allows citizens to empty their medicine cabinets of unwanted or expired medications with no questions asked. DEA will then dispose of these medications in a safe manner.

> David Gourley, DEA Assistant Special Agent in Charge U.S. Attorney's Office, 2018

# Treating Opioid Use Disorder (OUD)

Addiction is a **chronic**, treatable illness. Treating patients with opioid use disorder (OUD) requires continuing care rather than an episodic, acute-care approach. Patients should have access to medical treatment, mental health services, addiction counseling, and other recovery support services. Treatment should be tailored to each patient's needs and preferences (ASAM, 2015). In fact, there is no single best approach that works for all patients. A comprehensive approach to treatment is part of addressing the problem of drug diversion. Research shows that many people in need of treatment for substance use disorder do not receive treatment:

- The 2016 National Survey on Drug Use and Health (NSDUH) data indicate that 7.8%, or 21.0 million people, aged 12 or older needed substance use treatment in the past year (SAMHSA, 2017b).
- In 2016 an estimated 3.8 million people (1.4%) aged 12 or older who needed substance use treatment had received any substance use treatment in the past year (SAMHSA, 2017b).
- In 2016, an estimated 2.2 million people aged 12 or older received substance use treatment at a specialty facility in the past year. This number represents 10.6 percent of the 21.0 million people who needed treatment (SAMHSA, 2017b). Specialty treatment refers to substance use treatment at a hospital (only as an inpatient), a drug or alcohol rehabilitation facility (as an inpatient or outpatient), or a mental health center.
- In a single-day count in 2015, 10,099 individuals in West Virginia were enrolled in substance use treatment—a decrease from 10,711 individuals in 2011, but an increase from 9,596 individuals in 2012 and 10,057 individuals in 2013 (SAMHSA, 2017a).
- In a single-day count in 2015, 3,120 individuals in West Virginia were receiving methadone in opioid treatment programs as part of their substance use treatment—a decrease from 4,699 individuals in 2011 (SAMHSA, 2017a).

In a single-day count in 2015, 2,072 individuals in West Virginia were receiving buprenorphine as part of their substance use treatment—an increase from 1,135 individuals in 2011 (SAMHSA, 2017a).

The World Health Organization principles of good care for chronic illness can guide OUD care:

- Develop a treatment partnership with patients.
- Focus on patients' concerns and priorities.
- Support patients' self-management of illness.
- Use the five A's at every visit (assess, advise, agree, assist, arrange).
- Organize proactive followup.
- Link patients to community resources/support.
- Work as a clinical team.
- Involve "expert patients," peer educators, and support staff in the health facility.
- Ensure continuity of care. (SAMHSA, 2016a)

## **Medications**

The FDA has approved medications to treat OUD and improve patients' health and wellness. These medications are methadone, naltrexone, and buprenorphine. These medications can reduce or eliminate withdrawal symptoms (methadone, buprenorphine), blunt or block the effects of illicit opioids (methadone, naltrexone, buprenorphine), and reduce or eliminate cravings to use opioids (methadone, naltrexone, and buprenorphine).

<b>Comparison of Medications for OUD</b>			
Prescribing Consider- ations	Methadone	Naltrexone	Buprenorphine
Mechanism of action at mu-opioid receptor	Agonist	Antagonist	Antagonist
Phase of treatment	Medically supervised withdrawal, maintenance	Prevention of relapse to opioid dependence, following medically supervised withdrawal	Medically supervised withdrawal, maintenance
Administration route	Oral	Oral, intramuscular extended- release	Sublingual, buccal, subdermal implant, subcutaneous extended release
Possible adverse effects	Constipation, hyperhidrosis, respiratory depression, sedation, QT prolongation, sexual dysfunction, severe hypotension and syncope, misuse potential, neonatal abstinence syndrome	Nausea, anxiety , insomnia, precipitated opioid withdrawal, hepatotoxicity, vulnerability to opioid overdose, depression, suicidality, muscle cramps, dizziness or syncope, somnolence or sedation, anorexia, decreased appetite or other appetite disorders <b>Intramuscular:</b> Pain, swelling, induration (including some cases requiring surgical intervention)	Constipation, nausea, precipitated opioid withdrawal, excessive sweating, insomnia, pain, peripheral edema, respiratory depression (particularly combined with benzodiazepines or other CNS depressants), misuse potential neonatal abstinence syndrome <b>Implant:</b> Nerve damage during insertion/removal, accidental overdose or misuse if extruded, local migration or protrusion <b>Subcutaneous:</b> Injection site itching or pain, death from intravenous injection
Regulations and availability	Schedule II; only available at federally certified Opioid Treatment Programs and the acute inpatient hospital setting for OUD treatment	Not a scheduled medication; not included in OTP regulations; requires prescription; office-based treatment of specialty substance use treatment programs including OTPs	Schedule III; requires waiver to prescribe outside of OTPs. <b>Implant:</b> Prescribers must be certified in the Probuphine Risk Evaluations and Mitigation Strategy (REMS) Program. Providers who wish to insert/remove implants are required to obtain special training and certification in the REMS Program.

**Subcutaneous:** Healthcare settings and pharmacies must be certified in the Sublocate REMS Program and only dispense the medication directly to a provider for administration. OUD medications reduce illicit opioid use, retain people in treatment, and reduce risk of opioid overdose better than treatment with placebo or no medication. Medication can be taken on a short-term or long-term basis. Patients taking medication for OUD are considered to be in recovery.

- The science demonstrating the effectiveness of medication for OUD is strong.
- This doesn't mean that remission and recover occur only through medication; some people achieve remission without OUD medication.
- Medication for OUD should be successfully integrated with outpatient and residential treatment.
- Patients treated with OUD medications can benefit from individualized psychosocial supports.
- Expanding access to FDA-approved medications is an important public health strategy.
- Improving access is crucial to closing the wide gap between the need for treatment with OUD medications and the availability of such treatment. (SAMHSA, 2018)

People with OUD can benefit from medications for varying lengths of time, including lifetime treatment. Treatment with OUD medication is linked to better outcomes and retention than treatment without medications. Further, studies show that medication as part of treatment of OUD is cost effective.

The best results occur when a patient receives medication for as long as it provides a benefit. This is called maintenance treatment. OUD medications give patients time to make the life changes that are associated with long-term remission and recovery. Maintenance treatment minimizes cravings and withdrawal symptoms.

After time, patients may wish to stop opioid agonist therapy for OUD through gradually tapering doses of the medications. Outcomes depend on the length of their treatment, abstinence from illicit drugs, financial and social stability, and motivation to discontinue the medication (SAMHSA, 2018).

Healthcare providers need special training and certification to prescribe medications to treat OUD. A patient taking FDA-approved medication for OUD can be considered to be in recovery. Clinicians should also be aware that diversion of medications for treating OUD do occur (ASAM, 2015; SAMHSA, 2018).

### **Preventing Opioid Overdose-Related Deaths: Naloxone**

Opioid overdose-related deaths can be prevented when naloxone is administered in a timely manner. As a narcotic antagonist, **naloxone** displaces opiates from receptor sites in the brain and reverses respiratory depression that usually is the cause of overdose deaths. Naloxone may cause dizziness, drowsiness, or fainting. These effects may be worse if it is taken with alcohol or certain medicines (SAMHSA, 2016a). In 2015 the FDA approved the first naloxone nasal spray—NARCAN–developed as a result of NIDA-funded research. Naloxone is also available as an autoinjector—EVZIO—that provides verbal step-by-step instructions for use. Increasing access to naloxone is a priority for the U.S. Department of Health and Human Services, and research funded by NIDA is developing strategies to identify people at risk and ensure they have access to naloxone in the event of an overdose.

SAMHSA's Opioid Overdose Toolkit (2016a) recommends five strategies for preventing overdose deaths.

- Encourage providers, persons at high risk, family members, and others to learn how to prevent and manage opioid overdose.
- Ensure access to treatment for individuals who are misusing or addicted to opioids or who have other substance use disorders.
- Ensure ready access to naloxone.
- Encourage the public to call 911.
- Encourage prescribers to use state Prescription Drug Monitoring Programs. (SAMHSA, 2016a)

In the worst-case scenario put forth by STAT's expert panel, that toll could spike to 250 deaths a day, if potent synthetic opioids like fentanyl and carfentanil continue to spread rapidly and the waits for treatment continue to stretch weeks in hard-hit states like **West Virginia** and New Hampshire. If that prediction proves accurate, the death toll over the next decade could top 650,000.

Max Blau, 2017

#### **Barriers to Treatment**

The primary problem with the opioid epidemic is simple: **It is easier to get high than it is to get help.** People who need substance use treatment sometimes do not have access to treatment. Stigma surrounding substance use disorders remains high.

A video series issued by SAMHSA called "Prevention Conversations" stresses the importance of breaking the stigma around drug use. SUD is a disease and not a moral failing.

SAMHSA suggests the following strategies for reducing stigma:

- Do away with labels. Avoid stigmatizing labels such as "addict," "junkie," or "drug user" when referring to patients. Using the term "clean" for someone who is not currently using drugs implies that someone who is actively using is "unclean" or "dirty."
- Use "person first" language. Using person first language, such as "a person who uses drugs," demonstrates that you aren't defining a person by their drug use.
- Understand that drug use falls along a continuum. This continuum of substance use ranges from abstinence/low-risk use to chronic dependence and encompasses all stages in between. People may move back and forth along this continuum for a variety of reasons.
- Embrace positive change. Treatment for substance use disorders has historically been viewed as binary, with addiction and abstinence as a person's only two options.
- Beware of unintentional bias. People initiate and continue to use drugs for a variety of reasons. Without intending to, we may make value judgments about those reasons—deeming them "good" or "bad," "necessary" or "unnecessary," or even considering people "weak" or "strong" based on their substance use behaviors.
- Reflect on your own experiences. Many of us have lived experience of substance misuse—either our own or through a family member, loved one, co-worker, or neighbor. These experiences may be difficult, but they remind us that people who use drugs are first and foremost people—with strengths, passions, interests, and goals.
- Understand that substance misuse is often linked to trauma. Trauma is a risk factor for almost all behavioral health and substance use disorders. Understanding the relationship of trauma to substance misuse and knowing how to engage with people who use drugs in ways that prevent re-traumatization, will help you create a safe and supportive environment where everyone is encouraged to hear and be heard without judgment. (SAMHSA CAPT, 2018)

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# **Post Test**

Use the answer sheet following the test to record your answers.

- 1. The biggest drug problem in the United States is:
  - a. Heroin because it is so cheap.
  - b. Prescription drugs because they are so readily available.
  - c. Crack cocaine because the high is instantaneous.
  - d. Cannabis because it is considered harmless by many.
- 2. Diversion is:
  - a. Removal of a medication from its legitimate dispensing channels.
  - b. Taking prescribed drugs while distracted.
  - c. Failing to read the directions on a prescribed medication.
  - d. Using a parcel delivery service to move drugs across national boundaries.

3. The Controlled Substances Act has five Schedules designated with roman numerals. The least safe and most likely to be abused is Schedule V:

- a. True
- b. False
- 4. Pain is a normal physiologic sensation that signals injury or disease. Chronic pain:
  - a. Is probably neurologic.
  - b. Always requires scheduled medications.
  - c. Generally has psychological origins.
  - d. Is a disease state in itself.

5. The Federation of State Medical Boards (FSMB) issued guidelines to support the use of opioids for chronic noncancer pain in 1998 (rev. 2004, 2014). Based on their findings, The Joint Commission then issued the "Pain Standard" to:

- a. Guide family physicians in discerning chronic pain.
- b. Evaluate healthcare organizations in their assessment of patient pain.
- c. Enforce compliance with the Controlled Substances Act.
- d. Help law enforcement to understand use of prescription drugs.

6. Lawsuits filed in 2018 by six states against Purdue Pharma and other pharmaceutical makers of opioid analgesics allege that the drug companies minimized the potential for addiction and aggressively marketed to doctors to persuade them to prescribe more drugs:

- a. True
- b. False

7. Counties with higher rates of prescribing are the counties where more people are employed and have medical insurance:

- a. True
- b. False

8. The 2016 rate of opioid prescriptions per capita in the State of West Virginia compares to the national per capita rate in what way:

- a. It is roughly the same.
- b. It is 50% higher.
- c. It can't be compared because the picture is unclear.
- d. It is 10% lower.

9. A 2018 NIDA report on West Virginia reveals the following societal costs of drug abuse in the state:

- a. Obesity rates increasing year for year.
- b. Individuals failing to get standard vaccinations.
- c. People hospitalized with mental health issues.
- d. Increases in numbers of cases of hepatitis C and HIV/AIDS.
- 10. Apart from cannabis, what drugs are most diverted or abused:
  - a. Opioids, stimulants, and steroids.
  - b. Opioids, CNS depressants, and stimulants.
  - c. CNS depressants, stimulants, and marijuana.
  - d. Marijuana, growth stimulating hormones, and steroids.
- 11. Drug abusers are generally from the lower socioeconomic strata of society:
  - a. True
  - b. False

12. What source of diverted prescription pain medications is the most commonly reported source:

- a. Purchased from drug dealer.
- b. Stolen from healthcare provider.
- c. Prescribed by more than one doctor.
- d. Received from relation or friend.

13. All but one of the following is a top risk factor for nurses who may be vulnerable to drug diversion:

- a. Access to drugs.
- b. Exposure to addicts in daily work.
- c. Stress.
- d. Lack of education about addiction.
- 14. The distinction between dependence and addiction is:
  - a. Addiction can resolve after long-term detoxification but dependence is life-long.
  - b. Only dependence can be healed without withdrawal symptoms.
  - c. Dependence can resolve after detoxification but addiction has long-lasting effects.
  - d. Only addiction is associated with brain abnormalities.
- 15. People become addicted to opioids because they:
  - a. Are self-indulgent and unwilling to give up their high.
  - b. Believe they are invulnerable.
  - c. Are searching for escape from their life stresses.
  - d. Experience physiologic changes in their brain.

16. Pain assessment tools now available for use before initiating opioid therapy include all but one of the following:

- a. MMSE.
- b. NIDA Quick Screen.
- c. SOAPP-R.
- d. DIRE.
- 17. Physicians for Responsible Opioid Prescribing published a document in 2014 that:

- a. Sets forth levels of dosing for a variety of pain presentations.
- b. Focuses on acute pain and ways to address it.
- c. Presents myths vs. facts about pain management.
- d. Addresses opioids for cancer pain.

18. Patients need to understand that opioid pain medications not only relieve pain but affect other body systems. Opiates are also responsible for all but one of the following:

- a. Regulating mood.
- b. Affecting breathing.
- c. Regulating blood pressure.
- d. Impairing gait.
- 19. Tools for monitoring ongoing opiate therapy include all but one of the following:
  - a. Current Opioid Misuse Measure (COMM)
  - b. Drug Abuse Screening Test (DAST)
  - c. Prescription Drug Use Questionnaire (PDUQ)
  - d. Physicians' Drug Misuse Measure (PDMM)

20. If a lack of opioids' therapeutic effectiveness is noted, or if risk increases, discontinue the opioid medication immediately:

- a. True
- b. False
- 21. West Virginia's Prescription Drug Monitoring Program is known as:
  - a. C-PAP.
  - b. CSAPP.
  - c. PaP.
  - d. WVDMP.
- 22. Drug take-back programs have been ignored by the citizens of West Virginia:
  - a. True
  - b. False
- 23. The three FDA-approved medications for treating OUD have identical effects:

- a. True
- b. False

## **Answer Sheet**

## **WV: Best Practices for Prescribing Controlled Substances and Preventing Drug Diversion, 3** units

Name (Please print your name):

Date:

Passing score is 80%

- 1.\_\_\_\_\_
- 2.
- 3.\_\_\_\_\_
- 4.\_\_\_\_
- 5.
- 6.\_\_\_\_
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21.\_\_\_\_\_ 22.\_\_\_\_\_ 23.\_\_\_\_\_

## **Course Evaluation**

Please use this scale for your course evaluation. Items with asterisks \* are required.

- 5 = Strongly agree
- 4 = Agree
- 3 = Neutral
- 2 = Disagree
- 1 = Strongly disagree

\* Upon completion of the course, I was able to:

a. Describe the 5 Schedules of medications under the Controlled Substances Act and give examples of each.

 $\bigcirc$  5  $\bigcirc$  4  $\bigcirc$  3  $\bigcirc$  2  $\bigcirc$  1

b. Compare and contrast acute and chronic pain and discuss the trends in treatment of chronic pain.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

c. Identify the demographic of drug abusers in U.S. society and cite five groups from whom they may get drugs.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

d. State 7 symptoms of drug withdrawal from opioids at and least 4 best practice recommendations by the West Virginia Board of Medicine.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

e. Name 3 categories of risk factors for opioid abuse and addiction and demonstrate ability to create a treatment plan for an abuser.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

f. Explain informed consent and name 5 elements set forth by the Federation of State Medical Boards.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

g. List the 7 assessment tools for monitoring ongoing opioid therapy.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

h. State at least 5 precautions to follow when tapering the patient off of opioids.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

i. Describe West Virginia's Prescription Drug Monitoring Program (PDMP) and explain drug take-back programs.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

j. Define diversion, opioid use disorder, recovery, and relapse.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

\* The author(s) are knowledgeable about the subject matter.

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

\* The author(s) cited evidence that supported the material presented.

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

\* This course contained no discriminatory or prejudicial language.

○ Yes ○ No

\* The course was free of commercial bias and product promotion.

○ Yes ○ No

\* As a result of what you have learned, do you intend to make any changes in your practice?

○ Yes ○ No

If you answered Yes above, what changes do you intend to make? If you answered No, please explain why.

\* Do you intend to return to ATrain for your ongoing CE needs?

Yes, within the next 30 days.

Yes, during my next renewal cycle.

Maybe, not sure.

No, I only needed this one course.

\* Would you recommend ATrain Education to a friend, co-worker, or colleague?

• Yes, definitely.

Possibly.

No, not at this time.

\* What is your overall satsfaction with this learning activity?

 $\bigcirc 5 \bigcirc 4 \bigcirc 3 \bigcirc 2 \bigcirc 1$ 

\* Navigating the ATrain Education website was:

Easy.

- Somewhat easy.
- Not at all easy.

\* How long did it take you to complete this course, posttest, and course evaluation?

- 60 minutes (or more) per contact hour
- 50-59 minutes per contact hour
- 0 40-49 minutes per contact hour
- ◎ 30-39 minutes per contact hour
- Less than 30 minutes per contact hour

I heard about ATrain Education from:

- Government or Department of Health website.
- State board or professional association.
- Searching the Internet.

• A friend.

O An advertisement.

○ I am a returning customer.

- My employer.
- Other
- Social Media (FB, Twitter, LinkedIn, etc)

Please let us know your age group to help us meet your professional needs.

- 18 to 30
- 31 to 45
- 0 46+

I completed this course on:

- $\odot$  My own or a friend's computer.
- A computer at work.
- A library computer.
- A tablet.
- A cellphone.
- $\odot$  A paper copy of the course.

Please enter your comments or suggestions here:
## **Registration Form**

Please print and answer all of the following questions (\* required).

* Name:		
* Email:		
* Address:		
* City:	* State:	* Zip:
* Country:		
* Phone:		
* Professional Credentials/Designations:		
Your name and credentials/designations will appear on your o	certificate.	
* License Number and State:		

- \* Please email my certificate:
- Yes No

(If you request an email certificate we will not send a copy of the certificate by US Mail.)

## **Payment Options**

You may pay by credit card or by check. Fill out this section only if you are **paying by credit card.** 3 contact hours: \$29

## **Credit card information**

* Name: Address (if different from above):			
* Card type:			
○ Visa ○ Master Card ○ American Express ○ Dis	scover		
* Card number:			

\* CVS#:\_\_\_\_\_

\* Expiration date: