DE: Substance Abuse, Chemical Dependency, and Drug Diversion

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Contact hours: 3

Course price: $29

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The Delaware Board of Nursing Rules and Regulations requires Registered and Licensed Practical Nurses to complete continuing education (CE) on substance abuse. Starting with your next renewal, at least three of your required contact hours must be in the area of substance abuse. (Section 9.2.1.1.1).

This course fulfills the Delaware Board of Nursing's requirement for 3 units of coursework on substance abuse.

Course Summary

Evidence-based information about the problem of chemical dependency in the workplace, warning signs of substance use disorder, drug diversion and controlled substances, including safeguards to prevent diversion, misuse, abuse, addiction, and overdose deaths.

COI Support

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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 Medical Society of Delaware.
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 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 Delaware's Prescription Drug Monitoring Programs (PDMPs) and explain drug take-back programs.

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 Centers for Disease Control and Prevention (CDC), people from all age groups, ethnic backgrounds, and genders are affected by this disease.

Accidental overdose and misuse of prescription drugs leads to the severe consequence of death and addiction. The 2013 National Survey on Drug Use and Health (NSDUH) indicates that 15.2 million people aged 12 or older used prescription drugs nonmedically in the past year, and 6.5 million did so in the past month. Prescription drugs are abused and misused more often than any other drug except marijuana and alcohol (SAMHSA/NSDUH, 2014a).

Defining the Problem

Medical 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 (SAMHSA, 2014). 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.

In 2010 Delaware's drug-induced overdose death rate (16.4 per 100,000) exceeded the national average (12.9 per 100,000) (ONDCP, 2013). In 2012 Delaware Governor Jack Markell established the Delaware Prescription Drug Action Committee to improve access to treatment, best practices, data tracking, provider education and public education (DPDAC, 2013). In October 2014 the state launched a new information website that emphasizes prevention, treatment, and recovery (www.helpisherede.com) (DHSS, 2014).

The Delaware Board of Nursing Rules and Regulations now require Registered and Licensed Practical Nurses to complete continuing education (CE) on substance abuse. Starting with the next renewal, at least three of the required contact hours must be in the area of substance abuse (Section 9.2.1.1.1).

This policy is a response to the state's need for additional education about drug diversion and abuse mitigation. The following are some statistics for the State of Delaware.

Delaware has the tenth highest drug overdose mortality rate in the United States, with 16.6 per 100,000 people suffering from drug overdose fatalities, according to a new report, *Prescription Drug Abuse: Strategies to Stop the Epidemic 2013* (TAH, 2013).

Between 1999 and 2010, annual age-adjusted drug overdose mortality rates in Delaware rose 156 percent, from 6.5 in 1999 to 16.5 in 2010. The increasing trend in drug overdose mortality appeared in both male and female rates, with the female rate more than tripling and the male rate doubling in the ten-year span. Despite the larger proportional increase in the female rate, males had a 2010 mortality rate 45 percent higher than the female rate (19.6 vs. 13.5 deaths per 100,000) (DHSC, 2013).

According to the National Survey on Drug Use and Health, 8.99 percent of Delaware residents reported using illicit drugs in the past month, compared to the national average of 8.82 percent (ONDCP, 2013).

In 2010–2011 Delaware was one of the top ten states in several drug-use categories: past-year nonmedical pain reliever use among persons 12 or older; past-month use of illicit drugs other than marijuana among persons 12 or older; and illicit drug dependence among persons 12 or older and young adults 18-15 (ONDCP, 2013).

The rate of drug-induced deaths in Delaware is higher than the national average (ONDCP, 2013). As a direct consequence of drug use, 147 persons died in Delaware in 2010. This is compared to the number of persons in Delaware who died from motor vehicle accidents (111) and firearms (88) in the same year. Delaware drug-induced deaths (16.4 per 100,000 population) exceeded the national rate (12.9 per 100,000) (ONDCP, 2013).

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 reducing 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).

Abuse/nonmedical use: Abuse is 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." However, some critics dislike the term *abuse* being applied to substance use disorders and claim it is inaccurate and reflects morality-based language to depict what may actually be a medical condition (Corsini & Zacharoff, 2014).

Chronic pain: any pain that last more than 12 weeks, 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. Chronic pain often limits a person's activities of daily living (ADLs) and movement, and is often accompanied by other health problems (NIH, 2011).

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.

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).

Pseudoaddiction: a state of inadequate analgesia that may lead to aberrant drug-related behavior, such as increasing dosage without a physician's order or acquiring more than one prescription.

Tolerance: a state in which the body has adapted to a drug or class of drugs over a prolonged period of use to the degree that there is a decrease or loss of therapeutic effect over time, or the need to escalate the dose to maintain the same therapeutic effect (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, 2014d).

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 current, 2012, Controlled Substances Act has five schedules, known as schedules I, II, II, IV, and V.

Controlled Substances, 2012		
DEA schedule	Medical use/abuse potential	Examples of abused drugs
Schedule 1	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

Source: DEA, CSA, 2014.

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.
>
> Institutes of Medicine, 2011

Chronic pain affects approximately 100 million Americans, according to a 2011 Institute of Medicine Report from the Committee on Advancing Pain Research, Care, and Education.

- In 2011 at least 100 million adult Americans have common chronic pain conditions; this a conservative estimate because it does not include acute pain or children.
- Pain is a significant public health problem that costs society at least $560 billion annually in direct medical costs ($261–$300 billion) and lost productivity ($297–$336 billion), (an amount equal to about $2,000 for everyone living in the United States). This cost of chronic pain is believed to be a conservative estimate because several populations were excluded, such as institutionalized and noncivilian populations (nursing home residents, military personnel and prison inmates), persons under 18, cost to caregivers in lost wages, and working persons over the age of 65 or under the age of 24.
- In 2008 the cost to federal and state governments of medical expenditures for pain was $99 billion (including Medicare, Medicaid, the Department of Veterans Affairs, TRICARE, workers' compensation, and others).
- Recent CDC and National Center for Health Statistics (NCHS) data suggest substantial rates of pain from the various causes and that most people in chronic pain have multiple sites of pain. For U.S. adults reporting pain, loci include: severe headache or

migraine (16.1%), low back pain (28.1%), neck pain (15.1%), knee pain (19.5%), shoulder pain (9.0%), finger pain (7.6%), and hip pain (7.1%). (IOM, 2011)

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, 1994)

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. 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 (ASAM, 2012).

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. Key in the new model policy are the following 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 ADLs.
- 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, according to a Joint Statement from twenty-one health organizations and the Drug Enforcement Agency (DEA):

> Preventing drug abuse is an important societal goal, but there is consensus, by law enforcement agencies, health care practitioners, and patient advocates alike, that it should not hinder patients' ability to receive the care they need and deserve. . . . Undertreatment of pain is a serious problem in the United States, including pain among patients with chronic conditions and those who are critically ill or near death. Effective pain management is an integral and important aspect of quality medical care, and pain should be treated aggressively. (Joint Statement, 2002)

Primary care is where patients with pain usually go first, but these physicians rarely have the time to perform comprehensive patient assessments. Both providers and patients should be educated to understand that pain management must be tailored to each individual, which may take time (IOM, 2011).

Opioids are very effective in the treatment of pain. Their increased use is in part due to the pharmaceutical industry's widely marketing opioids to physicians, and offering incentives for prescribing. In May 2014, two California counties sued five of the world's largest 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 lawsuit alleges 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.

The University of Wisconsin Pain and Policy Studies Group received $2.5 million from narcotics manufacturers over the last decade. That pharmaceutical group was a significant force in the liberalizing of opioid analgesics for noncancer pain by helping to create "a body of 'information' that today is found in prescribing guidelines, patient literature, position statements, books, and doctor education courses, all of which favored drugs known as opioid analgesics" (Fauber, 2012).

Prescription Drug Abuse and Misuse

Because of changes in pain treatment, prescriptions of opioid analgesics have increased dramatically from the 1990s—from 76 million prescriptions in 1991 to 210 million subscriptions in 2010. This increase resulted in their increased availability for nonmedical users (NIDA, 2014).

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, and now far outnumber those from heroin and cocaine combined (about 16,000 for opioids vs. about 2,000 for heroin and 3,000 for cocaine). The CDC considers prescription drug abuse to be epidemic. According to the CDC, approximately one hundred Americans died from overdose every day in 2010. Prescription drugs were involved in more than half of the 38,300 overdose deaths that year, and opioid pain relievers were involved in over 16,600 of these deaths (ONDCP, 2014).

The State of Delaware is facing a significant drug abuse problem. Delaware has a higher rate of sales of opioid pain relievers (10.2 kilograms sold per 10,000 population) compared to the national rate (7.1) in 2010 (TAH, 2013). There is wide variation among states in prescribing practices. Delaware ranks 17th among all fifty states, with 90.8 prescriptions for opioid pain relievers per 100 persons, compared to the mean of 87.3 (CDC MMWR, 2014). According to the 2014 Delaware School Survey, 3 percent of eighth graders and 7 percent of eleventh graders report past year use of pain killers (UDCDAS, 2015). The Delaware Health and Social Services, Division of Substance Abuse and Mental Health reports 1,793 admissions to DSAMH Funded Treatment Programs for "other opiates and synthetics" drug abuse (UDCDAS, 2015).

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 impacts on-the-job performance and missed work. The overall cost of prescription opioid abuse in the United States has been estimated at $9.5 billion (in 2005 U.S. dollars), including healthcare, criminal justice, and workplace costs (Passik, 2009).

What Drugs Are Most Diverted or Abused?

After marijuana, prescription drugs are the second-most abused category of drugs in the United States (ONDCP, 2011a). 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).

One way to understand the scope of the problem of prescription drug misuse and abuse is to look at data on drug-related emergency department (ED) visits. The Drug Abuse Warning Network (DAWN) is a tracking system managed by the Substance Abuse and Mental Health Services Administration (SAMHSA). DAWN's purpose is to monitor trends in drug misuse and abuse, identify the emergence of new substances and drug combinations, assess health hazards associated with drug abuse, and estimate the impact of drug misuse and abuse on the nation's healthcare system.

In 2009, there were nearly 4.6 million drug-related ED visits nationwide, including drug abuse, adverse reactions to drugs, and other drug-related consequences. Of these, almost 50% were for adverse reactions to medications taken as prescribed, and 45% involved drug abuse. DAWN estimates that of the 2.1 million drug abuse visits:

- 27.1% involved nonmedical use of pharmaceuticals (ie, prescription or OTC medications, dietary supplements)
- 21.2% involved illicit drugs
- 14.3% involved alcohol, in combination with other drugs. (NIDA, 2011)

Furthermore, the emergency department (ED) visits involving prescription drugs (alone or in combination) increased 98.4% between 2004 and 2009, from 627,291 visits in 2004 to 1,244,679 visits in 2009 (NIDA, 2011).

For patients aged 20 or younger, ED visits resulting from nonmedical use of prescription drugs increased 45.4% between 2004 (116,644 visits) and 2009 (169,589 visits). Among patients aged 21 or older, there was an increase of 111% (NIDA, 2011).

Who Are the Drug Abusers?

People of all ages, genders, and backgrounds use illicit or prescription drugs nonmedically. Data from the 2013 National Survey on Drug Use and Health (NSDUH) shows that nonmedical use of prescription pharmaceuticals was 2.6% in men and 2.3% in women.

- In 2013 about 15 million people aged 12 or older used prescription drugs nonmedically in the past year, and 6.5 million did so in the past month.
- In 2013 youths aged 12 to 17, or young adults age 18 to 25, were more likely to misuse prescription drugs in the past year than adults aged 26 or older.
- On an average day during the past year, about 2,500 adolescents used prescription pain relievers nonmedically for the first time (SAMHSA, 2014a).
- According to the National Institute on Drug Abuse, as of 2014 prescription drug misuse or abuse is increasing among people in their fifties (SAMHSA, 2014b; NCHS, 2014).

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. Among people aged 12 and older who used prescription pain relievers for nonmedical reasons in the past 12 months, 55.9% obtained them from a friend or relative (SAMSHA, NSDUH, 2013). If the prescription drug is not freely given, a drug user may steal it from an unsuspecting family member or acquaintance who has a legitimate need for the medication (ONDCP, 2014).

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 2009 study found that elders in Wilmington, Delaware, were diverting their medications for economic reasons. "It was clear from the focus groups with prescription drug abusers that the elderly generally were not drug dealers, but filled their prescriptions and sold part or all to a few abusers known to them, as well as to dealers or pill brokers for much less than the street value of the drugs" (Incardi et al., 2009). Furthermore,

> Focus group participants indicated that even in a small state like Delaware, doctor shopping appeared to be fairly easy. The vast majority of abusers reported obtaining medications through doctor shopping, and most reported frequenting at least four physicians in order to obtain sufficient amounts of their desired medications. Occasionally clinics and hospital emergency rooms were reported as locations for doctor shopping as well. Regardless of location, the most common scenario reported by abusers was to present to a physician with complaints about pain. (Incardi et al., 2009)

A recent study by McDonald and Carlson (2013) 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).

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 call-back 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 (DEA, 2000).

Healthcare Professionals

Drug diversion isn't only a problem in patients, however. Pharmacists, doctors, nurses, and other medical 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). Clinicians should be aware that the Affordable Care Act has ushered in changes to Medicaid, Medicare, and other health care programs, including more stringent penalties for submitting false claims and statements related to the ordering and prescribing of prescription drugs (CMS, 2014).

Attempting to obtain a controlled substance by misrepresentation, fraud, forgery, or deception is a felony in most states and punishable by a prison term and fines. In addition, the U.S. Department of Health and Human Services, Office of Inspector General (HHS OIG) uses a range of law enforcement tools that can impose various legal sanctions and actions on physicians and other providers, such as recoupment, restitution, civil monetary penalties, suspension or loss of provider license, exclusion from participation in Medicaid and other Federal health care programs, and imprisonment (CMS, 2014).

Health professionals may also divert drugs for their own use. According to research by Storr and colleagues conducted in 2000, the prevalence of substance abuse and addiction in nurses and other healthcare professionals is no higher than that of the general population. Estimates range from 8% to 20% for use and abuse combined (NCSBN, 2011). Shaw and colleagues (2011) determined that because nurses comprise the largest group of healthcare professionals, those with substance use and abuse disorders are more visible, more stigmatized among health professionals, and receive more severe sanctions than physicians with similar abuse and addiction (NCSBN, 2011).

Nurses must be trained to recognizing 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.

Dunn (2005) found that 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

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, 2011)

Martin and colleagues found that nurses whose substance abuse problems are detected early and treated have a higher likelihood of successful treatment outcomes (NCSBN, 2011).

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 (Clark & Farnsworth, 2006)
- 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 (NCSBN, 2011)

Of these risk factors, the top four are access to drugs, attitude, stress, and lack of education about addiction. Nursing is a highly stressful profession impacted by staffing shortages, difficult schedules, and long shifts (NCSBN, 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. But according to a 2013 SAMHSA study, ED visits for youth aged 12 to 17 on a typical day include 174 prescription drug-related incidents, with 74 for prescription or nonprescription pain relievers (SAMHSA CBHSQ Report, 2013).

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, 2012a). 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. In August 2011 the American Society of Addiction Medicine released a new definition of addiction, Public Policy Statement: Definition of Addiction. Its shortened revised definition:

> 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, 2011)

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 (Kosten & George, 2002).

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.

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 (Kosten & George, 2002).

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

According to the National Institute on Drug Abuse (2012b):

> Long-term abuse causes changes in other brain chemical systems and circuits as well. Glutamate is a neurotransmitter that influences the reward circuit and the ability to learn. When the optimal concentration of glutamate is altered by drug abuse, the brain attempts to compensate, which can impair cognitive function. Brain imaging studies of drug-addicted individuals show changes in areas of the brain that are critical to judgment, decision making, learning and memory, and behavior control.

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 (Kosten & George, 2002).

Best Practices of Pain Management and Addiction Medicine

The Physicians Advisory Committee for Controlled Substances of the Medical Society of Delaware issued guidelines and

> recognizes that the use of opioid analgesics for other than legitimate medical purposes can pose a threat to the individual and society and that the inappropriate prescribing of controlled substances, including opioid analgesics, may lead to drug diversion and abuse by individuals who seek them for other than legitimate medical use. Accordingly, these guidelines mandate that licensed practitioners incorporate safeguards into their practices to minimize the potential for the abuse and diversion of controlled substances. (MSD, 2013)

A comprehensive approach is necessary to achieve safe pain management and optimal patient functioning (physical, psychosocial, social, and work-related) while guarding against misuse, abuse, addiction, and overdose. The Delaware approach aligns with the 2011 Prescription Drug Abuse Prevention Plan, which outlines actions in four major areas to reduce prescription drug abuse:

- Education for parents, youth, and patients about the dangers of abusing prescription drugs, and for prescribers on the appropriate and safe use and proper storage and disposal of prescription drugs.
- Monitoring via Prescription Drug Monitoring Programs (PDMPs) in every state to reduce doctor shopping and diversion, and enhance PDMPs to make sure data is available across states and used by healthcare providers.
- Proper medication disposal in convenient and environmentally responsible programs to help decrease the supply of unused prescription drugs in the home.
- Law Enforcement tools to eliminate improper prescribing practices and stop pill mills. (ONDCP, 2011a)

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 drug interactions.

Delaware clinicians can reference the Delaware Pain Initiative (www.delawarepaininitiative.org/healthcare-professionals), which aims to educate the public and healthcare providers regarding the assessment and treatment of pain, reduce the barriers to effective pain management, and serve as a resource for state-of-the-art pain information.

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, the risks associated with such drugs, how to identify overdose, how to treat it, how to appropriately prescribe and monitor the use of opioids (SAMHSA, 2014d).

In brief, the best practices approved by the Medical Society of Delaware 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 (MSD, 2013)

These best practice recommendations are echoed in publications by the Federation of State Medical Boards (2013) and the American Society of Addiction Medicine. We will discuss each of these safeguards in more depth.

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, 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 (MSD, 2013).

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 (MSD, 2013).

Prescribers of extended-release and long-acting (ER/LA) 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.

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 that there are three main categories of risk factors for opioid abuse and addiction:

- Psychosocial factors
- Substance-related factors
- Genetic factors (Ferrari et al., 2012)

The factor that is the most strongly predictive of opioid abuse, misuse, or other aberrant drug-related behavior is a personal or family history of alcohol or drug abuse (Chou, 2009).

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 ER/LA 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 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, non-medical 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 and over-the-counter medicines. 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, 2014d).

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

- Signs of opioid withdrawal, including goose bumps, sweating, sniffles, dilated pupils, muscle tenderness, increased bowel sounds, rapid heartbeat, restlessness, and hypertension
- Signs of liver disease, including jaundice, enlarged liver and spleen, "stigmata" of chronic liver disease, and ascites (CAMH, 2011c)

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. Physical options for nonpharmacologic treatments for chronic pain include bandage wraps, exercise, heat or cold application, limitation of activities, postural changes, hydrotherapy, massage therapy, mechanical devices such as splits, range-of-motion exercises, and physical and occupational therapy. Options for psychological treatments for chronic pain include attention control exercise, biofeedback, cognitive-behavioral therapy, hypnosis, distraction, and psychotherapy, among others. Other interventions for chronic pain are bracing, injection and radiation therapy, nerve blocks, surgery, transcutaneous electrical nerve stimulation (TENS), and vertebroplasty (Gourlay & Heit, 2005).

"Universal Precautions"

The goal of pain treatment is to decrease pain and improve patient functioning while monitoring for adverse effects. Universal Precautions is an idea derived from infection control but applied to the use of powerful pain analgesics (Gourlay & Heit, 2005). Universal Precautions advocates a step-by-step approach to prescribing opioids for optimal pain management and minimal patient risk for adverse outcomes:

1. Diagnosis. Identify causes of chronic pain and whether the pathophysiology for the pain supports the use of opiate therapy.
2. Conduct a psychological assessment, including risk of addictive disorders.

- Assess for depression, which may lead to misuse or abuse of prescription drugs.
- Screen for patient/family history of any substance abuse.

3. Informed consent. Discuss the risks and benefits of opiate therapy, including:
   - Side effects
   - Severe respiratory depression
   - Risk of addiction
   - Risk that the opioid analgesic may not reduce pain, and may need to be discontinued if pain and function does not improve

4. Make a treatment agreement, also called a patient-physician contract. This specifies the conditions under which opiate therapy will be continued or discontinued. Both the patient and the provider should retain a copy of the agreement. The patient agrees to the following:
   - To obtain prescriptions for opiates through one provider
   - To take only the prescribed amount, only when instructed
   - To undergo random urine drug testing
   - To abstain from using illicit substances or alcohol with the prescribed drug

5. Assess pain level and function both before and after intervention. The medical provider should document baseline pain scores and level of function before opioid analgesics are started. A set of simple questions about patient functioning in the areas of work, household duties, and self-care can be rated on a 1 to 10 scale, and then reassessed during treatment, along with a pain score, to determine continuation or discontinuation of opioid therapy.
6. Conduct an appropriate trial of opioid analgesic therapy with or without adjunctive medication. Certain medications (antidepressants, muscle relaxants, neuropathic medications, and anti-inflammatory medications) can improve the response to opioids. Titrate the opiate dose to obtain pain relief and minimize side effects. If there is no improvement in pain and function, the medication should be titrated back down and discontinued.
7. Reassess pain score and level of function. At each visit, the patient's pain and level of function should be checked. Therapy should be continued, adjusted, or

discontinued based on the assessment.

8. Regularly assess the "4 A's" of pain medicine. Ongoing, routine assessment of analgesia, activity, adverse effects, and aberrant drug behaviors will support the current therapy and/or alert the physician to prescription drug misuse, abuse, tolerance, and addiction.
9. Periodically review pain diagnosis and other conditions, including possible addiction disorders. Ongoing pain management involves periodic diagnostic procedures and assessment for worsening or improving pathology. Clinicians should also assess for new disease processes and assess for addiction disorder, especially if the patient is displaying aberrant behaviors.
10. Documentation. Careful documentation of all aspects of patient evaluation, assessment, treatment, medication, response to treatment and followup is necessary to protect the clinician and the patient. Appropriate documentation showing a standard approach to chronic pain management can reduce malpractice risk and risk of regulatory sanction. (Gourlay & Heit, 2005)

The Clinicians 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 long-term 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 Myth versus Fact Sheet, containing do's and don'ts for acute and chronic pain management (PROP, 2012).

Cautious, Evidence-Based Opioid Prescribing

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. (PROP, 2012)

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?

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 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 opioid misuse, dependence, addiction, and overdose.
- The limited evidence as to the benefit of long-term opioid therapy.
- 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 policies and agreements spelled out in the treatment agreement) (FSMB, 2013)

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, 2014d)

Patient–Prescriber Agreements

The use of a patient–clinician 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. In 2012 the working group developed 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. Other agreements are available online.

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, and nature of pain is noted. 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.

According to the Medical Society of Delaware,

> The licensed practitioner shall periodically review the course of pain treatment and any new information about the etiology of the pain or the patient's state of health. Periodic review shall include, at a minimum, evaluation of the following:
>
> 2.5.1 continuation or modification of controlled substances for pain management therapy depending on the practitioner's evaluation of the patient's progress toward treatment goals and objectives.
>
> 2.5.2 satisfactory response to treatment as indicated by the patient's decreased pain, increased level of function, or improved quality of life. Objective evidence of improved or diminished function must be monitored and information from family members or other caregivers should be considered in determining the patient's response to treatment.
>
> 2.5.3 if the patient's progress is unsatisfactory, the practitioner shall assess the appropriateness of continued use of the current treatment plan and consider the use of other therapeutic modalities. (MSD, 2013)

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:

- Take a psychiatric history. Opioid therapy can cause depression and anxiety, which is especially common in patients taking high doses. Furthermore, addiction to opioids can cause depression due to negative impacts on social relationships, financial status, and other areas.
- Assess patient functioning in multiple areas including work, family, activities of daily living, comparing before and after the medication.
- Ask the patient if he or she feels any problems have resulted from the opioid use. Of particular concern are poor work function, interpersonal conflicts, and depression.
- Assess whether the patient is experiencing an altered schedule of medication, including periods of excess use.
- Determine of the present dosage is controlling pain and to what degree.
- Ask the patient if she or he experiences any withdrawal symptoms such as discomfort if going without the opioid. Has the patient ever used the medication to avoid such discomfort or other withdrawal symptoms.
- Determine whether the patient is experiencing withdrawal-mediated pain. Patients may report intense pain as the opioid wears off, pain all over, dysphoria, or severe pain and withdrawal symptoms in the morning, with quick relief after taking the opioid.
- Be aware of and on the lookout for aberrant drug-related behaviors such as multiple prescribing doctors and purchasing opioids from family or friends, or from anywhere other than a pharmacy.
- Perform a physical examination and be on the alert for physical signs and symptoms of drug abuse. (CAMH, 2011a)

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, 2011b)

Spectrum of Aberrant Drug-Taking Behaviors

More suggestive of addiction*

- Concurrent abuse of alcohol or illicit drugs
- Evidence of deterioration in the ability to function at work, in the family, or socially that appears to be related to drug use
- Injecting oral formulations
- Multiple dose escalations or other nonadherence with therapy despite warnings
- Obtaining prescription drugs from nonmedical sources
- Prescription forgery
- Repeated resistance to changes in therapy despite clear evidence of drug-related diverse physical or psychological effects
- Repeatedly seeking prescriptions from other clinicians or emergency departments without informing prescriber
- Selling prescription drugs
- Stealing or borrowing drugs from others (Passik, 2009)

*Documented in patient's medical chart.

Less suggestive of addiction

- Aggressive complaining about the need for more drugs
- Drug hoarding during periods of reduced symptoms
- Openly acquiring similar drugs from other medical sources
- Requesting specific drugs
- Reporting psychic effects not intended by the clinician
- Resistance to a change in therapy associated with tolerable adverse effects accompanied by expressions of anxiety related to the return of severe symptoms
- Unapproved use of the drug to treat another symptom
- Unsanctioned dose escalation or other nonadherence with therapy on 1 or 2 occasions (Passik, 2009).

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, 2011)

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, 2011)

General Symptoms of Narcotic Abuse

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

- 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.

Pain Assessment and Documentation Tool (PADT)

This tool assesses patient progress on long-term opioid treatment for chronic pain, and is used throughout opioid treatment. It investigates various aspects of the patient's pain, including level of physical pain, the effect of pain on the patient's day-to-day living and functioning, adverse effects of pain, and noticeable drug-seeking behaviors. This tool is not predictive of drug-seeking behavior, nor does it predict positive and negative outcomes of opioid therapy. Research has shown that the PADT has strong validity and is useful to guide ongoing assessment and documentation (Chou, 2009; Passik, 2004).

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).

Chabal 5-Point Prescription Opiate Abuse Checklist

This is a five-point questionnaire that assesses the risk of opioid abuse through evaluation of behaviors that are consistent with opioid abuse rather than answers to specific questions (Chabal et al., 2013).

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).

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

Regular urine drug screening (UDS) is appropriate for patients who are at higher risk for opioid abuse or addiction, and for any patient who is exhibiting signs of misuse or aberrant drug behavior. Urine screening can indicate drug diversion, misuse, or abuse, and the presence of an illegal drug might indicate addiction. Any nonprescribed opioid 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.

Patients must provide a detailed history of their medication use over the previous days and hours. Also, providers must inform patients that urine will be used for a urine drug screening and get patient consent before performing the laboratory screening. Ideally, urine drug screening is part of the patient-prescriber agreement that is already in place.

Pill Counting

Pill counting is one method of ensuring medication adherence and helps to prevent drug diversion. Counting pills is done to compare the number of doses remaining in a prescription container with the number of doses that should remain, if the patient adhered to the medication schedule perfectly. For this method to work, the prescriber must order the medication such that the patient has doses remaining at the time of the next visit, and then should ask the patient to bring remaining pills to the visit.

The limitation of this strategy is that one cannot be sure that absent pills were consumed; they may have been diverted instead. Healthcare professionals must keep careful records about the amount of medication dispensed, prescription date, date the prescription was filled, and how many doses remain before the refill.

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:

- Medical history and physical examination
- Diagnostic, therapeutic, and laboratory results
- Evaluations and consultations
- Treatment objectives
- Discussion of risks and benefits
- Informed consent
- Treatments
- Medications, including date, type, dosage, and quantity prescribed
- Instructions and agreements
- Periodic review (MSD, 2013)

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.

Pain specialty professional organizations and primary care professional associations should work together to support the collaboration of pain specialists with primary care practitioners and teams when primary care providers have exhausted their expertise and the patient's pain persists (IOM, 2011).

Discontinuation of Opioids

Discontinuing opioid therapy is 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, discontinuing the opioid therapy by careful, safe tapering is indicated.

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 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, 2013)

Compliance with State and Federal Laws

To prescribe, dispense, or administer controlled substances, the prescriber must be licensed in the State of Delaware 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). Prescribers who hold an active Controlled Substances Registration (CSR) must register with the Delaware Prescription Monitoring Program established in the Delaware Prescription Monitoring Act (16 Del. C.§ 4798).

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. PDMPs assist in patient care, provide early-warning signs of drug epidemics, and help to detecting drug diversion and insurance fraud.

Delaware's Prescription Drug Monitoring Program, known as Prescription Monitoring Program (PMP) authorizes the Office of Controlled Substances to establish, maintain, and monitor the PMP for the purpose of reducing the misuse of controlled substances in Delaware and promoting improvements in patient care and professional practice standards.

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.
- HHS-OIG National Hotline (800 HHS-TIPS, or 800 447 8477) or TTY 800 377 4950 or at this website.
  More information can be found here (HSS CMS, 2014).

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 take-back programs, including National Prescription Drug Take Back Days (ONDCP, 2013). 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, 2011).

According to the U.S. Drug Enforcement Agency, the most recent National Prescription Drug Take-Back Day on September 27, 2014, in Delaware collected 4,707 pounds of unwanted, unused, and expired prescription drugs from citizens (DEA, 2014). The previous National Prescription Drug Take-Back events have removed over 2,411 tons of prescription drugs from homes nationwide (DEA, 2014).

References

American Society of Addiction Medicine (ASAM). (2012). Public policy statement on measures to counteract prescription drug diversion, misuse, and addiction. Retrieved 12/1/14 from http://www.asam.org.

American Society of Addiction Medicine (ASAM). (2011). Public Policy Statement: Definition of Addiction. Retrieved from http://www.asam.org/DefinitionofAddiction-LongVersion.html.

Butler SF, Budman SH, Fernandez KC, et al. (2007). Development and validation of the Current Opioid Misuse Measure. Pain 130(1¬2):144–56. Epub 2007 May 9. Erratum in: Pain. 2009;142(1-2):169. Retrieved 11/30/14 from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1950245/.

Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (CDC MMWR). (2014). Vital Signs: Variation Among States in Prescribing of Opioid Pain Relievers and Benzodiazepines—United States, 2012. Retrieved 3/29/2014 from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6326a2.htm?s_cid=mm6326a2_w#Tab.

Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (CDC MMWR). (2013). Drug-Induced Deaths—United States, 1999–2010. Retrieved 3/29/2015 from http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a27.htm.

Centre for Addiction and Mental Health (CAMH). (2011a). Addiction Toolkit. What other information do I require to complete the assessment? Retrieved 11/16/2014 from https://knowledgex.camh.net/primary_care/toolkits/addiction_toolkit/opioid_toolkit/Pages/faq_information_for_assessment.aspx.

Centre for Addiction and Mental Health (CAMH). (2011b). Addiction Toolkit. What are the aberrant drug-related behaviours that may indicate addiction? Retrieved 11/16/2014 from https://knowledgex.camh.net/primary_care/toolkits/addiction_toolkit/opioid_toolkit/Pages/faq_behaviours_indicate_addiction.aspx.

Centre for Addiction and Mental Health (CAMH). (2011c). Addiction Toolkit. How do I assess patients to determine if they are addicted to opioids? Retrieved 11/16/2014 from https://knowledgex.camh.net/primary_care/toolkits/addiction_toolkit/opioid_toolkit/Pages/faq_assess_patients.aspx.

Chabal C, Erjavec MK, Jacobson L, et al. (1997). Prescription opiate abuse in chronic pain patients: Clinical criteria, incidence and predictors. *Clin J Pain* 13(2): 150–55. Retrieved 11/28/14 from http://www.ncbi.nlm.nih.gov/pubmed/9186022.

Chou R. (2009). Clinical guidelines from the American Pain Society and the American Academy of Pain Medicine on the use of chronic opioid therapy in chronic noncancer pain. Retrieved 11/28/2014 from http://www.anthem.com/painmanagement/documents/ClinicalGuidelines2009.pdf.

Clark C, Farnsworth, J. (2006). Program for recovering nurses: An evaluation. MEDSURG Nursing 15(4), 223–30.

Clinicians for Responsible Opioid Prescribing (PROP). (2012). Cautious, Evidence-based Opioid Prescribing. Retrieved 11/28/2014 from http://www.supportprop.org/educational/PROP_OpioidPrescribing.pdf.

Compton PA, Wu SM, Schieffer B, et al. (2008, October). Introduction of a self-report version of the Prescription Drug Use Questionnaire and relationship to Medication Agreement Non-Compliance. J Pain Symptom Manage. 36(4): 383–395. Retrieved 11/28/2014 from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2630195/.

Corsini E, Zacharoff KL. (2014, 2011). Definitions related to aberrant drug-related behavior: Is there correct terminology? Retrieved 11/14/14 from https://www.painedu.org/articles_timely.asp?ArticleNumber=58.

Delaware Department of State (DDOS), Division of Professional Regulation. (2014). Title 24, regulated professions and occupations, Delaware administrative code, 1900 board of nursing, §9.2.1.1.1. Retrieved from http://regulations.delaware.gov

Delaware Health and Social Services, Division of Public Health (DHSS). (2014). Governor announces expansion of addiction treatment services. Retrieved 3/29/2015 from http://www.dhss.delaware.gov/dhss/pressreleases/2014/treatmentservices-102814_.html.

Delaware Heath Statistics Center (DHSC) Statsheet. (2013). Drug Overdose Mortality in Delaware—2010. Retrieved 3/30/2015 from http://dhss.delaware.gov/dhss/dph/hp/files/drugoverdose2010.pdf.

Delaware Prescription Drug Action Committee (DPDAC). (2013). Recommendations October 21, 2013, Presented to Governor Jack Markell. Retrieved 3/30/2015 from http://www.medicalsocietyofdelaware.org/Portals/1/Government%20Affairs/pdacfinalreport2013.pdf.

Dowling LS, Gatchel RJ, Adams LL, et al. (2007 Sept-Oct). An evaluation of the predictive validity of the Pain Medication Questionnaire with a heterogeneous group of patients with chronic pain. J Opioid Manag. 3(5):257–66. Retrieved 11/28/2014 from http://www.ncbi.nlm.nih.gov/pubmed/18181380.

Drug Enforcement Agency (DEA). (2014). National Take Back Day: September 27, 2014. Retrieved 3/29/2015 from http://www.dea.gov/divisions/hq/2014/hq110514.pdf.

Drug Enforcement Administration (DEA). (2014). Office of Diversion Control, Title 21 USC Codified CSA. Retrieved 11/13/2014 from http://www.deadiversion.usdoj.gov/21cfr/21usc/812.htm.

Drug Enforcement Administration (DEA). (2006). Practitioner's Manual: An Informational Outline of the Controlled Substances Act. DEA Office of Diversion Control. Retrieved 12/4/2014 from http://www.deadiversion.usdoj.gov/pubs/manuals/pract/pract_manual012508.pdf.

Drug Enforcement Administration (DEA). (2000, February). A Pharmacist's Guide to Prescription Fraud. 1(1). Retrieved 11/19/2014 from http://www.deadiversion.usdoj.gov/pubs/brochures/pharmguide.htm.

Dunn D. (2005, October). Substance abuse among nurses—defining the issue. AORN J 82(4):573–82, 585–8, 592–96; quiz 599–602.

Fauber J. (2012, February 19). Milwaukee Journal Sentinal, MedPage Today, "Chronic Pain Fuels Boom in Opioids." Retrieved 12/2/14 from http://www.medpagetoday.com/neurology/PainManagement/31254.

Food and Drug Administration (FDA). (2014). Opioid Patient-Prescriber Agreement. Retrieved 11/13/2014 from http://www.fda.gov/downloads/Drugs/DrugSafety/SafeUseInitiative/UCM388151.pdf.

Food and Drug Administration (FDA). (2011). How to Dispose of Unused Medicines. Retrieved 12/3/14 from http://www.fda.gov/downloads/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/UnderstandingOver-the-CounterMedicines/ucm107163.pdf.

Federation of State Medical Boards (FSMB). (2013). Model Policy on the Use of Opioid Analgesics in the Treatment of Chronic Pain. Retrieved 12/18/2014 from http://www.fsmb.org/Media/Default/PDF/FSMB/Advocacy/pain_policy_july2013.pdf.

Ferrari R, Capraro M, Visentin M. (2012). Risk factors in opioid treatment of chronic non-cancer pain: A multidisciplinary assessment. In Pain Management: Current Issues and Opinions, Gabor Racz (Ed.). Retrieved 11/28/2014 from http://www.intechopen.com/books/pain-management-current-issues-and-opinions/risk-factors-in-opioid-treatment-of-chronic-non-cancer-pain-a-multidisciplinary-assessment.

Food and Drug Administration (FDA) (2011). FDA Blueprint for Prescriber Education for Extended-Release and Long-Acting Opioid Analgesics. Reference ID: 3612128. Retrieved 11/13/2014 from http://www.fda.gov/downloads/forindustry/userfees/prescriptiondruguserfee/ucm361069.pdf.

Glover S, Girion L. (2014, May 22). In the Los Angeles Times, "Counties sue narcotics makers, alleging 'campaign of deception.'" Retrieved 12/2/2014 from http://www.latimes.com/local/la-me-rx-big-pharma-suit-20140522-story.html#page=1.

Gourlay DL, Heit HA. (2005). Universal Precautions in Pain Medicine: The Treatment of Chronic Pain With or Without the Disease of Addiction. Retrieved 11/21/2014 from http://www.medscape.org/viewarticle/503596.

Inciardi, J, Surratt, H, Cicero, T, et al. (2009). Prescription Opioid Abuse and Diversion in an Urban Community: The Results of an Ultra- Rapid Assessment. Pain Med. 2009 Apr; 10(3):537–548. Retrieved 3/28/2015 from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2719877/.

International Association for the Study of Pain (IASP). (1994). IASP Taxonomy, from Classification of Chronic Pain, 2nd ed. Edited by H. Merskey and N. Bogduk. Seattle: IASP Press. Retrieved 11/28/2014 from http://www.iasp-

Institutes of Medicine (IOM). 2011. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington, DC: The National Academies Press. Retrieved 11/25/14 from http://www.nap.edu/catalog/13172/relieving-pain-in-america-a-blueprint-for-transforming-prevention-care.

Joint Statement from 21 Health Organizations and the Drug Enforcement Administration. (2002). Promoting Pain Relief and Preventing Abuse of Pain Medications: A Critical Balancing Act. Retrieved 11/13/2014 from http://www.deadiversion.usdoj.gov/pubs/advisories/painrelief.pdf.

Kosten TR, George TP. (2002, July). The neurobiology of opioid dependence: Implications for treatment. Sci Pract Perspect. 1(1):13–20. Retrieved 11/18/2014 from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2851054/.

McDonald DC, Carlson KE. (2013). Estimating the prevalence of opioid diversion by "doctor shoppers" in the United States. PLOS ONE 8(7):e69241, 2013. Retrieved 11/26/2014.

Medical Society of Delaware (MSD) website. Retrieved 3/29/2015 from http://www.medicalsocietyofdelaware.org/GovernmentAffairs/StateLevel/PrescriptionDrugAbuse.aspx

Medical Society of Delaware (MSD). (2013). MSD Guidelines for the Use of Controlled Substances for the Treatment of Pain. Retrieved 3/29/2015 from http://www.medicalsocietyofdelaware.org/Portals/1/PMP/Guidelines%20for%20Controlled%20Substances%20for%20treatment%20of%20Pain%20April%202013.pdf.

National Center for Health Statistics (NCHS). (2014). Health, United States, 2013: In Brief. Hyattsville, MD. Retrieved 11/26/2014 from http://www.cdc.gov/nchs/data/hus/hus13_InBrief.pdf.

National Council of State Boards of Nursing (NCSBN). (2011). Substance Use Disorder in Nursing: A Resource Manual and Guidelines for Alternative and Disciplinary Monitoring Programs. Retrieved 11/13/2014 from https://www.ncsbn.org/SUDN_11.pdf

National Institute on Drug Abuse (NIDA). (2014). Prescription drugs: Abuse and addiction (NIH Pub Number 11-4881). Retrieved 11/18/14 from http://www.drugabuse.gov/publications/research-reports/prescription-drugs.

National Institute on Drug Abuse (NIDA). (2012a). Health Effects Chart. Retrieved 11/18/2014 from http://www.drugabuse.gov/drugs-abuse/commonly-abused-drugs/health-effects#prescriptions_opioids.

National Institute on Drug Abuse (NIDA). (2012b). Understanding Drug Abuse and Addiction. Retrieved 11/18/14 from http://www.drugabuse.gov/publications/drugfacts/understanding-drug-abuse-addiction.

National Institute on Drug Abuse (NIDA). (2011). Drug-Related Hospital Emergency Room Visits. Retrieved from http://www.drugabuse.gov/publications/drugfacts/drug-related-hospital-emergency-room-visits).

National Institutes of Health (NIH). (2011, Spring). NIH MedLinePlus. Chronic Pain: Symptoms, Diagnosis, & Treatment. 6(1):5–6. Retrieved 11/28/2014 from http://www.nlm.nih.gov/medlineplus/magazine/issues/spring11/articles/spring11pg5-6.html.

National Survey on Drug Use and Health (NSDUH). (2013). Results from the 2012 National Survey on Drug Use and Health: Mental Health Findings and Detailed Tables. Retrieved December 20, 2014 from http://media.samhsa.gov/data/NSDUH.aspx.

Office of National Drug Control Policy (ONDPC). Office of Public Affairs. (2014). Fact Sheet: Opioid Abuse in the United States. Retrieved 11/13/ 2014 from http://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/opioids_fact_sheet.pdf.

Office of National Drug Control Policy (ONDCP). (2013). Delaware Drug Control Update. Retrieved 3/27/2015 from https://www.whitehouse.gov/sites/default/files/docs/state_profile_-_delaware_0.pdf.

Office of National Drug Control Policy (ONDCP). (2011a). Fact Sheet: A Response to the Epidemic of Prescription Drug Abuse. Retrieved 11/13/2014 from http://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/prescription_drug_abuse_fact_sheet_4-25-11.pdf.

Office of National Drug Control Policy (ONDCP). (2011b). Prescription Drug Abuse. Retrieved 11/21/14 from http://www.whitehouse.gov/ondcp/prescription-drug-abuse.

Passik SD. (2009, July). Issues in long-term opioid therapy: Unmet needs, risks, and solutions. Mayo Clin Proc. 84(7): 593–601. Retrieved 11/13/ 2014 from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2704131/

State of Delaware Code. Retrieved 3/29/2015 from http://delcode.delaware.gov/title16/c047/sc07/index.shtml#4798.

State of Delaware, Board of Nursing. Section 9.2.1.1.1. Retrieved 3/29/2015 from http://regulations.delaware.gov/AdminCode/title24/1900.shtml.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014a). NSDUH. (2013). Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-48, HHS Publication No. (SMA) 14-4863. Rockville, MD. Retrieved 11/13/2014 from http://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014b). Specific Populations and Prescription Drug Misuse and Abuse. Retrieved from 11/13/2014 http://www.samhsa.gov/prescription-drug-misuse-abuse/specific-populations.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014c). Prescription Drug Misuse and Abuse. Retrieved 11/18/2014from http://www.samhsa.gov/prescription-drug-misuse-abuse.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014d). Opioid Overdose Prevention Toolkit. HHS Publication No. (SMA) 14-4742. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved 11/18/2014 from http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit-Updated-2014/SMA14-4742 11/18/2014.

Substance Abuse and Mental Health Services Administration Center for Behavioral Health Statistics and Quality, Treatment Episode Data Set (SAMHSA, TEDS). (2014). Based on administrative data reported by States to TEDS through Oct 24, 2014. Retrieved 3/28/2015 from http://wwwdasis.samhsa.gov/webt/quicklink/DE12.htm.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2013). The CBHSQ Report: A Day in the Life of American Adolescents: Substance Use Facts Update. Retrieved 11/13/2014 from http://www.samhsa.gov/data/sites/default/files/CBHSQ128_1/CBHSQ128/sr128-typical-day-adolescents-2013.htm.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2011). Leading Change: A Plan for SAMHSA's Roles and Actions 2011–2014. HHS Publication No. (SMA) 11-4629. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2008) States In Brief: Delaware. A Short Report from the Office of Applied Statistics. Retrieved 3/28/2015 from http://archive.samhsa.gov/data/StatesInBrief/2k9/DELAWARE_508.pdf.

Trust for America's Health (TAH). (2013). Prescription Drug Abuse: Strategies to Stop the Epidemic 2013. Retrieved 3/27/2015 from http://healthyamericans.org/reports/drugabuse2013/TFAH2013RxDrugAbuseRpt12_no_embargo.pdf.

U.S. Department of Health and Human Services, Centers for Medicare & and Medicaid Services (CMS). (2014). Partners in Integrity: What Is a Prescriber's Role in Preventing the Diversion of Prescription Drugs? Retrieved 12/2/2014 from http://www.cms.gov/medicare-medicaid-coordination/fraud-prevention/medicaid-integrity-education/provider-education-toolkits/downloads/prescriber-role-drugdiversion.pdf.

University of Delaware Center for Drug and Alcohol Studies (UDCDAS) and Its State Partners (2015). 2015 Delaware State Epidemiological Profile: Consumption, Context, and Consequences of Alcohol, Tobacco, and Other Drugs Abuse. Retrieved 3/26/2015 from http://www.cas.udel.edu/cdhs/ddata/Documents/2015%20Delaware%20Epidemiological%20Report.pdf

(VA/DoD). (2010). Tapering and Discontinuing Opioids factsheet. VA/DoD Clinical Practice Guideline for the Management of Opioid Therapy for Chronic Pain. Retrieved 12/1/14 from http://www.healthquality.va.gov/guidelines/Pain/cot/OpioidTaperingFactSheet23May2013v1.pdf.

WebMD Substance Abuse and Addiction Health Center. (2013). Painkillers, Narcotic Abuse, and Addiction. Retrieved 11/13/2014 from http://www.webmd.com/mental-health/addiction/painkillers-and-addiction-narcotic-abuse#0.

Wu SM, Compton P, Bolus R, et al. (2006). The addiction behaviors checklist: Validation of a new clinician-based measure of inappropriate opioid use in chronic pain. J Pain Symptom Manage. 32(4):342–51. Retrieved 11/13/2014 from http://www.emergingsolutionsinpain.com/images/pdf/reslib/Addiction_Behaviors_Checklist.pdf.

Yudko E, Lozhkina O, Fouts A. (1997, March). A comprehensive review of the psychometric properties of the Drug Abuse Screening Test. J Subst Abuse Treat. 32(2):189-98. Retrieved 11/28/14 from http://www.ncbi.nlm.nih.gov/pubmed/17306727.

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. A lawsuit filed in 2014 by the city of Chicago alleges that an academic studies group received $2.5 million from narcotics manufacturers even as they became a significant force in liberalizing use of opioids for noncancer pain.:

a. True
b. False

7. The rate of sales of opioid pain relievers in Delaware in 2010 compares to the national rate in what way?:

a. It is roughly the same.
b. It is higher.
c. It can’t be compared because the picture is unclear.
d. It is somewhat lower.

8. A 2009 study reveals the following societal costs of drug abuse in the United States:

a. Obesity rates increasing year for year.
b. Individuals failing to get standard vaccinations.
c. People hospitalized with mental health issues.
d. Negative impacts on on-the-job performance.

9. 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.

10. Drug abusers are generally from lower socioeconomic strata of society.:

a. True
b. False

11. 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.

12. 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.

13. 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.

14. 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.

15. Clinicians for Responsible Opioid Prescribing published a document in 2012 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.

16. 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.

17. 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)

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

a. True

b. False

19. Delaware's Prescription Drug Monitoring Program is known as:

a. D-PAP.

b. DSAPP.

c. CSMPaP.

d. PMP.

20. Drug take-back programs have been ignored by the citizens of Delaware.:

a. True

b. False

Answer Sheet

DE: Substance Abuse, Chemical Dependency, and Drug Diversion

Name (Please print your name): _____

Date: _____

Passing score is 80%

1. _____
2. _____
3. _____
4. _____
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20. _____

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.

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

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

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

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

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

d. State 7 symptoms of drug withdrawal from opioids at and least 4 best practice recommendations by the Medical Society of Delaware.

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

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

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

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

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

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

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

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

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

i. Describe Delaware's Prescription Drug Monitoring Programs (PDMPs) and explain drug take-back programs.

○ 5 ○ 4 ○ 3 ○ 2 ○ 1

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

○ 5 ○ 4 ○ 3 ○ 2 ○ 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?

5 4 3 2 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
- 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.
- 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
- ○ 46+

I completed this course on:

- ○ My own or a friend's computer.
- ○ A computer at work.
- ○ A library computer.
- ○ A tablet.
- ○ A cellphone.
- ○ 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 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): _____

* City: _____ * State: _____ * Zip: _____

* Card type:

○ Visa ○ Master Card ○ American Express ○ Discover

* Card number: _____

* CVS#: _____

* Expiration date: _____