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Pain Medicine: Accidental Lethal Drug Overdoses

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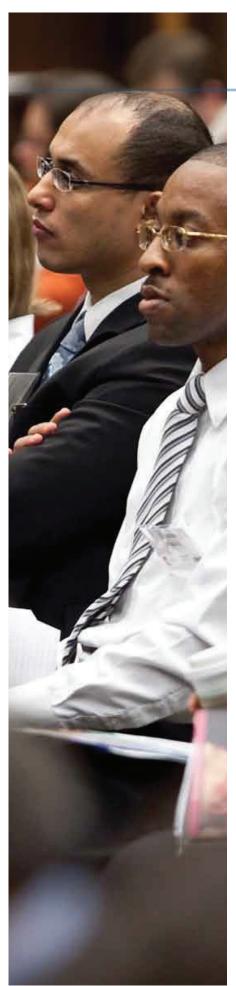
including 1.5 hours of Ethics/Professional Responsibility

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Release date: Nov. 15, 2012 Expiration date: Nov. 15, 2015







Providing Oncology Education for Primary Care Physicians

History

TMA formed the Physician Oncology Education Program (POEP) in 1987 to carry out the recommendations of the *Texas Cancer Plan* regarding physician education. POEP is funded in large part by the Cancer Prevention and Research Institute of Texas and is directed by a steering committee of experts focused on all facets of cancer prevention and control. Since its creation, POEP has provided cancer prevention and screening training to more than 100,000 Texas physicians and other professionals.

Focus

POEP's focus is educating primary care physicians about state-of-theart advancements in science and technology as they relate to cancer prevention, screening, early detection, control, and survivorship issues, including the physician role in influencing behavior.

Educational Materials

POEP has developed cancer education resources and clinical tools for practicing physicians to enhance their ability to reduce cancer morbidity and mortality in Texas.

We provide educational posters and pocket guides on cancer screening guidelines, tobacco cessation, skin cancer, and human papillomavirus vaccination. These items are available at no cost for Texas medical offices.

In addition, our website offers home study and Internet-based courses on

pain management, tobacco cessation, ovarian cancer, late effects of cancer treatment, and genetic cancers. All these topics have been approved for *AMA PRA Category 1 Credits*TM, including ethics and/or professional responsibility. Physicians and other health care professionals may download the items free of charge; however, there is a small fee for those wishing to receive continuing medical education (CME) credit for their participation.

Speakers' Bureau

TMA's Physician Oncology
Education Program Speakers' Bureau
encompasses more than 100 cancer
experts across the state who volunteer
their time to speak to physicians and
other health care professionals on
cancer prevention, screening, early
detection, and control issues. Many
lectures are approved for CME credit,
including ethics.

It's easy to request a POEP speaker. Contact us with your topic choices and ideal dates for programs. We recommend 60 to 90 days' lead time for the recruitment of speakers. The POEP staff will contact members of the Speakers' Bureau to determine availability for the requested dates and coordinate the speaker's schedule. POEP reimburses the speaker for travel, lodging, meal expenses, and any fees associated with his or her services. In some cases, we may be able to assist with costs associated with room rentals, audio-visual needs, and production of supplemental materials. There is no cost to the requesting institution or organization.



Physician Oncology Education Program
Physicians Caring for Texans



Pain Medicine: Accidental Lethal Drug Overdoses

Target Audience

"Pain Medicine: Accidental Lethal Drug Overdoses" is designed for physicians and physician assistants.

Original release date: Nov. 15, 2012

Expiration date: Nov. 15, 2015

Instructions for Completing This Course

Physicians who complete the entire activity, including the knowledge assessment and evaluation, may receive continuing medical education credit. The cost of this course is \$35. To expedite your CME transcript, please review the course online, and complete the test and evaluation located at www.texmed.org/opioidabuse.

Otherwise, please mail the assessment, the evaluation, and payment information to POEP, 401 W. 15th St., Austin, TX 78701, or fax the documents (including credit card information) to (512) 370-1693. If you have questions, please call (512) 370-1673 or e-mail laura.wells@texmed.org.

The expiration date for this activity is Nov. 15, 2015. TMA considers the postmark or date stamp the completion date of the activity. Items postmarked or faxed after the expiration date will not be considered for continuing medical education credit.

Funding

The Physician Oncology Education Program is funded primarily by the Cancer Prevention and Research Institute of Texas.

Accreditation

The Texas Medical Association is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Hour Designation

The Texas Medical Association designates this enduring material for a maximum of 1.5 AMA PRA Category 1 CreditsTM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

TMA has designated "Pain Medicine: Accidental Lethal Drug Overdoses" for 1.5 hours of education in medical ethics and/or professional responsibility.

Author Disclosures of Commercial Affiliations

Policies and standards of the Texas Medical Association, the Accreditation Council for Continuing Medical Education, and the American Medical Association require that speakers and planners for continuing medical education activities disclose any relevant financial relationships they may have with commercial entities whose products, devices or services may be discussed in the content of the CME activity.

These speakers/moderators have no relevant financial relationships to disclose:

Krista Crockett, Executive Director, Texas Pain Society

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This author disclosed the following relationships:

Graves T. Owen, MD, President-Elect, Texas Pain Society

Medical Director, Texas Pain Rehabilitation Institute, PA

Dr. Owen disclosed that he served on an advisory panel focusing on an electronic medical record system for Endo Pharmaceuticals.

Learning Objectives

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

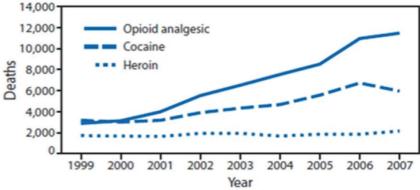
- 1. Discuss the number of opioid overdoses in the United States,
- Restate the most commonly prescribed drugs detected in 2011 drug-related fatalities,
- 3. Cite common dangerous drug cocktails, and
- 4. Appraise a patient's risk for substance abuse.

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Figure 1: Number of Unintentional Drug Overdose Deaths Involving Opioid Analgesics, Cocaine, and Heroin — United States, 1999-2007



National Vital Statistics System. Multiple cause of death dataset. Available at www.cdc.gov/ncbs/nvss.htm.

Summary

In the United States, prescriptive drug abuse has reached epidemic levels. As a result, accidental lethal drug overdoses are increasing in proportion to the incidence of prescription abuse. The Texas Travis County Medical Examiner's Office (TCMEO) collected data from 2011 involving accidental lethal drug overdoses. This paper will discuss its findings, identify the proper role of controlled substances in pain management, and make suggestions for reducing these preventable deaths.

Introduction

The United States is experiencing a prescription drug abuse epidemic (1). The unintentional lethal prescription overdoses (ODs) have increased in proportion to opioid prescribing patterns (2). Opioids are the primary drug resulting in these preventable

deaths. For each unintentional lethal prescription OD, nine people are admitted for substance abuse treatment, 35 visit the emergency department, 161 report drug abuse or dependency, and 461 report nonmedical use of opioid analgesics (1). Among the victims of lethal prescription OD, the rural and more impoverished counties, Medicaid populations, and mental illness are overrepresented (1, 2). Deaths from opioid prescriptions now exceed deaths from cocaine and heroin combined (Fig. 1).

The opioid prescription drug morbidity and mortality rates correlate with the per-kilogram/10,000 population sales of opioids. States with higher opioids sales have a higher opioid death rate for unintentional overdoses (2). While Texas was the 43rd highest state for drug overdose deaths, it is surrounded by states with a significantly higher drug OD problem (Fig. 2).

Figure 2: Drug OD Rates: Deaths per 100,000 in 2008 (2)

Country/State	OD Rate	National Ranking
United States	11.9	NA
New Mexico	27.0	1
Oklahoma	15.1	9
Louisiana	15.0	11
Arkansas	13.1	22
Texas	8.6	43

It is estimated that 4.8 percent of the U.S. population age 12 or older uses opioids nonmedically. Drug OD deaths are approaching the number of deaths from motor vehicle accidents, the leading cause of injury death (2).

The use of chronic opioid therapy (COT) has been controversial for some time, but the controversy is increasing in a retractile manner. Currently there is no outcome data to justify COT, but recent information clearly has demonstrated a significant risk of adverse outcomes up to and including death (3). About half of the lethal ODs involved at least one other central nervous system (CNS) depressant including alcohol (4).

The U.S. Congress' declaration of the "Decade of Pain Control and Research" from 2000 to 2010 was a well-intended campaign to educate the public and health care community about the importance of treatment for individuals suffering with pain conditions. Unfortunately, many in the pharmaceutical industry used this national awareness to promote opioid management as the primary treatment modality for pain despite a lack of scientific data to support this treatment. The national sales of kilograms of opioids per 10,000 population skyrocketed during this advertising campaign. Many of the socalled thought leaders have retracted their pro-opioid position to one of "responsible opioid prescribing" (5, 6, 7). Many pro-opioid advocates are under investigation by the U.S. Senate for possible conflict of interests with the pharmaceutical industry (8).

TCMEO Data for 2011

The Travis County Medical Examiner's Office noticed a trend of increasing accidental lethal prescription OD and started to track the data.

In 2011, TCMEO investigated 162 accidental drug-related deaths that occurred in Travis County (a 40-percent increase from 2010). In 2011, prescription drugs accounted for more deaths (71) than illicit drugs (38). In an additional one-third of the cases, the decedent had consumed a combination

of illicit drugs and prescription drugs. The most frequently detected class of prescription drugs was opioid medications, which were detected in just more than half the cases. Benzodiazepines (sedatives) were detected in almost half of the cases.

The most common prescribed drugs detected in 2011 drug-related fatalities were:

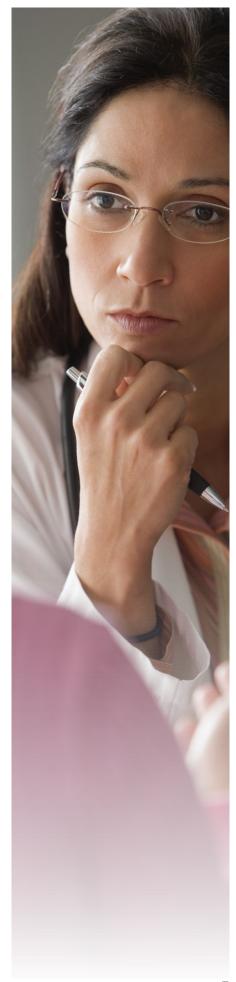
Drug	Cases
Hydrocodone (Vicodin, Norco)	43
Xanax	32
Clonopin	29
Valium	23
Methadone	21
Oxycodone	17
Soma	12

Most of the deaths from prescription drugs involved taking more than one medication. In approximately one-third of the deaths with prescription drugs detected, the decedent had taken more than type of one pain medication or more than one type of sedative. In less than one-third of the drug deaths in which prescription drugs were detected, the decedent had no prescriptions for the drugs. A valid prescription for the overdose causative drugs was present in 79 percent of the cases.

Alcohol was detected in nearly onethird of people dying from prescription drugs (with no illicit drugs detected). Ninety-three percent of the deaths in which prescription drugs were detected (and 70 percent of all drug deaths) had pain medications, sedatives, or alcohol detected, often in combination.

Sixty percent of the people who died had a history of addiction, while 50 percent had a psychiatric diagnosis.

One hundred percent of these deaths were preventable.





What Can Be Done?

1. Exhaust conservative care.

Chronic opioid therapy is an increasingly controversial treatment strategy, as long-term data with objective outcome metrics justifying this treatment do not exist (3). However, there is significant data that adverse events related to COT are occurring at a concerning rate. Principles of responsible COT prescribing should include exhausting all reasonable and conservative treatment options prior to starting COT.

2. Do a risk assessment.

Texas Medical Board rule 170.3(a)(1)(B) (v) requires that, in the case of chronic pain, any "history and potential for substance abuse" shall be documented (9). (Note: Subsection [b] states that strict adherence is not required if rationale indicates sound clinical judgment.) The word "shall" makes this a required assessment.

While there is no data to predict who will do well with COT, a growing body of evidence has identified numerous risk factors predictive of aberrant drugtaking behaviors.

The chart below lists the risk factors associated with aberrant drug use that have been identified by numerous studies

Several screening psychometrics are readily available for stratifying COT risk factors. The Opioid Risk Tool (ORT); Pain Medication Questionnaire (PMQ); Diagnosis, Intractability, Risk, Efficacy Score (DIRE); and the Screener and Opioid Assessment for Patients With Pain-Revised (SOAPP-R) are widely accepted tools for opioid risk assessment. A formal psychological assessment can be used as well. The CAGE questionnaire and other screening tools can assess problematic alcohol use. However, according to Chou (12), the quality of the evidence for risk stratification remains weak.

Risk assessments typically categorize patients into low-, moderate-, and high-risk groups. Recent data suggest the SOAPP-R may be superior to the ORT, PMQ, and DIRE (13, 14). Only a psychological assessment provides similar sensitivity and specificity. However, the clinical experience of the mental health provider can affect the reliability of the psychological interview in accurately predicting the patient's actual risk classification (15). In Jones's study (15), the percentage of patients identified in a given risk group who eventually would be discharged for aberrant drugrelated behavior are described in Fig. 3. The best tools (SOAPP-R and psychological interviews) correctly identified 70-77 percent of the patients who eventually would be discharged. Unfortunately, even the best tools failed

Risk Factors Associated With Aberrant Drug Use

- Personal or family history of alcoholism or substance abuse (past or present),
- Nicotine dependency,
- Age < 45 years,
- Depression,
- Impulse control problems (attention deficit disorder, bipolar disease, obsessive-compulsive disorder, schizophrenia, personality disorders),
- Hypervigilant states (post-traumatic stress disorder, any physical or emotional abuse history),
- · Somatoform disorder,
- · Organic mental syndrome,
- · Pain after a motor vehicle accident, and
- Pain involving more than three regions of the body (10, 11).

Figure 3: Risk Rating of Discharged Patients by Each Risk Measurement Tool (15)

	Low risk n (%)	High risk n (%)	
SOAPP-R	30 (23%)	102 (77%)	
Psychologist	40 (30%)	92 (70%)	
PMQ	74 (56%)	58 (44%)	
ORT	94 (71%)	38 (29%)	

KEY

SOAPP-R is the Screener and Opioid Assessment for Patients with Pain-Revised **Psychologist** is results from a formal psychological evaluation.

PMQ is the Pain Medication Questionnaire.

ORT is the Opioid Risk Tool.

to identify 23-30 percent of patients that eventually would demonstrate aberrant drug-taking behaviors severe enough to result in discharge from the clinic. However, the SOAPP-R and psychological interview were significantly more accurate than the PMQ or ORT. Although the psychological interview and SOAPP-R are helpful tools, they should not be used as an isolated modality. A quality risk assessment has the potential to reduce the 60 percent of lethal accidental ODs that result from a single prescribing physician.

In **Fig. 3** each patient admitted to a pain clinic in Knoxville, Tenn., was assessed using each psychometric instrument listed above. The patients were tracked for one year while being treated for pain with opioids. The table above represents the sensitivity of the listed instruments to predict future discharge from the clinic for aberrant drug taking behaviors.

3. Stress that access to COT is a privilege, not an entitlement.

Evidence-based medicine has not been able to correlate disability perception with the severity of pathological processes. However, there is a strong correlation between disability perception and unstable psychosocial comorbidities (16). Therefore, it is ill-advised to assume that because someone is poorly functioning, the

low function is related to the severity of pain. In chronic pain patients with poor functional status, unstable psychosocial comorbidities are the rule rather than the exception (17).

Deyo and Edlund (18, 19) found that COT use is increasing more rapidly in patients with mental health and/ or substance abuse disorders than in patients without these disorders. This is particularly worrisome because patients with mental health and/ or substance abuse disorders are at greatest risk of using controlled substances nontherapeutically and dying from accidental drug overdoses (1, 2). This correlation is supported by the TCMEO data, in which 60 percent of lethal OD cases had a history of addiction, and 50 percent had a psychiatric history. This data may suggest poor risk assessment by the prescribing clinician.

Unstable psychosocial comorbidities are predictive of aberrant drug-taking behavior, disability perception, and poor outcomes from interventional treatments. Therefore, some individuals may simply be poor candidates for COT as the risk is outweighed by any known benefit. Patients are best served by focusing initially on conservative, evidenced-based treatments.

COT should be considered a highrisk, nonevidenced-based treatment reserved for well-selected individuals after exhausting all conservative care. Remember the "first do no harm" tenet of medicine. Psychological



consultation and treatment using cognitive behavioral therapy (CBT) and motivational interviewing (MI) techniques is a strong, evidenced-based, conservative treatment that is underutilized. Combining CBT, MI, and good-quality physical therapy in a systematic stepwise fashion is a very effective way of restoring function and quality of life to psychosocially distressed individuals. Cautious supplementation with interventional techniques such as injections may aid the rehabilitation.

Failure to comply with conservative treatment does not entitle an individual to progress to more dangerous elective treatments. Any clinician willing to treat chronic pain patients must be willing and able to set boundaries and be able to politely and professionally say no to unreasonable and unjustified treatments. This is especially true when prescribing any controlled substance.

4. Avoid mixing CNS depressants: a death cocktail.

According to the Centers for Disease Control and Prevention (CDC), 50 percent of accidental lethal drug ODs occurred as a result of a combination of CNS depressants (4). The TCMEO data identified a larger percentage of deaths related to dangerous cocktails. The most common mixture is from an opioid combined with a benzodiazepine and/or a relaxant like Soma. The CDC data are consistent with the TCMEO data.

Benzodiazepine: Similar to COT, chronic benzodiazepine therapy (CBeT) does not have any evidencedbased data to justify its long-term use. While it has been practiced for several decades, more recent data suggest it can be associated with rebound anxiety. Of course, just like COT, it is associated with both psychological and physiological dependence, and anxiety symptoms may decrease by discontinuation of CBeT (20, 21). Evidence-based treatment guidelines such as the Official Disability Guidelines do not recommend the treatment of pain-related anxiety with benzodiazepines (22). Unlike COT, abrupt discontinuation of CBeT may have life-threatening consequences.

Carisoprodol (Soma): Carisoprodol, a controlled substance, is a drug that is metabolized to meprobamate. Meprobamate is a euphoric and when co-administered with opioids and/or benzodiazepines, the euphoria effect of these CNS depressants is increased. Soma was approved by the Food and Drug Administration prior to the requirements for testing with doubleblind placebo for controlled substances. Soma is a known drug of abuse with no evidence-based proven therapeutic benefits. The literature has argued that the known risk of prescribing Soma is outweighed by a lack of known benefits (23, 24, 25).

Alcohol: Alcohol is a commonly available CNS depressant that has been associated with potentiating the respiratory depressant effects of other CNS depressants. Alcohol was detected in nearly one-third of people dying from prescription drugs (with no illicit drugs detected).

Thus, patients treated with CNS depressants should be advised against consuming alcohol and warned of the lethal effects when used in combinations.

Dangerous drug cocktails:

According to the TCMEO and CDC data, mixing CNS depressants accounted for approximately 50 percent or more of the accidental drug OD deaths. Therefore, especially given the lack of any evidenced-based literature to justify mixing the drug combinations, a mixture of CNS depressants should be avoided. When it appears reasonable and necessary to prescribe a CNS depressant such as a benzodiazepine or an opioid, the clinician should determine which treatment modality is more critical and use that modality exclusively and should avoid adding another class of CNS depressants.

Common cocktails of abuse include the "Soma Coma" (codeine and Soma), "Vegas Cocktail" (hydrocodone and Soma), and the "Holy Trinity" aka "Houston Cocktail" (hydrocodone plus a benzodiazepine, usually Xanax and Soma). Some geographic regions also see abuse of dextromethorphan with codeine in isolation or in combination with the above drug cocktails. Simply avoiding issuing a prescription for these dangerous drug combinations could have a significant impact on morbidity and mortality.

5. Assess therapeutic benefit.

According to the CDC, 40 percent of the lethal accidental prescription ODs occurred in individuals who were prescribed high doses of opioids by a single practitioner (1). High-dose COT was defined as greater than or equal to 100 morphine equivalents using standard opioid conversion tables. High-dose COT also is associated with a number of adverse events. Therefore, once the decision is made to begin COT, it is imperative upon the prescribing clinician to ensure that a therapeutic benefit from COT is achieved. This is no different from any other area of medicine; as an example, no reasonable clinician would continue to prescribe an antihypertensive if the medication failed to lower the blood pressure. However, how should one assess a therapeutic benefit from pain — a purely subjective experience often distorted by psychosocial comorbidities?

Physicians want to believe their patients. It is a fundamental element of our training to take a history of subjective symptoms and incorporate it into the analysis. However, this makes clinicians susceptible to the truth bias.

The prevalence of addiction in the general population is estimated to be 3-16 percent (26). Although addiction in the pain management setting has been considered uncommon, more recent studies examining urine drug testing (UDT) suggest that the rate of problematic drug-related behaviors in the chronic pain clinic setting is far higher (17, 27, 28, 29, 30, 31, 32, 33, 34).

Therefore, evidence-based guidelines emphasize that function should be the primary outcome metric. Functional assessments will mitigate the risks that the individual may have a hidden agenda such as pursuit of disability or obtaining a drug of choice (secondary gain). Patient satisfaction, although important, does not distinguish a happy and content patient from an individual with a hidden agenda if that agenda has been satisfied.

Failure to achieve a clinically meaningful and objective functional improvement after a reasonable titration period should result in discontinuation of COT if a therapeutic benefit has not been achieved. Nontherapeutic prescribing is currently the most common standard-of-care violation that results in physician sanctions by the Texas Medical Board.

Physicians should never prescribe COT at doses above their comfort level, which would make weaning off the medication difficult. The prescribing clinician should have an "exit strategy" prior to committing to COT. The clinician must know when and how to discontinue COT. Controlled substances are controlled because of their abuse potential. Therefore, a physician should ensure that the therapeutic benefit outweighs the risk. Additionally, a physician should weigh whether "clinically meaningful" results should be considered "game changing" in magnitude. For example, although increasing walking tolerance from 10 to 20 feet may be a 100-percent improvement, 20 feet of walking duration is hardly clinically significant or game changing.

6. Use Urine Drug Testing.

The Texas Pain Society, in response to membership requests, recently published an article that outlines practical urine drug testing (UDT) frequency (35) based on the individual's risk stratification, which is found by performing risk assessments. Readers are encouraged to read the full article on UDT for more details and information, as it is beyond the intended scope of this paper.

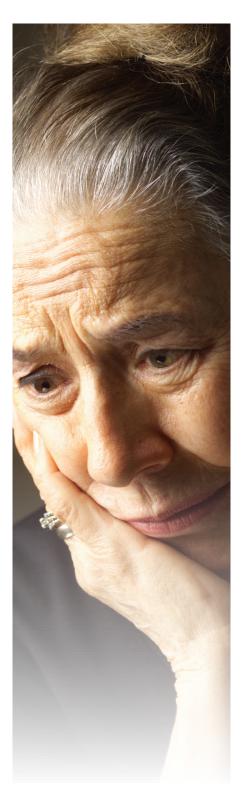
Recent studies have revealed that among patients with chronic pain who are receiving COT, the percentage of those with aberrant UDT results indicate a surprising frequency: 9-50 percent (Fig. 4). Aberrant UDT results may indicate any of a spectrum of problematic behaviors, from addiction to chemical coping. Aberrant drugtaking behavior is both a patient and a public safety concern. Random UDT combined with adherence monitoring has been shown to reduce the occurrence of aberrant drug-taking behaviors (36). However, the absence of aberrant-drug taking behaviors is a separate issue from establishing the presence or absence of a therapeutic

Pain is subjective, and clinicians must rely on subjective reports from patients to make treatment decisions. Addicted individuals, as part of their disease state, may not provide truthful self-reports if the report could result in their not receiving their drug of choice. Significant data has shown that self-reported drug use in the chronic pain population is often unreliable (37).

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Figure 4: Incidence of Aberrant Urine Drug Testing Results

Study	Percent of patients with chronic pain who are taking opioid medications with aberrant UDT results.
Cook RF, 1995 (42)	50
Fishbain DA, 1999 (43)	46.5
Hariharin J, 2007 (44)	38
Ives TJ, 2006 (45)	32
Berndt S, 1993 (46)	32
Katz NP, 2003 (47)	29
Michna E, 2007 (48)	45
West R, 2010 (34)	9-33
Manchikanti L, 2006 (11)	16



Therefore, clinicians must analyze a combination of subjective input and objective observations to assess their patients. Objective observations include pill counts (admittedly difficult to do), prescription monitoring programs, and monitoring for aberrant behaviors. Aberrant behaviors may include early refill requests (self-escalation), reports of "lost or stolen" medications, treatment noncompliance, and UDT that does not include the prescribed drug and may include illicit or nonprescribed controlled substances. Monitoring of aberrant behavior alone is inadequate and frequently results in underestimated aberrant drug-taking behavior (18, 28, 37). A combination of monitoring for aberrant behavior and use of UDT has been recommended as the best available monitoring strategy (11.12).

The differential diagnosis for aberrant drug-taking behaviors includes addiction, chemical coping, organic mental syndrome, personality disorder, self-medicating depression, anxiety, situational stressors, and criminal intent. Aberrant UDT results provide valuable and objective information that may assist the clinician in working through the differential diagnoses.

Noncompliance suggests hidden agendas, a lack of insight into treatment goals and proven benefit(s), unrealistic expectations of treatment outcome(s), passive coping mechanisms, chemical coping, addiction, or an amotivational state that inhibits active participation such as depression (38). Due to the extensive overlap of various psychological comorbidities and chronic pain states, discerning the exact reason for medication noncompliance is often difficult.

7. Use the Prescription Monitoring Program.

CDC has determined that 40 percent of accidental lethal ODs from prescription medications result from individuals who seek care from multiple physicians (1). Obtaining controlled substances that are not medically necessary from multiple providers by misrepresentation, fraud, forgery, deception, subterfuge, or concealment

of a material fact is referred to as "doctor shopping" and is a felony in Texas.

With respect to doctor shoppers, historically physicians had few tools to identify this problem. When it was identified, it was usually long after the doctor shopping event had occurred.

Texas has had the Texas Prescription Program (TPP) to monitor Schedule II medications (CIIs) since 1982, and in 2008 started monitoring Schedule III-V medications (CIII-V), but today physicians have easier accessibility to the monitoring program through Prescription Access in Texas II (PAT II), where they can login to the TPP via a secure website. In September 2011 a company, Optimum, received the contract for hosting and collecting the data for the TPP. Previously the Department of Public Safety (DPS) did the hosting, development, and data collection internally. DPS had developed a website-accessible version of the TPP (referred to as PAT I -Prescription Access in Texas), which went through several rounds of betatesting that began in August of 2011. The traditional fax request method is still in place and remains an option.

In August 2012, PAT II was rolled out in stages and is now available for registrants. Online registration is at https://www.texaspatx.com/Login. aspx. Before using the site, registrants should read the website's FAQ section and a tutorial. The Texas Pain Society heavily cautions all PAT II users to use due diligence when reading and interpreting data results. The information in this database is received directly from pharmacy reports and is subject to error. The automated error checks the system performs are not an endorsement of the accuracy of the information but rather are only a check that all fields are filled in.

Texas PAT II is a valuable tool which can be used to reduce the incidence of doctor shoppers, which is estimated to be 10 percent of individuals who are prescribed opioids (1). However, the standard of care regarding how to use the PAT II has not been established. Some state agencies have expressed to the Texas Pain Society that they expect clinicians to use PAT II on each patient

encounter. While this may be ideal, it is not practical and would be an unfunded mandate on clinicians at a time in which numerous regulatory and economic factors impair the delivery of quality care. Therefore, the Texas Pain Society recently wrote a white paper establishing minimum suggestions for PAT II utilization. Ideally in the near future, software automation will mine the database and automatically alert prescribing clinicians via email or similar modalities of suspicious prescription profiles that may represent doctor-shopping behaviors so that the clinician may further investigate at the next office visit.

The PAT II has the potential of significantly reducing the incidence of lethal accidental OD related to doctor shopping.

Conclusions

The public should be aware of the extent that these prescription drugs are being abused and causing death. These drugs (and alcohol) can combine to cause respiratory depression or arrest.

These deaths are preventable. Physicians and other health care providers should be appraised of the large extent to which prescription drugs are being abused and causing death.

Ensuring that reasonable alternative treatment options are explored and a quality risk assessment is performed prior to initiating COT and ensuring that an objective and clinically meaningful therapeutic outcome is achieved once COT is started should reduce the problem of deaths related to COT from single practitioners prescribing high-dose COT.

If a therapeutic benefit is not obtained after a reasonable titration, then the medical necessity to continue COT has not been achieved. There is no reason to expect that a higher dose of COT is necessary if a therapeutic benefit has not been achieved at low to moderate doses. The higher doses are known risk factors for adverse events including unintentional lethal OD. Early use of COT after occupational injuries has been associated with decreased function and increased disability rates

(40, 41). COT should be reserved for treatment at later stages after exhausting conservative care in wellselected individuals if used at all.

Empirical observations by pain management physicians suggest that COT in well-selected individuals is an effective treatment. However, "well-selected" is the key concept. The fact that 79 percent of the TCMEO deaths were to people who had legitimate prescriptions illustrates that clinicians may not be exhausting conservative care, not performing adequate risk assessments, not ensuring a therapeutic benefit has been achieved, and not discontinuing treatments when it is ineffective.

Additional information on this data, and 10 other "safe living" tips can be viewed at the Travis County Medical Examiner website at www.co.travis. tx.us/medical examiner/.

References

- 1. CDC: Grand Rounds: Prescription drug overdoses- a U.S. epidemic. *Morbidity and Mortality Weekly*. 61(01):10-13; 2012.
- 2. CDC: Vital Signs: Overdoses of prescription opioid pain relievers-United States 1999-2008. Morbidity and Mortality Weekly. 60(43):1487-1492; 2011.
- 3. Manchikanti L, Abdi S, Atluri S, Balog CC, et al. American Society of Interventional Pain Physicians (ASIPP) Guidelines for Responsible Opioid Prescribing in Chronic Non-cancer Pain: Part I- Evidence Assessment. Pain Physician. 15:S1-S66; 2012. Available at: www.painphysicianjournal.com/pastissue_vw.php?jcode=68.
- 4. CDC: Policy Impact: Prescription Painkiller Overdoses. Available at: www.cdc.gov/ homeandrecreationalsafety/rxbrief/.
- 5. Risk of Addiction. www.youtube. com/watch?v=QYWykvy3xDI.
- 6. Effectiveness of Opioids for Chronic Pain. www.youtube.com/watch?v=l4Y3TQUsH4k.
- 7. High Dose Opioids. www.youtube.com/watch?v=qDXCHVGuevg.

- 8. www.finance.senate.gov/newsroom/chairman/release/?id=021c94cd-b93e-4e4e-bcf4-7f4b9fae0047.
- 9. Texas Administrative Code, Title 22, Part 9, Chapter 170. Pain Management.
- 10. Webster LR, Webster RM. Predicting aberrant behaviors in opioid-treated patients: Preliminary validation of the Opioid Risk Tool. *Pain Med* 6:432-442; 2005.
- 11. Manchikanti L, Cash KA, Damron KS, Manchukonda R, Pampati V, McManus CD. Controlled substance abuse and illicit drug use in chronic pain patients: An evaluation of multiple variables. *Pain Physician* 9:215-226; 2006.
- 12. Chou R, Fanciullo GJ, Fine PG, Miaskowski C, Passik SD, Portenoy RK. Opioids for chronic noncancer pain: Prediction and identification of aberrant drug-related behaviors- A review of the evidence for an American Pain Society and American Academy of Pain Medicine Clinical Practice Guideline.

I Pain 10:131-146; 2009.

- 13. Passik SD, Kirsh KL, Casper D. Addiction-related assessment tools and pain management: Instruments for screening, treatment planning, and monitoring compliance. *Pain Med.* 9:S145-S166; 2008.
- 14. Moore TM, Jones T, Browder JH, Daffron S, Passik SD. A comparison of common screening methods for predicting aberrant drug-related behavior among patients receiving opioids for chronic pain management. *Pain Med.* 10:1426-1433; 2009.
- 15. Jones T, Moore T, Levy J, Browder JH, Daffron S, Passik SD. A comparison of various risk screening methods for patients receiving opioids for chronic pain management. Poster presented at: PAINWeek; Sept. 8-11, 2010; Las Vegas, Nev.
- 16. Chou R, Shekelle P. Will this patient develop persistent disabling low back pain? *IAMA*. 303(13):1295-1302; 2010.
- 17. Manchikanti L, Damron KA, McManus CD, Barnhill RC. Patterns of illicit drug use and opioid abuse in patients with chronic pain at initial evaluation. A prospective, observational study. *Pain Physician*. 7:431-437; 2004.

- 18. Deyo RA, Mirza SK, Turner JA, Martin BI. Overtreating chronic back pain: Time to back off? *J Am Board Fam Pract*. 22:62-68; 2009.
- 19. Edlund MJ, Steffick D, Hudson T, Harris KM, Sullivan M. Risk factors for clinically recognized opioid abuse and dependence among veterans using opioids for chronic non-cancer pain. *Pain.* 129(3):355-62; 2007. Epub 2007 Apr 20.
- 20. Galanter, Marc (1 July 2008). The American Psychiatric Publishing Textbook of Substance Abuse Treatment (American Psychiatric Press Textbook of Substance Abuse Treatment) (4 ed.). American Psychiatric Publishing, Inc.. p. 197. ISBN 978-1-58562-276-4. http://books.google.co.uk/books?id=6wdJgejlQzYC&pg=PA197.
- 21. Lindsay S, Powell G, eds. (28 July 1998). *The Handbook of Clinical Adult Psychology* (2nd ed.). Routledge. p. 173. ISBN 978-0-415-07215-1. http://books.google.co.uk/books?id=a6A9AAAAIAAJ&pg=PA173.
- 22. *ODG Treatment in Workers Comp.* Workloss Data Institute.
- 23. Reeves RR, Carter OS, Pinkofsky HB, Struve FA, Bennett DM. Carisoprodol (Soma): abuse potential and physician unawareness. *J Addict Dis.* 18:51-6; 1999.
- 24. Owens C, Pugmire B, Salness T, Culbertson V, Force R, Cady P, Steiner J. Abuse potential of carisoprodol: a retrospective review of Idaho Medicaid pharmacy and medical claims data. *Clin Ther.* 29:2222-5; 2007.
- 25. Reeves RR, Burke RS. Carisoprodol: Abuse Potential and Withdrawal Syndrome. *Curr Drug Abuse Rev.* 2010.
- 26. Savage SR. Assessment for addiction in pain-treatment settings. *Clin J Pain* 18:S28-S38; 2002.
- 27. Michna E, Jamison RN, Pham LD, Ross EL, Janfaza D, Nedeljkovic SS, Narang S, Palombi D, Wasan AD. Urine toxicology screening among chronic pain patients on opioid therapy: Frequency and predictability of abnormal findings. *Clin J Pain* 23:173-179; 2007.

- 28. Katz NP, Sherburne S, Beach M, Rose RJ, Vielguth J, Bradley J, Fanciullo GJ. Behavioral monitoring and urine toxicology testing in patients receiving long-term opioid therapy. *Anesth Analg* 97:1097-1102; 2003.
- 29. Manchikanti L, Cash KA, Damron KS, Manchukonda R, Pampati V, McManus CD. Controlled substance abuse and illicit drug use in chronic pain patients: An evaluation of multiple variables. *Pain Physician* 9:215-226; 2006.
- 30. Fishbain DA, Cutler RB, Rosomoff HL, Rosomoff RS. Validity of self-reported drug use in chronic pain patients. *Clin J Pain*. 15:184-191; 1999.
- 31. Berndt S, Maier C, Schutz HW. Polymedication and medication compliance in patients with chronic non-malignant pain. *Pain.* 52:331-339; 1993.
- 32. Hariharan J, Lamb GC, Neuner JM. Long-term opioid contract use for chronic pain management in primary care practice. A five year experience. *J Gen Intern Med.* 22:485-490; 2007.
- 33. Ives TJ, Chelminski PR, Hammett-Stabler CA, et al. Predictors of opioid misuse in patients with chronic pain: a prospective cohort study. *BMC Health Serv Res.* 4(6):46; 2006.
- 34. West R, Pesce A, West C, et al. Observations of medication compliance by measurement of urinary drug concentrations in a pain management population. *J Opioid Manag.* 6(4):253-257; 2010.
- 35. Owen GT, Burton AW, Schade CM, Passik S. Urine Drug Testing Current recommendations and best practices. *Pain Physician*. 15:ES119-ES133; 2012. Available at: www.painphysicianjournal. com/pastissue_vw.php?jcode=68
- 36. Manchikanti L, Manchukonda R, Pampati V, Damron KS, Brandon DE, Cash KA, McManus CD. Does random urine drug testing reduce illicit drug use in chronic pain patients receiving opioids? *Pain Physician* 9:123-129; 2006.
- 37. Katz N, Fanciullo GJ. Role of urine toxicology testing in the management of chronic opioid therapy. *Clin J Pain* 18:S76-S82; 2002.

- 38. Passik SD, Kirsh KL, Portenoy RK. Pain and addictive disease. In Von Roenn JH, Paice JA, Preodor ME (eds.). *Current Diagnosis & Treatment of Pain.* 1st ed. Lange Medical Books/McGraw-Hill, New York, NY, 2006, pp78-84.
- 39. Utilization of PMP: A Texas Pain Society White Paper. Available at: www.texaspain.org.
- 40. Franklin GM, Stover BD, Turner JA, et al., Early opioid prescription and subsequent disability among workers with back injuries. *Spine*. 33:199-204; 2008
- 41. Webster BS, Verma SK, Gatchel RJ, et al., Relationship between early opioid prescribing for acute occupational low back pain and disability duration, medical costs, subsequent surgery and late opioid use. *Spine*. 32:2127-32; 2007.
- 42. Cook RF, Bernstein AD, Arrington TL. Methods for assessing drug use prevalence in the workplace: a comparison of self-report, urinalysis, and hair analysis. *Int J Addict.* 30:403-426; 1995.
- 43. Fishbain DA, Cutler RB, Rosomoff HL, Rosomoff RS. Validity of self-reported drug use in chronic pain patients. *Clin J Pain*. 15:184-191; 1999.
- 44. Hariharan J, Lamb GC, Neuner JM. Long-term opioid contract use for chronic pain management in primary care practice. A five year experience. *J Gen Intern Med.* 22:485-490; 2007.
- 45. Ives TJ, Chelminski PR, Hammett-Stabler CA, et al. Predictors of opioid misuse in patients with chronic pain: a prospective cohort study. *BMC Health Serv Res.* 4(6):46; 2006.
- 46. Berndt S, Maier C, Schutz HW. Polymedication and medication compliance in patients with chronic non-malignant pain. *Pain.* 52:331-339; 1993.
- 47. Katz NP, Sherburne S, Beach M, Rose RJ, Vielguth J, Bradley J, Fanciullo GJ. Behavioral monitoring and urine toxicology testing in patients receiving long-term opioid therapy. *Anesth Analg.* 97:1097-1102; 2003.

48. Michna E, Jamison RN, Pham LD, Ross EL, Janfaza D, Nedeljkovic SS, Narang S, Palombi D, Wasan AD. Urine toxicology screening among chronic pain patients on opioid therapy: Frequency and predictability of abnormal findings. *Clin J Pain*. 23:173-179; 2007.

Pain Medicine Knowledge Assessment

To expedite your CME transcript, please review the course online, and complete the test and evaluation located at www.texmed.org/opioidabuse.

Da	te of Completion:
1.	Common cocktails of abuse include the:
0	A. Soma Coma, Vegas Cocktail, Denver Drama
0	B. Soma Coma, Vegas Cocktail, Holy Trinity
	C. Soma Coma, Houston Cocktail, Cleveland Climber
2.	According to the Travis County Medical Examiner's Office and CDC data, mixing CNS depressants accounted for approximately or more of the accidental drug overdose deaths.
O	A. 40 percent
0	B. 50 percent
0	C. 60 percent
3.	Among the victims of lethal prescription overdose,, and are overrepresented.
0	A. Rural populations, Medicaid recipients, and those with mental illness
0	B. Elderly patients, mentally ill patients, patients with better insurance
0	C. Mentally ill patients, patients who abuse alcohol, and those in rural counties
	A quality risk assessment has the potential to reduce of lethal accidental overdoses that result from a single prescribing physician.
	A. 40 percent
	B. 50 percent
0	C. 60 percent
5.	There is a strong correlation between disability perception and unstable psychosocial comorbidities.
0	True
0	False
	According to CDC, 30 percent of accidental lethal drug overdoses occurred as a result of a combination of CNS depressants.
	True
0	False
7.	High-dose chronic opioid therapy was defined as greater than or equal to morphine equivalents using standard opioid conversion tables.
0	A. 75
0	B. 100
0	C. 125

8.	Evidence-based guidelines emphasize that should be the primary outcome metric.				
0	A. Function				
0	B. Flexibility				
0	C. Comfort				
9.	is currently the most common standard-of-care violation that results in physician sanctions by the Texas Medical Board.				
0	A. Failure to meet the standard of care				
0	B. Nontherapeutic prescribing				
0	C. Inadequate medical orders				
10	Aberrant behaviors may include:				
0	A. Early refill requests				
0	B. Reports of "lost or stolen" medications				
0	C. UDT that does not include the prescribed drug				
0	O D. All of the above				
O The	e content was free of commercial bias. Yes O No e information presented will improve patient care in my practice. Yes O No				
	er completing this activity, I plan to:				
	Create an exit strategy when committing to COT.				
	B. Utilize the online monitoring program, PATII.				
	C. Utilize monitoring for aberrant behavior and UDT to screen for prescription drug abuse. D. All of the above				
D.	All of the above				
Wł	nere do you receive your oncology-related education?				
Wł	nat oncology-related educational topics would be helpful for you?				

Physicians who complete the entire activity, including the knowledge assessment and evaluation, may receive continuing medical education credit. The cost of this course is \$35. **To expedite your CME transcript, please review the course online, and complete the test and evaluation located at www.texmed.org/opioidabuse.** Otherwise, please mail the assessment, the evaluation, and payment information to POEP, 401 W. 15th St., Austin, TX 78701, or fax the documents (including credit card information) to (512) 370-1693. If you have questions, please call (512) 370-1673 or e-mail laura.wells@texmed.org.

Items must be marked or faxed before the CME expiration date of Nov. 15, 2015.

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110,000 Texans will be told "You have cancer."



In 2012, it is estimated ...

- 39,000 Texans will lose their lives to cancer.
- The annual cost associated with cancer will be \$28 billion.

In 2012, it is estimated ...

- 14,500 Texans will be diagnosed with lung cancer.
- 16,000 women in Texas will be diagnosed with breast cancer.
- 1,200 women in Texas will be diagnosed with cervical cancer.
- 10,600 Texans will be diagnosed with colorectal cancer.

What can you do?

The Texas Cancer Plan aims to reduce the cancer burden in Texas and improve the lives of all Texans. Find out more at

www.txcancerplan.org.



Physician Oncology Education Program
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