

# The Journal of Workers Compensation

*A quarterly review of risk management and cost containment strategies*

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**A GROWING NEED FOR COVERAGE**  
THE PAST, PRESENT, AND FUTURE OF THE DEFENSE BASE ACT



**EFFECTIVE PHARMACY MANAGEMENT PROGRAMS**  
A COMPARISON OF DIFFERENT APPROACHES



**KEY COST DRIVERS IN WORKERS COMPENSATION**  
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# DATA-DRIVEN INTERVENTION TO PROMOTE APPROPRIATE UTILIZATION AND PRESCRIPTION OF NARCOTICS IN WORKERS COMPENSATION CASES

BETSY ROBINSON

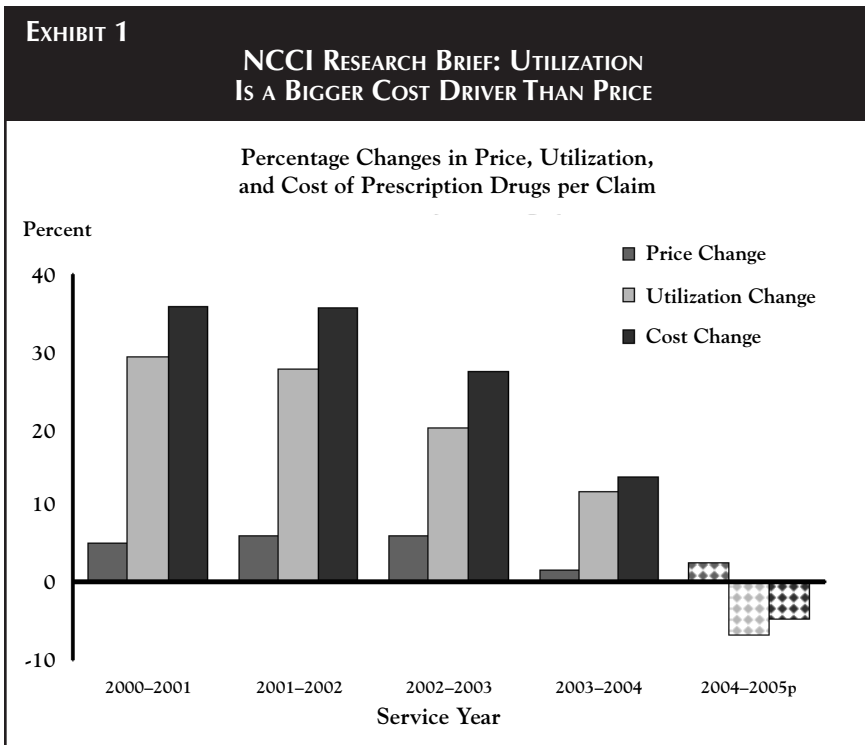
**N**early all workers compensation injuries require some level of pain management. Narcotic analgesics represent almost half of all drugs prescribed to treat injured workers from the acute period at the onset of injury through the chronic period for mature claims. This class of drugs can play an important role in managing pain and enabling the employee to regain function and return to productivity; however, inappropriate prescription and utilization of narcotics can escalate costs and may hinder the individual's ability to recover and return to work. It is not uncommon for several physicians to be prescribing pain medication to the same patient at the same time. Narcotic therapy management can help predict and prevent problematic situations associated with inappropriate treatment and overutilization of narcotic analgesics in order to promote

patient safety and positive health outcomes. This article will examine the critical role that predictive modeling plays in narcotics therapy management and it will look at several criteria that can be used to determine whether characteristics of inappropriate use exist within chronic pain cases.

**THE \$1.6 BILLION OPPORTUNITY**

According to a recent survey of workers compensation payers, drug costs represent about 14.5 percent — or more than \$4 billion — of workers compensation medical expenses.<sup>1</sup> Narcotic use is widespread, and it is particularly high in workers compensation claims due to the fact that most workers compensation cases involve some degree of pain due to injury. Narcotics drive an estimated 40 percent of workers compensation pharmaceutical costs.<sup>2</sup> Initiatives to reduce spending on narcotics, then, could potentially affect approximately \$1.6 billion in direct costs for workers compensation.

Prescription costs may decrease slightly as brand-name narcotic analgesics come off patent, but many of these drugs are already being prescribed as generics. According to the National Council on Compensation Insurance’s



(NCCI) workers compensation prescription drug study, two of the top three prescription drugs in workers compensation are narcotic analgesics, one of which is brand-only. Of the top 11 drugs on the list, four are narcotic analgesics, three are anti-inflammatories, two are muscle relaxants, one is a skin preparation, and one is a central nervous system (CNS) drug for treating nerve pain.<sup>3</sup> A look at prescribing patterns during the 2001 through 2005 study period shows a decrease in share of total prescriptions paid for anti-inflammatories (from 31 percent to 16 percent) and an increase in the use of analgesics (from 28 percent to 34 percent) and muscle relaxants (from 9 percent to 13 percent) in the same period.<sup>4</sup> The answer then doesn't lie simply in negotiating better prices or requiring generics. The answer lies in better managing utilization.

Appropriate use of narcotic analgesics as tools for pain management is not problematic. Ameliorating pain is necessary to support functional improvement. An injured worker who needs to undergo physical therapy is more likely to comply with the rehabilitation regimen if he or she is not in pain. Undertreatment of pain can have significant adverse effects, ranging from decreased activity and mobility, to depression, to loss of work and familial breakdown. It may even be responsible for decreased immune response.<sup>5</sup> The real problem with narcotics arises when an individual begins to rely on the prescribed drugs as a means to alter mood as much as or more than as a way to control physical sensations of pain. Misuse of narcotic prescriptions, along with mismanaged chronic pain, are associated with physical, social, and psychological impairment. The likelihood of such problems increases with the length of the claim, as does the impact of managing the pharmacy element. The prescription drug share of workers compensation medical costs increases with each service year.<sup>6</sup> It is important to note that prescription drug utilization remains relatively stable, but other incremental medical costs drop as claims age and active treatment decreases.

In some cases, an injured worker may continue working or return to work and continue to take one or more mood-altering drugs for pain. These medical-only claims represent potential safety and productivity issues. An office worker who is drowsy or inattentive may underproduce or generate inaccurate work; a driver or equipment operator who is not alert can be a danger to self and others. These individuals continue to take drugs as prescribed, but without narcotic therapy management, they are at risk of reinjury. Medical-only claims may not receive active medical management because their risk on many scales appears to be low. However, using medical bill data to identify those workers who are taking controlled substances makes it possible to proactively address concerns for their safety and productivity.

It is interesting to note that the type of drugs prescribed often shifts as claims age. NCCI study data shows that in the first service year, 38 percent of drugs prescribed are anti-inflammatories, 20 percent are analgesics, and 16 percent are muscle relaxants. Psychotherapeutic drugs and CNS drugs each represent only 2 percent, and sedatives/hypnotics account for only 1 percent of total prescription drugs paid. In the fifth service year, analgesics head the list, representing 35 percent of prescriptions paid, and the percentage continues to increase with the age of the claim. At five years, psychotherapeutic drugs and CNS drugs represent 12 percent and 13 percent, respectively, of the prescription drug pie; use of sedatives and hypnotics increases from 1

**EXHIBIT 2**

**NCCI RESEARCH BRIEF**

**Percentage of Total Prescription Drugs Paid  
for Service Year 2005  
Age of Claim (in Years)**

Drug Group	1	2	3	4	5	6	7	8	9	10	11	12
Anti-inflammatories	30%	21%	16%	12%	11%	10%	9%	9%	9%	8%	9%	9%
Analgesics	22%	30%	33%	35%	39%	39%	40%	41%	39%	44%	43%	42%
Muscle Relaxants	19%	15%	13%	11%	10%	10%	9%	8%	8%	8%	8%	7%
Anti-infective Agents	12%	3%	2%	1%	1%	1%	1%	1%	1%	1%	1%	0%
Skin Preparations	3%	4%	5%	5%	4%	4%	5%	4%	4%	4%	4%	3%
Gastrointestinal	3%	6%	6%	6%	5%	5%	6%	5%	5%	5%	6%	5%
CNS Drugs	2%	8%	11%	12%	12%	12%	11%	12%	12%	10%	11%	11%
Psychotherapeutic	2%	6%	9%	11%	12%	12%	13%	13%	14%	13%	12%	14%
Sedatives/Hypnotics	1%	3%	4%	3%	4%	4%	3%	3%	3%	3%	3%	3%
Other	5%	4%	3%	3%	3%	3%	4%	4%	5%	5%	5%	6%

percent to 3 percent. In contrast, use of anti-inflammatories drops to 15 percent, and continues to drop as the claim ages.<sup>7</sup> When comorbidities develop, as they often do in the case of lingering chronic pain, patients may obtain different prescriptions from different providers — for example, a sleeping pill from a primary care physician or an anti-depressant from a psychiatrist in addition to the narcotic analgesic from the workers compensation provider. Although the prescriptions are obtained legitimately, for legitimate issues, multiple prescriptions may exacerbate the potential for problems and put the patient at risk.

### WORST-CASE SCENARIOS

At the extreme end of the continuum are intentional drug abusers. This small portion of the population has a disproportionate impact on direct and indirect workers compensation and health-care costs. In the United States, prescription drugs account for an estimated 25 percent to 30 percent of drug abuse, and 31 million Americans have used painkillers without a medical

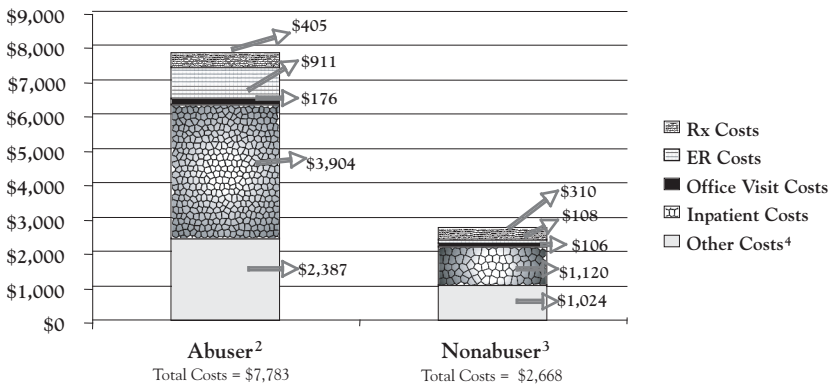
#### EXHIBIT 3

### NARCOTICS THERAPY MANAGEMENT PROGRAM: THE COST OF NARCOTIC ABUSE

#### Current Problem

Misuse of narcotic prescriptions along with mismanaged chronic pain are associated with physical, social, and psychological impairment. Narcotic abusers have direct costs that are approximately 3 times higher than those of nonabusers.

Average \$ Costs<sup>1</sup> of Narcotic Abusers vs. Nonabusers



<sup>1</sup> Costs based on client ABC on claims during 12/1/05 – 2/28/06.

<sup>2</sup> Abusers are suspected patients that meet the Narcotic Therapy Management Program criteria.

<sup>3</sup> Nonabusers are patients who are taking narcotic analgesics, but did not meet the criteria.

<sup>4</sup> Other Costs represents MRIs, labs, or other tests ordered by the provider.

need.<sup>8</sup> Drug abuse has a significant impact in the workplace.

According to a 2007 survey from the Substance Abuse and Mental Health Services Administration (SAMHSA), most of the nation's approximately 16.4 million current illicit drug users and approximately 15 million heavy alcohol users hold full-time jobs. The survey found that illicit drug use and heavy alcohol use are associated with higher levels of absenteeism and frequent job changes. Nearly twice as many current illicit drug users skipped one or more days of work in the past month compared with workers who did not abuse drugs. In addition, drug users were also far more likely to report missing two or more workdays in the past month due to illness or injury compared with workers who did not abuse drugs.

A study of claims data from December 2005 through February 2006 revealed that the claims costs for narcotic abusers are approximately three times higher than for patients taking narcotics who did not abuse the drugs.<sup>9</sup> Prescription costs for the narcotic abusers were about 33 percent higher than for nonabusers. Inpatient costs were nearly four times higher, and other costs, such as MRIs, labs, and other diagnostics, were more than twice as high. Emergency room costs were nine times higher for narcotic abusers than for nonabusers.

According to the results of the 2001 SAMHSA National Household Survey on Drug Abuse, 43 percent of patients who wound up in emergency rooms from drug overdoses in 2000 were there because of misusing prescription drugs.<sup>10</sup> The number of people entering the ER because of misusing hydrocodone rose 48 percent between 1998 and 2000; the number of emergency hospitalizations for oxycodone rose 108 percent in the same period.<sup>11</sup>

Inappropriate narcotic therapy risks creating an abuse problem in susceptible individuals. In 2007, one brand-name time-release oxycodone formulation made headlines when three executives from the product manufacturer pleaded guilty in federal court to charges that they had misled regulators, doctors, and patients about the drug's risk of addiction and potential to be abused. The company had claimed that the long-acting drug posed a lower threat of abuse than do shorter acting narcotic analgesics.<sup>12</sup> The pharmaceutical industry is responding to these concerns. In March, a drug manufacturer announced that it had completed a pilot study and was ready to move into full-scale clinical trials of a once-daily, controlled-release oral oxycodone designed to resist abuse.<sup>13</sup>

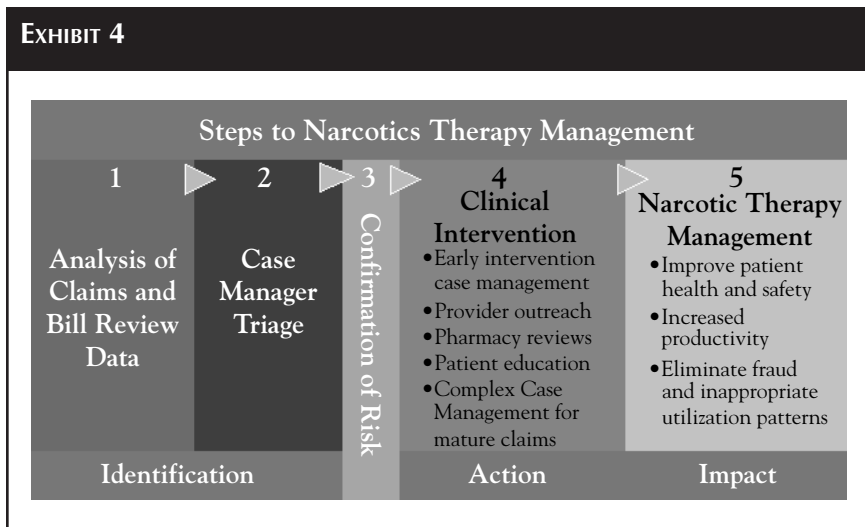
Another issue of potential concern is the prescribing of narcotics and other mood-altering drugs for uses that are not approved by the Food and Drug Administration (FDA). Although this so-called "off-label" use of a drug may be medically appropriate in many cases, in others, it may not

offer any added benefit while driving higher prescription costs and perhaps even putting the employee at risk. A study of “Off-Label Prescribing Among Office-Based Physicians,” published in the Archives of Internal Medicine, looked at prescribing patterns for 160 commonly prescribed drugs. The study found that 21 percent of prescriptions were for off-label uses, and of those, 73 percent of those uses had little or no scientific support.<sup>14</sup> The highest percentage of off-label prescriptions in the study were for gabapentin, a central nervous system (CNS) drug labeled for treatment of some types of seizures and nerve pain from the herpes virus or shingles. In NCCI’s list of the Top 20 prescribed drugs by total paid, gabapentin was No. 2. In many cases, it may be worth taking a closer look at off-label use of a drug to ensure that it is benefiting the patient.

**PROACTIVE NARCOTIC MANAGEMENT TO MINIMIZE POTENTIAL PROBLEMS**

Although a number of factors drive workers compensation drug costs, utilization seems to be the most significant. In Health Strategy Associates’ fifth annual survey on workers compensation prescription drug management, companies reported using several control strategies, including provider utilization, injury-specific and claimant-specific formularies, step therapies, and refining clinical approaches.<sup>15</sup> In light of the potential for dependence associated with narcotics and other mood-altering drugs, as well as the potential for pain to become a chronic issue, it makes sense to shine a spotlight on claims that involve narcotic prescriptions for the sake of obtaining the best outcome possible. The potential for fraud or abuse, which can significantly

**EXHIBIT 4**



escalate costs, provides additional incentive to look at some of these claims more closely.

A narcotics therapy management program can help identify potentially problematic claims, allow for appropriate case manager or provider intervention before the situation escalates, and have a positive impact on the outcome. In addition to reducing the overutilization of narcotic analgesics, such a program could identify possible fraud and abuse, help treating physicians align appropriate clinical care, and help patients adhere to their prescribed medication programs.

### **Identification**

Predictive modeling can be used to identify patients who are at risk and who might benefit from additional oversight and clinical programs. Such an approach is already being used successfully by group health vendors who have mined data on old claims that became “adverse surprises” — that is, resulted in worsening health of the patient along with greater-than-expected costs for the employer. Trends in the historic data are analyzed to identify predictors of similar outcomes in new claims data. The algorithms used to identify potentially inappropriate narcotic therapy are easily adapted to a workers compensation environment, and a program can be developed utilizing intervention types that adhere to jurisdictional requirements.

Predictive modeling supports more timely intervention. A model might analyze current and past medical utilization patterns to document a history of substance abuse, identify cases where multiple physicians prescribe — or multiple pharmacies fill prescriptions for — narcotics and other controlled substances, or where patients receive high prescription fill quantities of any prescribed narcotic within a given time frame. Data inputs could include formulary, claims, and billing data. For example, open claims can be filtered to identify a number of prescriptions within certain classes within a given time frame. The maximum benefit would be derived from analysis of integrated group health and workers compensation data, but current privacy regulations do not allow this approach. It is also possible to program exclusions for circumstances under which extended narcotic use is appropriate. In cases of amputation or other traumatic injury, a catastrophic case manager is assigned early in the case and can help identify potential problem areas.

Using such a model, a group health system identified a 34-year-old man who, in a three-month period, obtained 43 narcotic prescriptions from eight different pharmacies prescribed by 23 different medical providers. In six months, the individual had run up \$54,935 in medical costs, with 46 emergency room visits, seven MRIs, and 17 office visits. Such situations are

possible because, according to a 2005 report by The National Center on Addiction and Substance Abuse (CASA) at Columbia University, more than 40 percent of physicians do not ask about prescription drug abuse when taking a patient's health history and one-third do not regularly call or obtain records from the patient's previous (or other treating) physician before prescribing controlled, potentially addictive drugs like opioids, depressants, and stimulants.<sup>16</sup> Predictive modeling will not identify every case of abuse — a few determined abusers will bypass the system by paying cash at various pharmacies — but it can provide a solid starting point.

Claims that meet the criteria trigger an alert. At-risk patients may undergo additional screening by a nurse case manager. The case manager can review and triage the case, recommending appropriate interventions.

### **Intervention**

A number of clinical interventions are possible, including pharmacy reviews, provider outreach, patient education, and case management. Proactive interventions should take place early in the life of the claim, ideally within 90 days of the date of injury, to ensure that the injured worker obtains best-practice care. Mature claims require more intensive intervention to address their increasing complexity.

If a case manager needs more information, a retrospective utilization review of the patient's prescriptions by a pharmacist may be helpful. If appropriate, the pharmacist can then reach out to the health-care provider and suggest future management options.

A provider outreach program can include a letter sent to each provider who is treating the patient, alerting the provider to patterns that might indicate patient safety issues or unmet clinical needs. The correspondence can include a medication profile identifying medications in the targeted classes. Such profiles can be blinded so that specific providers are not named, but the number of providers who are prescribing for the same patient should be clear. The report can also be configured to include data on office or hospital visits and other events over the same period of time. The report should be sent regularly to all providers who are treating the same patient. In addition, the outreach program can suggest interventions. For example, if the appropriate tools are in place, the provider and case manager may wish to limit the patient to a single pharmacy and single prescriber for controlled substances. Other support, such as a peer-to-peer consultation, a pharmacist call center, or behavioral health resources, could be offered in case the provider seeks alternatives to manage the patient better. In addition, the outreach program gives the provider an opportunity to report additional information, such as

a missing diagnosis or suspected fraud.

As appropriate, the intervention could also include patient education, including information on applicable pain management and substance programs. In the case of many workers compensation injuries, a lower back pain program might be helpful. Participants learn integrated strategies for managing back pain, ideally reducing their reliance on narcotic analgesics. By empowering the individual, patient education may help prevent the vicious cycle that often occurs with chronic pain and narcotic use spiraling downward to depression, which can feed the physical pain and continue to drive the perceived need for narcotics. In other cases, patient education can encourage compliance with the prescribed medication regimen, particularly if the patient has concerns about the medication's side effects. Such compliance supports better health outcomes.

Telephonic case management is adequate for most early intervention. Claims that have not resolved after six months to a year may require complex case management with specific skill sets. This could include cognitive behavioral coaching to help patients disabled by injury cope with their pain more effectively. Such case managers should have a deep understanding of the nature of chronic pain as well as experience in addressing psychosocial issues. Additional resources, such as vocational case management or employee assistance programs, may need to be applied.

### **Impact**

The potential for positive impact is significant and measurable. Due to the complexity of the clinical issues that may be present in claims involving narcotics and other controlled substances, the impact can be widespread. By focusing on appropriate utilization, a narcotic therapy management program is likely to contribute to reductions in both narcotic analgesic-related pharmacy costs and total pharmacy and medical costs. Early intervention can help ensure that the injured worker is getting appropriate restorative care, hopefully minimizing the need for extended maintenance care and the possibility of developing comorbidities and behavioral issues. By addressing or helping to prevent substance abuse, narcotic therapy management may also reduce medical costs associated with emergency room treatment, doctors' office visits, and inpatient hospitalization. These reductions are not limited to workers compensation costs. They could have a positive impact on group health costs, including behavioral health costs, as well.

A number of operational points of impact can be measured to gauge program effectiveness. These include the number of multiple narcotics and multiple prescribers per patient identified by the data mining process. The number of

patients referred to behavioral health programs or pain management programs following case management triage represents medical and pharmaceutical cost savings, as does the number of those enrolled in a substance abuse program following intervention. Although sending patients to behavioral or substance abuse programs has associated costs, successful completion of these programs ultimately has a positive impact on the bottom line. The key is to identify and align with programs with a high success rate. A high number of fraud cases identified and addressed is another indication of how well the program is working. Hard and soft savings — from both workers compensation and group health perspectives — can be substantial as patient health and safety are improved. Aggregate clinical costs for claims involving narcotics could potentially be reduced by two-thirds. More difficult to quantify, but equally important, are the increases in productivity that come from having employees who are fully present — not just physically present.

### THE ROAD TO RECOVERY

Used properly, narcotic analgesics can be a useful element of an injured employee's acute care treatment plan — but they are just one element. They are meant to complement — not replace — nonpharmaceutical modalities. Too often, however, they may be seen as an “easy fix” and, ironically, their overutilization can lead to a host of escalating problems, ranging from “presenteeism” and dependence to chronic pain, substance abuse, and even fraud, all of which reduce productivity and drive costs unnecessarily. A narcotics therapy management program that combines data-driven intervention with integrated management can promote appropriate use of drugs while reducing potential risks associated with inappropriate prescribing practices in order to reduce fraud and abuse and improve patient safety and outcomes.

### ENDNOTES

1. Paduda, Joseph, “Prescription Drug Management in Workers's Compensation: The Fifth Annual Survey Report—Spring 2008,” (Health Strategy Associates, 2008).
2. Reynolds, Dan, “Non-narcotic painkiller Lidoderm vaults to the top of WC Rx cost, surprising researchers: OxyContin falls to no. 5 as most expensive work comp drug,” *Risk & Insurance* (Feb. 2008).
3. Lipton, Barry, Brett King, Chris Laws, and Jim Stevens, “Workers Compensation Prescription Drug Study 2007 Update,” *The Journal of Workers Compensation* 17 no. 3 (Spring 2008): 93-112.
4. Id.
5. Jay, Gary W., “Chronic Narcotic Therapy for Patients with Chronic Non-malignant Pain,” *European Neurological Disease* (2006).

6. Lipton, *ibid.*
7. Lipton, *ibid.*
8. Reigier, D.A., W.E. Narrow, and D.S. Rae, et al., "The de facto US mental and addictive disorders services syst. Epidemiologic Catchment Area prospective 1-year prevalence rates of disorders and services," *Archives of General Psychiatry* 50 no. 2 (Feb. 1993): 85-94.
9. CIGNA Pharmacy Management customer claim data (Feb. 2006).
10. Center for Substance Abuse Prevention, "Trouble in the Medicine Chest: Rx Drug Abuse Growing," U.S. Dept. of Health and Human Services Substance Abuse and Mental Health Services Administration *Prevention Alert* (March 7, 2003).
11. *Id.*
12. Meier, Barry, "In Guilty Plea, OxyContin Maker to Pay \$600 Million," *The New York Times* (May 10, 2007).
13. Mansell, Pete, "Abuse-resistant oxycodone primed for clinical trials," *in-Pharma Technologist.com* (March 30, 2008).
14. Radley, David C., MPH; Stan N. Finkelstein, MD; and Randall S. Stafford, MD, PhD, "Off-label Prescribing Among Office-Based Physicians," *Arch Intern Med.* 166 (2006): 1021-1026.
15. Paduda, *ibid.*
16. "Under the Counter: The Diversion and Abuse of Controlled Prescription Drugs in the U.S.," The National Center on Addiction and Substance Abuse (CASA) at Columbia University (2005).

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