

**‘God’s Own Medicine’:  
Opioids, Law and the Health Community**

by  
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## **ABSTRACT**

Sarah Whitmarsh: 'God's Own Medicine': Opioids, Law and the Medical Community  
(Under the direction of Barbara G. Friedman, Ph.D.)

The interaction among prescription drugs, medicine and the law is an intricate one, involving patients, doctors, government officials and drug representatives with ties to advocacy and professional organizations, and regulatory. Recent events, such as increasing rates of prescription drug abuse and overdose deaths and physician prosecutions, have intensified the conflict. This project, a series of news articles, examines the relationship between policy, pain and prescription drugs with perspectives from the fields of law enforcement, public health and medicine. It serves as a remedy to medical journalism that has largely been unwilling or unable to tease out the nuances of this complex relationship. The project considers the ways that health and law enforcement institutions reconcile drugs that are critical in the treatment of pain, but also subject to widespread abuse. It seeks to answer the question: How does the complex relationship among prescription drugs, law enforcement and medicine affect the practice of pain and addiction medicine and the regulation of opioid drugs?

To my parents, for their understanding and support

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## CHAPTER I INTRODUCTION

The interaction among prescription drugs, medicine and the law is a tangled one, involving patients, doctors, government officials and policy researchers with ties to advocacy and professional organizations, regulatory agencies and universities. These players have been in tension with one another since the origins of modern medicine and drug policy. Physicians attempt to balance drug therapies with the potential for addiction among their patients. Drug enforcement officials seek to restrict access to people who illegally abuse drugs. Patient advocacy groups push for easier and more effective treatment. This project will explore these relationships in the context of recent events that have intensified the conflict, most notably the soaring rates of prescription drug abuse and resulting increase in overdoses and deaths.

From 1995 to 2005, the number of Americans abusing prescription drugs increased from 6.2 million to 15.2 million (Substance Abuse and Mental Health Services Administration [SAMHSA], 2007). Americans abuse prescription drugs more than they do heroin, cocaine and hallucinogens combined. Of the four categories of prescription drugs abused (pain relievers, tranquilizers, stimulants and sedatives), opioid pain relievers are the most widely abused.

Opioids, a class of drugs derived from opium, activate and block opioid receptors in the brain. Opioids mimic the effect of endorphins, a brain chemical responsible for pain sensitivity and pleasure. The primary use of opioids is for pain relief; they are the

most powerful analgesics on the market. Opioids reduce the suffering aspect of pain, creating a “dreamy euphoria in which worldly cares disappear” (Erickson, 2007, p. 107). People who use opioids have a high potential of addiction; tolerance and withdrawal are characteristic with chronic use. The drug carries a risk of overdose that can lead to death. But they are also a necessary and useful drug for the treatment of pain<sup>1</sup> (Erickson, 2007).

The rising rates of prescription drug abuse and addiction are rooted in the recent pain management movement. After reports that many people experiencing pain were not being treated adequately, medical practice guidelines changed to encourage prescription of pain medication to people in need of such drugs. Prescriptions of opioids grew accordingly, with increases of 933 percent for methadone, 588 percent for oxycodone, and 198 percent for hydrocodone from 1997 to 2005 (U.S. Department of Justice Drug Enforcement Administration [DEA], 2007). The drugs helped patients with legitimate needs, but also found their way into the hands of abusers. Most people who abuse prescription drugs do so non-medically, meaning they take the drugs only for their euphoric effect or without a doctor’s prescription. In a 2006 survey, 45 percent of people who used the drugs non-medically said they obtained the drugs from a friend or relative

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<sup>1</sup> The definition of pain is almost universal. It is defined by The International Association for the Study of Pain’s *Classification of Chronic Pain* as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage” (p. 209). The definition of acute and chronic pain varies however. The Federation of State Medical Boards has come up with a definition in its *Model Policy for the Use of Controlled Substances for the Treatment of Pain*. This policy has been adopted in medical practice guidelines for most states. This policy defines acute pain as “the normal, predicted physiological response to a noxious chemical, thermal or mechanical stimulus and typically associated with invasive procedures, trauma and disease” and as generally time-limited (p. 5). Chronic pain is defined as “a state in which pain persists beyond the usual course of an acute disease or healing of an injury, or that may or may not be associated with an acute or chronic pathological process that causes continuous or intermittent pain over months or years” (p. 5).

who had a prescription (SAMHSA, 2007).

In the midst of the pain management movement, the long-acting opioid OxyContin arrived on the market. OxyContin, a timed-release pain reliever, was marketed as a wonder drug, a safer and less addictive alternative to traditional pain relievers. But drug abusers soon realized they could circumvent the timed-release capsule and get high by crushing or chewing pills. Much of the media attention surrounding prescription drug abuse focused on OxyContin, though other types of opioids are also abused, including methadone and hydrocodone, which is marketed as Vicodin.

The trend in prescription drug abuse and overdose deaths has heightened tensions among Drug Enforcement Administration (DEA) and other law enforcement authorities and physicians. The DEA along with state regulatory authorities has intensified efforts to prevent the channeling of prescription drugs to abusers. In 2004, the agency revoked an opioid prescribing privilege widely used among physicians, leading to an outcry from the pain community. Although these privileges were reinstated two years later, the move left many physicians feeling mistrustful of and resentful toward the DEA. From 2003 to 2007, the agency arrested and criminally prosecuted 116 physicians (DEA Office of Diversion Control, 2007). State medical boards have also stepped up disciplinary actions against physicians, including license suspension. Actions against physicians by state medical boards increased from 636 in 1997 to more than 1,000 in 2006, according to a report by the Federation of State Medical Boards (2007). These actions have had a ripple effect on doctors and their patients. Fear of license suspension and litigation has made many physicians reluctant to prescribe pain-relieving drugs even for legitimate purposes. Patient advocacy organizations worry that increased regulation will lead to further



undertreatment of pain (Manchikanti, 2007). And because state medical boards create their own continuing medical educational requirements, physicians vary widely in their knowledge of pain practice guidelines, leading to even more confusion.

These events have combined to create a situation in which each of the players – regulator, physician and patient – is in upheaval. DEA officials and physicians seek to balance prescription drug regulation and medical care. Patients cope with addiction while their doctors figure out how to responsibly manage patient care. And state regulators are compelled to respond to a problem that is both medical and political.

This project, a series of news articles, examines these events within the context of policy, pain and prescription drugs. It provides perspectives from the fields of law enforcement, public health and medicine. Further, it aims to serve as a remedy to medical journalism that has largely been unable or unwilling to tease out the nuances of this complex relationship. The project considers the ways that health and law enforcement institutions reconcile drugs that are critical in the treatment of pain, but also subject to widespread abuse. It seeks to answer the question: How does the complex relationship among prescription drugs, law enforcement and medicine affect the practice of pain and addiction medicine and the regulation of opioid drugs?

## CHAPTER II LITERATURE REVIEW

Examining the current relationship among prescription drugs, medicine and the law involves understanding three distinct yet related areas: historical research into the origins of opioid use in medicine and the emergence of U.S. drug policy; clinical research concerning the use of opioids in medicine, with an emphasis on addiction; and prescription drug policy research. Pertinent issues within these three research areas will be discussed in this review using primary and secondary literature. Media coverage of prescription drugs and addiction will also be discussed.

### **History of Opiates in Medical Practice and the Origins of Control**

Several authors chronicle the use of opium in medicine through history. In *Dark Paradise: A History of Opiate Addiction in America*, Courtwright (2001) notes the therapeutic use of opium by 18th century American and European physicians originated with Greek physicians centuries earlier. During the 18th century, he writes, the drug was administered “to dull pain, induce sleep, control insanity, alleviate cough, [and] check diarrhea” (p. 43). It was also used to “treat” a variety of diseases, but the drug provided relief from pain rather than a cure. In *Opium: A History*, Booth (1998) suggests that opium was particularly appealing to physicians after scientists isolated alkaloids of opium in the early 1800s and subsequently discovered morphine. The production of morphine, named for Morpheus, the Greek mythological god of dreams, provided a cheaper form of opium for physicians – with a standard strength. Renowned Canadian physician Sir

William Osler wrote that morphine was “God’s own medicine” (p. 81). By the mid-1800s, morphine was the single most widely prescribed drug in medical practice (Courtwright, 2001).

A darker history parallels the early use of opiates in medicine. Medicinal use of opiates as well as opium-laden patent medicines created widespread addiction throughout the United States and Europe. Although some recreational use of opium occurred, Courtwright (2001) suggests that administration by physicians was the leading cause of addiction. Schuster (2006) points to inadequate training of physicians as a major cause of medical addiction in the 19th century. At that time, there were no standards for medical schools. And few doctors stopped to question the use of opium. But by the late 1800s, accounts of addiction began to appear in books and medical journals (Courtwright, 2001).

The recognition of opiate addiction led to a reform movement at the beginning of the turn of the 20th century, which sparked the first of many drug legislations in the U.S. From 1895 to 1915, most states passed laws that limited sales of narcotics to people with a prescription. The Pure Food and Drug Act of 1906 mandated that medicines state any narcotic content they contained. Most opiates were subsequently removed from patent medicines (Courtwright, 2001).

In the early 1900s, medical and pharmacy professional organizations supported laws that would protect citizens from dangerous and addictive drugs, provided doctors could still prescribe narcotics for treatment (Booth, 1998). Many physicians had already abandoned the liberal use of opium and morphine as newer drugs, like aspirin, were discovered. But physician organizations strongly opposed the Harrison Narcotics Tax Act of 1914, viewing the legislation as government interference in the health profession

(Courtwright, 2001). The Harrison Narcotics Act taxed those involved in the manufacture and import of narcotics and required that physicians and pharmacists be licensed to dispense them. Registered physicians were also required to keep records of prescriptions (The Harrison Narcotics Act, 1914). Despite the Harrison Narcotics Act's opposition, Booth (1998) writes that the controversy over opiate regulation within the medical community went mostly unnoticed by the public. Because opiate use was socially condemned, "the only question publicly debated with reference to narcotics was *how* to control, not *whether* to control," he notes (p. 65).

As a result of legislation and the decrease in use of opiates by physicians from 1920 to the 1970s, medical addiction decreased substantially, although it did not disappear. During the 1980s and 1990s, however, several new drugs and research reporting widespread undertreatment of pain led to resurgence in opioid use (Cleeland et al., 1986; Kanner & Portenoy, 1986; Portenoy & Foley, 1986; Portenoy, 1986). This resurgence has been controversial and widely debated within the medical community, which is divided on the benefits and dangers of opioid use for chronic pain not related to cancer.

### **Opioids in Current Medical Practice**

A plethora of medical and clinical research exists regarding opiates. In the past three decades, the use of opiates to treat acute pain and cancer pain and to ease pain in end-of-life care has been widely accepted within the medical community (Ashby et al., 1992; MacPherson, 2000; Portenoy & Coyle, 1990; Walker, Hoskin, Hanks, & White, 1988). The most contentious issue is the use of opiates to treat chronic, non-cancer pain. Researchers' opinions differ over whether it is appropriate to prescribe opioids to patients

for years, or even months, at a time. These researchers have generally been divided among three groups: those supporting the aggressive use of opioids, those opposing opioid use, and those advocating a middle-of-the-road approach. Each position is supported by a significant body of evidence. The purpose of this section is not to resolve the debate, but rather to describe the opinions and research regarding the most prominent issues within the debate: the effectiveness of long-term opiate use and the addictive potential of opiates in patients with chronic non-cancer pain. This section will also include physicians' and researchers' responses to that debate.

Research has supported the use of opioids in treating pain. In a meta-analysis of 41 randomized clinical trials, Furlan, Sandoval, Mailis-Gagnon, and Tunks (2006) showed that opioids were efficient in eliminating pain. But several researchers have debated the effectiveness of opioid therapy over extended periods of time such as a period of several months or longer (Chou, Clark, & Helfand, 2003; Furlan et al., 2006; Kalso, Edwards, Moore, & McQuay, 2004; Martell et al., 2007). Such long-term use of opioids carries risks of side effects, physical tolerance, possible withdrawal and addiction.

Of all the studies analyzing the effectiveness of opioids, most patients used opioids over a period of weeks. In Furlan et al.'s study, for instance, the average duration of treatment in the studies was five weeks. No controlled, randomized clinical trial has chronicled the use of opioids over multiple months or years. Studies that have investigated long-term usage typically involve patients who have abused their medication. These reports, therefore, question the effectiveness of opioids over time.

In a small, retrospective study of pain patients addicted to opioids, Miller,

Swiney, and Barkin (2006) found that patients actually reported less pain after detoxification from opioid medications. In one review of 25 studies in chronic, non-cancer pain patients, Højsted and Sjøgren (2007) suggested that long-term treatment with opioids leads to medical problems that interfere with pain treatment, such as tolerance, dependency, abnormal pain sensitivity, cognitive dysfunction, hormonal changes, immune modulation and addiction.

Research has also differed on the risk of addiction for pain patients receiving opioids. Multiple studies have attempted to assess the rate of addiction in chronic pain patients. Reports have ranged from 3 percent (Cowan, Wilson-Barnett, Griffiths, & Allan, 2003) to 50 percent (Saper et al., 2004). Højsted and Sjøgren's review found prevalence of addiction ranging from less than 1 percent to 50 percent in chronic non-cancer pain patients. In a prospective study of 500 chronic pain patients receiving opioid medication, Manchikanti et al., (2006) found that nearly one in 10 patients abused opioids while another 16 percent abused illicit drugs. This variation is largely due to differences in the criteria used to define addiction and different pain syndromes.<sup>2</sup>

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<sup>2</sup> A National Institute on Drug Abuse report defines prescription drug abuse as non-medical use of prescription drugs, or “the intentional misuse of medication outside of the normally accepted standards of its use” (2005, p. 11). The Federation of State Medical Board's *Model Policy for the Use of Controlled Substances for the Treatment of Pain* (2004) defines addiction as “a primary, chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations” and characterized by behaviors such as “impaired control over drug use, craving, compulsive use, and continued use despite harm” (p. 5). The policy also states that physical dependence and tolerance are normal consequences of opioid therapy and are not the same as addiction. Physical dependence, according to the policy, is an adaptation to prescription drug usage “that is manifested by drug class-specific signs and symptoms that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist” (p. 5). Tolerance occurs when regular use of a drug requires an increased dosage to produce an effect or when “a reduced effect is observed with a constant dose over time” (p. 5).

As there is no set rubric on opioid effectiveness or the risk of opioid addiction, physicians understandably differ on how they consider treatment risks when prescribing opioids. Portenoy (1996) wrote that “published surveys address only the most severe [treatment] disturbances” (p. 209). He suggests that physicians focus instead on the benefits of opioids and treat only the “subpopulation” of chronic pain patients able to achieve pain relief without complications (p. 206). Others have proposed a more cautious approach. For example, Højsted and Sjøgren (2007) suggested that physicians should screen patients for their risk of addiction before starting long-term opioid treatment. Kahan, Srivastava, Wilson, Gourlay, and Midmer (2006) advised that patients who have a personal or family history of addiction sign treatment agreements and be monitored with regular drug tests. Ballantyne and LaForge (2007) suggested that patients be monitored for psychiatric disorders because people with chronic pain may be more likely to also have disorders such as depression and anxiety that have a higher risk for substance abuse.

The rate of addiction in pain patients, however varied, has been significant enough to lead some scientists to research methods to identify prescription drug abuse and even attempt to decrease it. Wu et al., (2006) designed an instrument to screen pain patients for behaviors that are characteristic of addiction. The instrument, termed the “Addiction Behaviors Checklist,” is a yes-or-no questionnaire that a doctor fills out regarding possible patient behaviors, including whether the patient appears alert or has asked for frequent refills. Butler, Budman, Fernandez, and Jamison (2004) developed a similar screening tool that has also been implemented for patients to self-administer. Such tools are still in early development, and there is no proven method of determining

whether a patient will become addicted (Glajchen, 2001). Another method to decrease opioid abuse focuses on the drugs themselves rather than patients. Schuster (2006) suggests that drug companies develop formulations of drugs that will lower abuse potential, such as adding secondary ingredients or creating formulations that would have a slower rate of onset.

The literature regarding the use of opioids in medical practice is complex. Reviewing key issues within that debate for this project shows physicians may rely upon a range of conflicting opinions or study data when writing prescriptions for opioids.

### **Prescription Drugs and Policy**

Federal and state laws and regulations govern prescription drug policy. The U.S. Drug Enforcement Administration (DEA) regulates the manufacture, labeling and distribution of prescription drugs and interprets drug laws and rules from the Controlled Substances Act (1970). States standardize medical practice, license medical professionals and investigate illegal activity within the medical community. This section will provide an overview of the agencies and regulators involved in prescription drug policies and will conclude with opinions and research undertaken in response to them.

The DEA's Office of Diversion Control oversees the agency's dealings with prescription drugs, what they term "controlled substances." The 2006 edition of the DEA's "Practitioner's Manual" states that the mission of the agency is to "prevent the diversion and abuse of these drugs while ensuring an adequate and uninterrupted supply is available to meet the country's legitimate medical, scientific and research needs" (p. 4). The DEA requires that anyone who comes in contact with controlled substances at any point from manufacture to distribution be registered and maintain strict records.



Although state authorities are responsible for most investigations into illegal activity, the DEA has also taken action against individual physicians.

The DEA places controlled substances into five categories, or schedules, based on their use in medical treatment and potential for abuse or dependence. Drugs in schedules II and III, such as narcotics and stimulants, are useful in medical treatment and have a high and moderate potential for abuse, respectively.<sup>3</sup> In order for registrants to handle controlled substances, the DEA requires that they implement procedures, maintain records of distribution and guard against theft. The DEA also mandates specific instructions for prescriptions of schedule II drugs. Refills of prescriptions for schedule II controlled substances, which include opioids and stimulants like Ritalin, are prohibited. However, physicians often issue multiple prescriptions of schedule II drugs during one appointment so that patients can procure more than one month's supply without an office visit. Before 2004, writing multiple prescriptions with the term "do not fill" until a certain date had been a common practice among physicians. The DEA revoked this practice for a brief period before adding a rule that allowed it – up to a 90-day supply (DEA, 2006).

States license the practice of physicians through state medical boards, which have much of the regulatory power to investigate illegal activity. Each state makes its own prescription drug policies and practices. The Federation of State Medical Boards (FSMB), a national association that represents state medical boards, cannot implement

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<sup>3</sup> According to the Controlled Substances Act of 1970, schedule I drugs have a high potential for abuse and no medical use in treatment, such as heroin. Schedule IV and V drugs are useful in medical treatment and have a low and lower potential for abuse, respectively. Schedule IV drugs include benzodiazepines and long-acting barbiturates, like Phenobarbital; schedule V drugs include cough medicines with codeine (21 U.S.C. § 812).

state prescription drug policies, but releases guidelines which its members are encouraged to follow. In May 2004, the FSMB released its “Model Policy for the Use of Controlled Substances for the Treatment of Pain.” With a view toward preventing the undertreatment of pain, the Model Policy encouraged states to evaluate their pain policies in order to identify “any restrictions or barriers that may impede the effective use of opioids to relieve pain” (p. 2). The Model Policy also addressed physicians’ fears of investigation, stating that physicians prescribing opioids for “a legitimate medical purpose” need not fear retribution (p. 3). The policy noted that, in the event of an investigation, the FSMB would judge the validity of a patient’s treatment based on the physician’s records, rather than on the quantity and duration of drugs prescribed. It also set forth criteria for evaluating a patient’s treatment of pain. These guidelines concerning opioid use have been adopted by nearly two-thirds of state medical boards (Federation of the State Medical Boards, Inc., 2004).

Laws and regulations by both state and federal authorities have led to a backlash in the medical community. Many physicians and patient organizations suggest that excessive regulatory control interferes with appropriate medical care. In a commentary, Hurwitz claims the targeting of physicians infuses “the doctor-patient relationship with mutual suspicion and distrust” (2005, p. 160). Cleeland et al., (1986) notes that fear of scrutiny by authorities discourages physicians from prescribing opioids to patients. This underprescribing is linked to inadequate treatment of pain (Højsted & Sjøgren, 2007; Portenoy, 1996). Many physicians and researchers criticize the policies. Hurwitz (2005) writes that the DEA’s focus on physicians is faulty, given that the amount of prescriptions written by dishonest or deceptive doctors could not possibly constitute a

significant share of the black-market supply of prescription drugs. Manchikanti et al., (2006) point out that the FSMB's guidelines "have no basis in scientific evidence" (p. 43). Still, others cite improvements under increased regulation. In a study of changes in state pain policies, Gilson, Maurer, and Joranson (2005) found that more recent policies have included a greater amount of positive language that encourages the adequate treatment of pain, including the use of drugs, and does not contain provisions that would restrict such practice.

Fear of scrutiny has also led physicians to investigate just how vulnerable they are to deceitful patients looking for drugs and to action by regulatory authorities. Jung and Reidenberg (2007) reviewed six studies examining how well physicians could tell when their patients lie. The studies tested whether doctors were able to identify "standardized patients," actors taught to mimic a patient with an illness (p. 433). In the one study involving the symptom of pain, doctors could only detect 26 of the 263 visits by standardized patients (Kopelow et al., 1992). Jung and Reidenberg noted, therefore, that deception is difficult to identify. In another study, the pair used incidents of physician arrest and registration revocation to assess the risk of actions against physicians by the DEA. They found that reasons for action included loss of the physician's state medical license, fraud, substance abuse by the prescriber, that the prescriber engaged in sex in exchange for prescriptions or that the prescriber provided prescriptions without seeing a patient. They concluded that action against a physician prescribing opioids to a chronic pain patient is small when adequate medical records exist (Jung & Reidenberg, 2006).

### **Media Coverage**

Coverage of addiction in general is widespread among newspapers and

magazines. Indeed, celebrities' drug use seems to garner regular headlines; recent examples include sensational coverage of the drug-related deaths of Heath Ledger and Anna Nicole Smith. Numerous feature stories have conveyed the experiences of people who successfully overcame their addictions – as well as those who failed to. Prescription drug addiction has also gained media attention in recent years. OxyContin's addiction rates and overdose deaths brought prescription drug addiction into the limelight.

But few news stories have succeeded in articulating how the more complex relationship among prescription drugs, policy and medicine affects drug regulation and medical community, including patients; a goal of this project is to fill that gap in coverage. In addition to reviewing scholarly critiques of those topics, this section briefly surveys newspaper and magazine coverage, to provide insight into how current media cover prescription drugs and addiction. In doing so, the literature review demonstrates the ways that this project will add new and more substantive understanding to this topic.

Much of the criticism of the media's representation of prescription drug addiction has come from within the medical community. Some researchers cite the poor quality of reporting on prescription drugs and addiction. In one commentary, Stepney (1996) writes that certain news reports of the addictive tranquilizer benzodiazepine were "exaggerated and unhelpful" (p. S15). In another commentary responding to a report of increasing deaths from opioids, Joranson and Gilson (2006) suggest that the media trivialize the complex problems of abuse and addiction, focusing only on prescription drugs and the physicians who prescribe them. In contrast, in a characterization of the newspaper coverage of instances of controlled substances diversion from 1993 to 2002, Brushwood and Kemberlin (2004) found most articles concerned the theft or robbery of a pharmacy

while illegal activity by pharmacists involved the fewest articles. The media might report about pharmacy theft more often because this event occurs more frequently than fraudulent activities by health professionals; police reports are also a typical and easily accessible resource for reporters.

Other scholars argue that the media influence public attitudes and policy positions toward drug use. Joranson and Gilson (2006) note that negative news reports about prescription drugs “exacerbate fears of appropriate medical use of prescription drugs among pain patients and the public, trigger more drug control, and increase fears of regulatory scrutiny among legitimate prescribers and dispensers” (p. 632). In turn, they suggest that these attitudes lead to further undertreatment of pain. Similarly, Gallagher (2003) accuses the media of distorting coverage of OxyContin abuse, leading to a “renewed reluctance of physicians to prescribe opioids” (p. 1). A 2005 study showed how media influence drug regulators. In a survey of 258 state medical board members, 31 percent reported that media coverage about opioid abuse and diversion had an impact on their board’s views pertaining to pain management (Gilson et al., 2005).

Nuanced coverage of prescription drugs, medicine and the law in the print media has been rare. This paucity may be explained in part by a lack of space allotted for in-depth coverage of medical topics. With the exception of the largest publications, science sections have disappeared from daily newspapers as owners try to reduce costs. Cristine Russell’s commentary in the Fall 2007 edition of *Science Writers*, a newsletter of the National Association of Science Writers, charts this demise and what it means for the future of science journalism. Of the small number of science sections that remain, Russell writes, articles have shifted away from traditional science topics “toward softer

consumer-oriented, ‘news you can use’ medicine and personal health coverage” (p. 1). Alternatively, most specialized science publications employ freelance writers who may not have the time, expertise or resources to devote to an in-depth medical story.

However, due to some writers’ efforts, robust literature has been published. For example, investigative reporter Barry Meier wrote about OxyContin abuse and related deaths for *The New York Times*. His series of newspaper articles led to the 2003 book *Pain Killer*, a non-fiction narrative charting the rise and fall of OxyContin through a cast of characters including physicians and pharmacists, pain management experts and patients, drug officials, prescription drug abusers and pharmaceutical executives. Meier explained in the afterword of *Pain Killer* that his goal was to “examine how and why the problems involving OxyContin happened from the perspective and experiences of those whose lives the drug had touched” (p. 311).

A few major publications have also proved to be exceptions. In the June 17, 2007, *New York Times Magazine* article, “When is a Pain Doctor a Drug Pusher,” Tina Rosenberg explored the precarious balance among pain, addiction and patient care prompted by the story of one doctor, Ronald McIver, convicted of conspiracy to distribute controlled substances and eight counts of controlled substances distribution. Rosenberg used one physician’s trial to examine the thin line between medical treatment and criminal behavior.

*Washington Post* reporter Marc Kaufman profiled a prominent pain management specialist and chronic pain sufferer, Howard Heit, in the April 23, 2006, article, “Pitching Relief.” Kaufman uses Heit’s dual role to delve into the risk of addiction among patients and the consequences of improper prescribing by doctors. Both Kaufman and Rosenberg

discuss doctors' relationship with the DEA and an ill-fated guideline meant to improve education between law enforcement officials and pain medicine specialists (Kaufman, 2006; Rosenberg, 2007). The DEA unexpectedly pulled the guideline, which outlined prescribing activities that would not incriminate physicians, released around the same time a doctor was facing prosecution for drug trafficking. Kaufman and another *Post* staff writer, Jerry Markon, covered the trials of the doctor, William Hurwitz, and mentioned the medical community's complex relationship with the DEA. After two different trials and an appeal, Hurwitz was sentenced to five years in prison in spring 2007 (Kaufman, 2004; Markon, 2006; Markon 2007). An important part of the story -- the connection between the educational guideline, Hurwitz's trial and the DEA -- has been neglected by journalists.

*Psychology Today* features a section called the "Addiction Center" on its Web site and regularly devotes space to news about addiction in its print publication. Recent articles have addressed gambling and shopping addictions and how to stage interventions (*Psychology Today*, 2008a). The magazine has also published more controversial subject matter, as in the September 1999 article, "Are Psychiatrists Betraying their Patients," a discussion on the supposed allegiance of psychiatrists to prescription drug companies. The article was written as series of essays, one by Loren R. Moshier, past president of the American Psychiatric Association, who accused the organization of being influenced by drug companies. The other essays were counter-arguments by well-known experts within the field (Moshier et al., 1999).

Coverage by *The Herald-Sun* and *News & Observer* on prescription drugs, addiction and the medical community has been limited and mainly focused on specific

incidents. Some articles have focused on physician addiction. In an April 3, 2005, *News & Observer* article, “Patient Blames Medical Board,” Kristin Collins profiles a breast cancer patient who claimed her two doctors, both with histories of drug or alcohol abuse, misdiagnosed her cancer and delayed life-saving treatment. Other articles have centered on a physician with a history of addiction surrendering his license (Locke, 2004), actions against physicians by the North Carolina Medical Board (Avery, 2004), and a researcher pushing for random drug testing of physicians (Shamp, 2002). *News & Observer* reporter Sarah Avery’s Feb. 17, 2002, article, “Doctor defends his pain-control creed,” explores questions over the proper use of narcotics in managing pain and the closing of one North Carolina physician’s practice after his DEA registration was revoked.

Other newspaper coverage has focused on pain management. Susan Kinzie’s Sept. 20, 2001, article “Painkiller backlash feared,” describes doctor and pain patients concern that OxyContin abuse and deaths could lead to the undertreatment of pain and stigma by the public. Interestingly, an Oct. 20, 1996, *News & Observer* article by Catherine Clabby marks the North Carolina Medical Board’s policy shift toward “endorsing the use of powerful narcotics to manage chronic pain” (p. A1).

Some local coverage has centered on statewide trends, such as the increasing number of prescription drug deaths due to the opioid methadone. In a series of three articles published March 12, 2006, *News & Observer* reporter Mandy Locke briefly explains the trend and profiles two people representative of the phenomena. One profile centered on a parent whose teenager accidentally overdosed on methadone. The other focused on a pain patient who was selling her methadone pills (Locke, 2006a; 2006b;



2006c). Locke's reporting uncovered new perspectives, but she did not investigate fully the origins of the trend, or the state and national response to it.

Some newspapers and magazines have covered prescription drugs, medicine and law over the past few years, but coverage has been limited and intermittent. Importantly, few reporters have tackled the issue and its complexities in a comprehensive way.

As this literature review has shown, the relationship among prescription drugs, drug policy, addiction and medicine is a complicated one with many contradictory opinions. Untangling this complex web of interactions in a series of news articles is challenging, but a critical means to explore the issues surrounding law and medicine for the stakeholders. This project intends to do so in three articles by examining the experiences of patients, doctors, policymakers and state and national regulatory authorities.

### CHAPTER III METHOD

The three articles that make up this project are feature-length, non-fiction print articles meant to address the question: How does the complex relationship among prescription drugs, law enforcement and medicine affect the practice of pain and addiction medicine and the regulation of opioid drugs?

The first article follows the experiences of opioid policy researchers and health professionals through the trials and tribulations of a national effort to improve education and relations between Drug Enforcement Administration (DEA) officials and doctors. The article will illuminate the difficulty as well as the necessity of balancing prescription drug regulation with medical care.

The second article explores the issue of illicit drug addiction and prescription opioids through the perspective of one patient who is living with pain from a chronic disease. It will illustrate the experiences of one person grappling with two diseases, chronic pain and addiction.

The third article looks at North Carolina's investigation into overdose deaths from one prescription drug, methadone, in order to explicate the benefits and drawbacks of opioid medications and the difficulties involved in regulating them. It will focus on how methadone has become such an enormous problem and why the drug is so particularly deadly.

To undertake this project, I interviewed multiple sources including physicians, patients, regulatory officials and drug policy researchers, in addition to researching published journals and primary and secondary documents related to the topics of pain and addiction medicine and drug regulation. I kept detailed notes of my research and interviews.

A major obstacle to this series was a lack of reporter access to sources. By far, the most challenging source to work with was the DEA. Former and current officials and policymakers at the DEA play a major role my first article and yet their representative stonewalled my efforts to identify an authoritative source at the agency to interview. I spoke with a public affairs spokeswoman by telephone, who told me that the agency does not comment on internal operations. She suggested that I send her an email instead to request the information I needed for my article. In her response, she wrote that the agency did not have the resources to help me with my project. She then listed a series of policy statements I could use to better understand the DEA's laws and rules. I sent a follow-up email, which requested to speak to someone in general about the DEA's stance on prescription drug rules. This communication was not returned.

My first article would be significantly improved if I could provide the agency's side of the story. Because I could not reach sources within the DEA, I tried to create balance by interviewing multiple policy researchers and medical professionals who were and were not directly involved in the events of the narrative. However, I hope that, if I can successfully pitch this story, I can use that publication's moniker when contacting the DEA anew. Perhaps then, my interview request would be given more serious consideration.

Another obstacle is the Health Insurance Portability and Accountability Act (HIPAA), a recent medical privacy law that has caused gatekeepers hesitation in connecting journalists with patients. I did not have trouble with HIPAA in reporting these articles. However, one gatekeeper's concerns about my presence in a group therapy counseling session did prevent me from experiencing this aspect of my main character's therapy for my second article. I repeatedly asked the patient's drug counselor to be able to sit in on these sessions. The counselor said he would check with his boss and mentioned they would conduct a "risk assessment" for my attending the sessions. However, weeks passed without a direct answer to my request, even after I offered to discuss the risks with his boss. Time limitations did not allow me to experience that aspect of the patient's therapy.

These articles, although they are related in subject matter, are intended for discrete publication. The first article is intended for publication in a newspaper or news magazine in the D.C. area, like the *Washington Post Magazine*. The second article will be suitable for publication in a health or trade magazine such as *Psychology Today*. Although the second article in my series is less directly tied to the fields of psychology or psychiatry, *Psychology Today* has tackled controversial issues and accepts query letters from freelance writers (*Psychology Today*, 2008b). This project is appropriate because it is a topic that has relevance to counselors and psychologists who may be seeing more patients with prescription drug abuse and pain. The third article is meant for publication in a North Carolina daily newspaper, such as *The Herald-Sun* or *News & Observer*. Because of the publications for which these articles are intended, the first and third were written in standard AP style and the second was written in Chicago style.

This project used reporting techniques similar to those employed by Meier, Rosenberg and Kaufman, such as the use of narrative as a story-telling device to explain the larger issues surrounding prescription drugs, policy, law enforcement and medicine. However, this project differed from current media coverage in that it tells a new story and takes a big-picture view to show how these issues affect doctors, patients and regulators. Two articles were regional in scope and, therefore, feature local sources. The other was national and includes sources from across the country. The purpose of this project was to contribute to a greater understanding of the issues surrounding prescription drugs, medicine and policy and to demonstrate how those problems affect drug regulation and the medical community.

## CHAPTER IV A BALANCING ACT: DRUGS, DOCTORS AND THE DEA

Over the past few decades, the Drug Enforcement Administration and doctors have had a relationship as warm as one can be for a federal agency and the group of professionals it regulates. It was a professional, if not friendly, one. Doctors obtain licenses from the DEA and follow the agency's rules to prescribe drugs for their patients. The DEA enforces drug laws, including ones that govern the distribution of prescription drugs and penalizes people – including doctors – who break those laws.

But in the late 1990s, the distant but functioning partnership dissolved into one of almost direct opposition. As the medical community more widely supported the adequate treatment of pain, doctors prescribed more pain medications. Soon, those medicines began to filter out into the illegal drug market.

That prompted the DEA to step up prevention efforts, including the investigation of suspicious prescribing activities among physicians. Fear of prosecution led to a chilling effect because many doctors were hesitant to prescribe pain medications to their patients or opted not to accept those patients for treatment in the first place.

At one point, the medical community and the DEA seemed to stand on opposite sides of a gulf with little hope of meeting in the middle. One party was trying to ensure that patients had access to medicines they needed. The other party was doing its best to protect a population from drugs that are highly addictive and often fatal when abused.

By early 2000, prescription drug use was soaring. About 2.5 million Americans used pain relievers non-medically for the first time in 2000, compared to 600,000 in 1990, according to the National Survey on Drug Use and Health.

With both sides looking for solutions, the DEA and the pain community formed an unlikely but necessary partnership. In October 2001, the DEA and 21 health organizations released a joint statement that articulated a collaborative approach to preventing prescription drug abuse while ensuring the drugs remained available for patients in need.

“There was some kind of sense that we were all in this together,” recalled Steve Passik, an associate attending psychologist at Memorial Sloan-Kettering Cancer Center in Manhattan.

Soon after the statement was released, the organizations involved agreed that further collaboration was needed to discover ways to put the principle of balance into practice. Law enforcement agents needed to better understand doctors’ prescribing practices for controlled substances like pain medication; health care professionals likewise needed to better comprehend the laws and regulations governing the prescription of controlled substances. The idea formed to create an educational guideline that could help clarify points of contention.

But the document that promised to bring law enforcement and medicine together triggered a series of events that eventually drove the two sides further apart, aborting a promising dialogue and sparking an atmosphere of confusion, anger and betrayal among members of the medical community.

### **Looking for balance**

Collaboration on the educational guideline didn't begin until early 2003, two years after the joint consensus was published. The group that worked on the document consisted of about 20 DEA officials, pain policy experts, patient advocacy spokespeople and pain medicine specialists.

“It was a good faith, active, open and transparent kind of discussion,” said David Joranson, senior scientist and director of the Pain and Policies Studies Group, who worked on the document.

The group met for more than a year. The guideline went through rigorous rounds of editing – about 20 in all – before the group was satisfied. They organized the document into two sections. The first tackled medical issues in pain management, and the second addressed issues related to law enforcement, like what factors affected physician investigations and prosecutions.

Finally, in August 2004, *Prescription Pain Medications: Frequently Asked Questions for Health Care Professionals and Law Enforcement Personnel* (FAQ) was published. The DEA set up a press conference and posted the FAQ on its Web site. Joranson and the Pain and Policies Study Group (PPSG) did the same.

The individuals involved with the FAQ seemed pleased with the final product.

“It provided information that made it clear for what one should do and not do,” said William Rowe, chief executive officer of the American Pain Foundation, a non-profit organization devoted to pain advocacy. Rowe worked on the FAQ. “It was a big success.”

But two months later, on Oct. 4, 2004, Joranson received a phone call from a DEA official. The official, who had not been involved in creating the document, claimed



that the FAQ contained “misstatements” and said the agency was pulling the document from its Web site. The official also asked that Joranson remove the document from the PPSG Web site.

Joranson, along with the rest of the pain community, was shocked and confused. He asked the DEA official for a letter explaining the agency’s actions.

The letter, which arrived in early October, didn’t provide much more of an explanation. It said the FAQ contained “misstatements of law and other statements which could create confusion about the applicable law and create misleading perceptions about physician’s [sic] obligations to remain within the bounds of accepted medical practices.”

Further, the letter said the FAQ was removed from the DEA’s Web site “pending further review,” and until this review was completed, the agency could “no longer support or endorse the document.”

“It was a great disappointment, and I was upset because of all the work that had gone into this,” Joranson said.

Many people were surprised at the notion that the document, which was so thoroughly edited, contained any errors.

“The recommendations in the FAQ were supported by DEA for a long period of time,” Gilson said. “It wasn’t until the retraction that they made any indication there were any issues with the content.”

But surprise quickly turned to skepticism, and then rumors began to circulate.

“Imagine the DEA having a press conference with the administrator of the DEA heralding something, and then saying it was never officially approved,” Rowe said. “It

was looked upon by the pain community as bogus. Most people surmised that the real reason had to do with Dr. Hurwitz.”

### **Trial and Speculation**

Dr. William Hurwitz was and remains a controversial figure within the pain community. A Virginia-based pain specialist, Hurwitz advocated publicly for the treatment of chronic pain with large doses of pain medication.

Hurwitz also exhibited negligent prescribing practices. During the 1990s and early 2000s, his medical license was revoked several times after incidents of patient deaths and selling of drugs by patients, according to the Virginia Board of Medicine.

In September 2004, Hurwitz was put on trial for 50 counts of drug trafficking.

Rumors quickly spread within the pain community that the FAQ had been entered into evidence for Hurwitz’s trial.

The FAQ specifically stated it had not been formulated as a type of medical policy or for legal advice. But the document would probably have helped Hurwitz’s case, said David Brushwood, a professor of pharmaceutical outcomes and policy at the University of Florida. The very things Hurwitz was accused of doing were practices that the FAQ had described as acceptable, he said.

A vital part of the prosecution’s case against Hurwitz was the large amount of medication he prescribed. Yet the FAQ stated that the amount of pills prescribed for each patient “should not be used as a sole basis for an investigation by regulators or law enforcement.”

The document stated that physicians – with close monitoring and oversight – could continue to treat patients who abused drugs. Hurwitz had continued to treat patients he knew to be abusing or selling the drugs.

“It destroyed the government’s case against Dr. Hurwitz,” Passik said about the FAQ. Passik testified on Hurwitz’s behalf.

Newspaper reports indicate the FAQ was removed from evidence following the DEA’s removal of the document from its Web site. After several appeals and a new trial, Hurwitz was convicted on 16 counts of drug trafficking and sentenced to five years in prison.

A DEA spokeswoman said the agency does not comment on internal operations, including what prompted the agency to remove the document.

Whether related to the outcome of the Hurwitz case or not, the FAQ’s removal left the pain management community confused and resentful.

“It created a significant amount of turmoil, confusion, dismay in the pain community,” Rowe said.

### **Missteps, Misstatements**

Until the DEA released an explanation of the FAQ’s “misstatements,” no one in the pain community knew how to respond. Because communication with the DEA was limited; the PPSG resorted to writing letters.

In an Oct. 26, 2004, letter to DEA Administrator Karen Tandy, FAQ committee members Joranson, Passik and Portenoy urged clarification on the misstatements and a re-commitment to the principle of balance. The group tread lightly, pushing for information but wary of how important it was to maintain communications with the DEA.

“The FAQ was a positive demonstration of the dialogue that is needed,” they wrote. “The DEA’s sudden withdrawal threatens to undermine several years of progress to further this dialogue.”

A few weeks later, on Nov. 16, 2004, the DEA explained the FAQ’s “misstatements” in an “interim policy statement” (IPS) published in the *Federal Register*, a daily publication of the rules, proposed rules, and notices of federal agencies and the Executive branch of the government.

The IPS explained that the number of patients in a practice receiving pain medications and the amount of drugs prescribed to each patient “may indeed be indicative of diversion” and that physicians have “a responsibility to exercise a much greater degree of oversight to prevent diversion” in patients known or suspected to be addicted.

Brushwood said he found the explanations absurd. He believed the FAQ was pulled because of Hurwitz’s trial.

“You could just tell they spent five weeks going around saying, ‘What can we say misstatements are? I don’t know. We gotta make something up.’”

Absurd or not, one of the DEA’s interim policy statements left the pain community reeling. It stripped doctors of a common prescription-writing practice.

### **Multiple Prescriptions**

The DEA’s prescribing laws and rules, as outlined by and interpreted through the Controlled Substances Act, require that potentially addictive drugs be categorized among five schedules. Illegal drugs, or schedule I controlled substances, like heroin, have no use in medical practice and therefore cannot be prescribed.

Schedule II through V controlled substances are drugs that can be prescribed but have a potential for abuse or addiction. Schedule II has the highest potential; schedule V has the lowest.

Rules on refilling prescriptions differ between schedule II drugs and drugs categorized as schedule III through V. Schedule III, IV and V prescription drugs, such as steroids and benzodiazepines like Xanax and Valium, can be refilled up to five times within a six-month period, meaning that doctors can indicate that a patient receive up to five refills with one prescription. Prescriptions for schedule II drugs, which include the most powerful pain medications like OxyContin and Percocet, cannot be refilled.

Many doctors adapted to this rule by prescribing larger amounts of schedule II drugs at one time. But during the early 1990s, as more prescriptions were paid for by health insurance, a 30-day supply limit was imposed by insurance companies, Brushwood said.

For patients with chronic pain that was well-controlled by the same dosage and type of medication, this limit posed a problem. Although they didn't need to see their doctor every month, they could no longer receive a three to six-month supply of their medicines. Instead, doctors had to find a way to issue three to six prescriptions for a one-month supply at a time, Brushwood said.

Pharmacists and doctors worked out a system where doctors wrote "do not fill until," "valid after" or "do not dispense until" a certain date on prescriptions. For instance, to prescribe three months of pain medication to a patient, a doctor would write one prescription for an immediate 30-day supply of the medication and two additional

30-day supply prescriptions not to be filled until one and two months later. This practice was supported in the FAQ.

But in the interim policy statement, the DEA decided that the practice of writing “do not fill” until prescriptions was “tantamount to writing a prescription authorizing refills of a Schedule II controlled substance” and could indicate “a recurring tactic among physicians who seek to avoid detection when dispensing substances for unlawful (nonmedical) purposes.”

Thus, the DEA no longer considered the “do not fill until” method of prescribing a legitimate medical practice. The reversal flummoxed the pain community and plunged the practice of pain medicine into a state of turmoil.

Instead of writing three or more prescriptions for stable, long-term chronic pain patients during an appointment once every few months, doctors had to figure out how to get new prescriptions to these patients every month. Many physicians felt this meant they had to schedule appointments with all their patients every month.

“I just have a limited number of appointment slots in a day, in a week, in a month,” said Dr. Sunil Dogra, an anesthesiologist at UNC Hospitals. Dogra sees about 150 patients a month.

The prescription-writing change meant more patients were vying for these limited appointments.

“You can imagine what a huge burden that imposed on everybody,” Dogra said.

Rowe said that burden was especially felt by patients.

“For long-term chronic pain patients with long-term opioid therapy, in many instances, it made no sense for them to be coming in every 30 days,” he said. “It was terribly inconvenient and impractical.”

The reversal also added to the chilling effect doctors felt in treating pain.

“You don’t know if what you prescribed is going to be seen as beyond the bounds of medicine or not by some authority outside the practice of medicine,” Rowe said. “It scared a lot of practitioners.”

A noticed released by the DEA on the same day as the interim policy statement solicited comments from physicians and the public regarding areas of the law that the DEA should address in its next statement. The response from the pain community was resounding.

“They (the DEA) were stunned that they received so much criticism,” Brushwood said. “The DEA had no idea that the firestorm of opposition that this would lead to.”

### **The Opposition**

The backlash over the newly imposed rule was swift and far-reaching. In December 2005, the president and president-elect of the American Academy of Pain Medicine, a professional organization representing pain medicine practitioners, wrote a letter formally opposing the interim policy statement.

In January 2005, The National Association of Attorneys General sent a letter signed by 29 attorneys general across the country that expressed concern over the DEA’s recent actions. The attorneys general wrote that the FAQ “appeared to be consistent” with the principle of balance and that the subsequent interim policy statement emphasized law enforcement and seemed “likely to have a chilling effect on physicians.”

In another letter dated March 11, 2005, the PPSG again urged the DEA to reconsider its position on “do not fill until” prescriptions and to re-commit to a balanced and collaborative national policy on diversion control. The letter pointed out that the DEA had previously endorsed the practice of multiple prescriptions in a Jan. 31, 2003, letter to Dr. Howard Heit, a pain specialist also involved in writing the FAQ.

In response, the DEA organized a meeting in August 2005 to address the pain community’s concerns. But in a *Federal Register* clarification in on Aug. 26, the DEA reaffirmed its position. It clarified, however, that patients do not have to visit their physician’s office every month to pick up new prescriptions. Instead, the DEA suggested, physicians could mail the prescription to the patient or pharmacy or fax the prescription, but only if the original handwritten one was available to the pharmacist before dispensing.

Many people continued to try to convince the DEA to modify its position on multiple prescriptions. In a commentary published in the January 2006 edition of the journal *Pain Medicine*, Heit explained that the writing of multiple prescription series is “not done as a way to refill a prescription; rather it is a way to issue a new prescription.” He wrote that monthly visits increased costs for patients and the health care system and mailing prescriptions caused “much more work for the physician and his staff” and ultimately increased the risk that prescriptions might get into the wrong hands.

Heit also slammed the actions of the agency.

“It is now apparent that the spirit of cooperation that existed between the DEA and the pain community to achieve the goal of balance has broken down,” Heit wrote.



“The DEA seems to have ignored the input and needs of the healthcare professionals and pain patients.”

Still, Heit urged the re-establishment of communications between the DEA and the pain community.

“It is essential that we resume dialogue between the DEA and healthcare professionals for the benefit of our patients and society,” he wrote.

### **90-Day Rule**

After a year, the outcries from patients and doctors and perhaps pressure from other branches of government seemed to have gotten through. In a notice dated Sept. 6, 2006, the DEA proposed to amend its regulation, allowing doctors to once again prescribe multiple prescriptions to be filled sequentially – up to a 90-day supply.

The DEA was tight-lipped about the decision, but in the Nov. 19, 2007, *Federal Register*, the DEA wrote that the rule “ensures that the prescriptions are treated as separate dispensing documents, not refills of an original prescription.” The agency said the 90-day “do not fill until” rule saved time and money by reducing frequent visits to doctors.

Health care professionals saw the 90-day limit as sensible.

“I don’t think there are that many people that can handle three months’ worth of controlled substances,” Passik said. “That’s plenty of medicine for the vast majority of pain patients.”

Others, however, are still resentful at the time cap.

“They gave us back what they stole from us, but not quite all of it,” said Brushwood.

A majority of people though welcomed the change. Joranson and Gilson said they felt that the DEA was finally listening to the pain community.

“It’s a long, obtuse way of getting at the same conclusion, unfortunately,” Gilson said. “But I do think that the development of prescription series was a good faith effort on the part of the DEA to legitimize that practice.”

### **A Return to Balance?**

In a December 2007 commentary, Joranson and Gilson suggested that the new rule “should mark the beginning of a re-dedication to education for law enforcement, healthcare regulators, and practitioners.”

Despite the change, the relationship among those groups is still characterized by skepticism and mistrust. Joranson said the DEA officials who worked on the FAQ are no longer with the agency. And many people in the medical community see the officials who replaced them as gun-carrying cops with no knowledge of the intricacies of pain medicine.

“There is a crisis in the credibility of the DEA that has yet to be completely rebuilt,” Joranson said.

He said that credibility seems to be improving, however, as a few DEA officials are once again reaching out to experts in the medical community, he said.

“They’re being very forthright and helpful, and they’re doing their best,” Joranson said. “But it’s been a couple of years of wasted time.”

During that time, the stakes of prescription drug abuse and pain treatment have only been raised higher. In 2005, more than 15 million Americans abused prescription drugs, according to the Substance Abuse and Mental Health Services Administration.

Americans now abuse prescription drugs more than they do heroin, cocaine and hallucinogens combined.

Health organizations and the DEA have said they continue to stand by the joint statement they signed in 2001 committing to a balanced approach to preventing prescription drug abuse. But it's difficult to determine whether positive relations between the pain community and the DEA can ever be achieved.

But to those involved, developing a working relationship is vital to solving the problem of prescription drug abuse.

"This is not going to be solved by each side of this equation sitting in their own corners," Rowe said.

## CHAPTER V CARL'S STORY

Carl McLaurin didn't know someone had tested him for drugs. When he arrived at Duke Hospital's emergency room on a warm morning last July, a nurse took his medical history, including whether he used drugs. McLaurin confessed he smoked marijuana. Once he was admitted, he didn't think about it again.

McLaurin's hematologist, Dr. Laura DeCastro, knew almost immediately. She checks the status of her hospitalized patients daily. McLaurin's drug test, like all the tests and treatments he receives, was filed in his electronic medical record in the Duke University system. DeCastro says she didn't know about McLaurin's marijuana use, but wasn't entirely surprised.

"He's at the age and has the lifestyle where he could be doing it," she says.

But McLaurin's marijuana use wasn't just a lifestyle choice. It was a habit that had turned into a decade-long addiction. McLaurin has sickle cell disease, a genetic condition that causes blood cells to be crescent-, or sickle-shaped. These misshapen cells cause sudden attacks of intense pain, which are usually treated with powerful pain-relieving medication. About 70,000 Americans have the disease.

McLaurin is prescribed oxycodone, an opioid, to deal with his pain crises. But he found that marijuana helped, too.

A small percentage of chronic pain patients abuse their prescription drugs by selling pills or taking too many, or by using other drugs without a prescription. Some, like McLaurin, turn to illicit drugs.

It's a complicated scenario for doctors who prescribe potentially addictive pain medication to patients. How do you treat a patient who needs pain medication but who also abuses drugs?

It was a dilemma that McLaurin and his doctor faced at his first medical appointment after his release from the hospital.

DeCastro confronted him with the results of the drug test. Her license with Medicaid requires that patients caught abusing drugs undergo substance abuse treatment and provide two clean drug tests to continue receiving their pain medication.

DeCastro spoke to McLaurin like a friend; he'd been her patient for 10 years. She offered him two options. He could enter drug treatment, or he could continue to smoke marijuana and forfeit his prescription pain medication. She told him he had a week to choose.

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A study in a Kentucky pain management center showed that one out of 10 chronic pain patients abused their opioid medications. Sixteen percent abused illicit drugs like marijuana. Those numbers, in isolation, might not raise eyebrows. But given the fact that 50 million Americans experience pain, according to the National Pain Foundation, the potential for widespread drug abuse is staggering.

Another way to view the phenomena is through doctors' increased attention to drug-taking behaviors. Over the past few years, doctors have begun assigning random

drug tests and watching closely for signs of addiction. They educate patients, requiring anyone with an ongoing prescription for opioids to sign pain treatment agreements that they know taking the drug could lead to many side effects, including the possibility of addiction.

These agreements also outline the consequences for the patient who becomes addicted. Some patients may be withdrawn from their pain medication. Others, who may be seeking relief, may be switched to a drug that takes care of their pain.

Patients like McLaurin, who are caught or admit to abusing drugs, especially illicit drugs, often have to choose drug rehabilitation to continue receiving their prescription pain medications.

McLaurin took his time deciding whether to enter drug treatment. But he was already leaning toward entering the treatment program. He saw DeCastro's ultimatum as an opportunity. At 29 years old, it was time to quit.

"I don't want to be a pothead the rest of my life," he says.

McLaurin's history with using marijuana is a long and complicated one, entwined with experimentation, recreation and pain. McLaurin was initially terrified of using the drug. A friend gave him his first bag of weed in 1998, but he was so scared to use it that he threw it in a trash can.

Soon after, he started smoking occasionally with friends.

"I had just started smoking cigarettes," McLaurin remembers. "And weed gave me a buzz."

By winter 1999, McLaurin was smoking heavily. He bought marijuana in half-ounces, kept it around his apartment and smoked two or three times a day.

But soon, McLaurin discovered another reason to smoke, besides the high. In 2000, McLaurin underwent surgery for a gastrointestinal condition unrelated to sickle cell. He stopped smoking and moved back home to recuperate, but six months after the surgery, he started again.

“That’s when I first realized that, ‘Wow. This is helping my pain,’” McLaurin says. “When I smoked, it wouldn’t hurt. I really just felt better.”

Over the next seven years, he smoked marijuana two to four times per day about four days a week. The first marijuana cigar, or blunt, would take care of his pain. Two or three blunts more that day would be recreational, McLaurin says.

The intensity of McLaurin’s pain varies, but he can’t remember a day when he didn’t experience it.

“You know how you get blood drawn? You know that first little prick with the needle?” McLaurin says slowly, in a rural North Carolina drawl. “Imagine that, but it’s like pricking’ in your joints.”

Although he’ll turn 30 in two months, McLaurin could easily pass for 20. His face is round and youthful, his skin an earthy brown and slightly oily. He still gets acne occasionally, which bothers him. Everything else about him is elongated and skinny. He weighs just 140 pounds. His legs seem to account for two-thirds of him. When his hips hurt, he walks gingerly.

McLaurin measures his pain along a scale. A two or three is an average day’s pain, the kind he’s learned to deal with. A five or six means 500 milligrams ibuprofen and a warm bath. Anything above a seven requires a 10-milligram dose of oxycodone just

be able to function. Pain at a level of 10 for more than a day or two results in a trip to the emergency room and a morphine drip.

The crises arrive without warning and can last from hours to days.

Marijuana helps ease the moderate pain. “It made it dull and just not as intense,” McLaurin says. “More bearable. More tolerable.”

While marijuana relieves pain, it isn’t a cure-all for pain sufferers. Long-term, heavy marijuana smoking is accompanied by a range of side effects, including lung damage and short-term memory loss, says Stephen Childers, professor of physiology and pharmacology at Wake Forest University. Smoking also decreases the oxygen available in the blood, a serious side effect for someone with a blood disease.

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McLaurin sits in the waiting room of the Duke Psychiatry building, nervously fingering holes in his fashionably tattered jeans. It’s late September, and today is the first meeting with his drug counselor, Rob Kinnan.

McLaurin hasn’t smoked marijuana in more than three weeks, but it’s mostly because he’s had two long hospital stays since his last appointment with DeCastro. The sickle cell clinic and psychiatry department have been coordinating a substance abuse treatment program tailored specifically for sickle cell patients.

As more pain patients are battling addiction, many substance abuse treatment facilities are updating counseling programs to include new segments of patients with special treatment needs. For McLaurin, this treatment involves individual appointments every week with Kinnan and bi-weekly group sessions with other sickle cell patients in recovery for addiction.



Kinnan's treatment plan involves basic relapse prevention: avoiding people, places and things that would trigger use. "Boredom or stress, certain people, certain situations, even certain times of day can all be triggers," Kinnan says. McLaurin would have to adopt some strategies to cope with the situations that made him most vulnerable and could trigger use.

But one trigger McLaurin can't avoid is his pain. It's a challenge for both patient and counselor.

A lot of patients say that marijuana or cocaine helps them with their pain, Kinnan says. "That could be a real problem because it's a big trigger that you really can't get rid of completely."

During his first counseling session, McLaurin admits his fears about pain as a trigger. "I'm concerned about when my next pain episode would occur, I will look for marijuana," he says. "I'm sure I will have an episode, I just don't know when."

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Group therapy sessions take place every other Friday at 11 a.m. Kinnan, who is new to counseling patients with sickle cell disease, formed group sessions so that his patients can provide support for similar issues they are facing, like dealing with cravings during sickle cell crises, he says.

But sharing a common genetic disease doesn't lead to an automatic group bond. At the first group meeting, talk of crises leads to complaining instead of coping strategies. McLaurin, who felt pride in his ability to cope with his pain silently, didn't want to listen.

“It was like a gripe session, and that’s one thing I don’t like – to hear people gripe about their pains and gripe about their not gettin’ medicines,” McLaurin says. “And I just kinda sat there and listened because that’s not how I deal with my pain and my issues.”

He also felt out of place. Two patients in the group used cocaine. “That was really shocking,” McLaurin says. “And it made me feel like I don’t want to do group, I’d just rather do individual.”

When McLaurin voiced his opinions in his individual session, Kinnan told him he was minimizing the seriousness of his own behavior by stigmatizing the other group members.

“I think a lot of people will rationalize to themselves, ‘Hey, I’m only addicted to marijuana, at least I’m not addicted to crack,’” Kinnan says. “Certain groups look down on other groups.”

Kinnan encourages McLaurin to avoid passing judgment and to keep going to group therapy. McLaurin agrees.

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McLaurin’s first crisis since entering treatment comes on Nov. 1, the morning after a Halloween party and a long walk to see the revelry on Franklin Street in Chapel Hill. The pain begins around 11:15 a.m. and becomes so intense McLaurin takes 10 milligrams of oxycodone within half an hour.

McLaurin sits hunched over on the couch in his living room; he’s still wearing his pajamas. He holds his side with one hand, waiting for the oxycodone to kick in. The pain shoots up the bottom of his spine to the middle of his back. He’s almost in a trance. Eyes closed, he breathes deeply in and out.

There's no noise except for the whir of McLaurin's bedside fan and the blaring of a small, fuzzy TV monitor. He takes two 800-milligram ibuprofen tablets.

McLaurin is grateful for the relief his pain pills provide, but he hates taking them. He can't function normally after taking them.

"They just make you so lethargic and just so – so helpless," he says.

Slowly, the pain starts to ease up. At a 10 earlier, the pain is now a seven or eight.

McLaurin crosses his arms behind his back and leans forward periodically.

He stretches his long legs out on the couch and turns on his side. He's clutching the remote, but his eyes are closed again.

He drifts away from the noise of the TV and into the hazy relief of medicine-induced sleep. His phone rings twice, but he either can't hear it or ignores it.

An hour later, a call wakens him. It's 2:36, and he has an appointment with Kinnan at three. He takes another oxycodone, changes and walks slowly to his truck.

The appointment is about two miles away and will take McLaurin about five minutes to drive – if he should be driving at all.

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Sitting on Kinnan's couch, McLaurin's eyes are heavy-lidded. He's still groggy from the oxycodone.

"So, how's it been this week in terms of smoking and temptation to smoke?"

Kinnan asks.

“Temptations are getting less,” McLaurin says softly. “If I would’ve had some this morning, I tell you, I probably would’ve smoked it ‘cause my back was killin’ me for a second there.”

“So, pain is a trigger,” Kinnan says.

“Yeah. But thankfully, I didn’t have it around,” McLaurin says.

McLaurin’s crisis has made him lethargic, but also more candid.

“I ran into one of my friends,” McLaurin says, relaying how the two reminisced about college and how much pot they smoked.

“How does it make you feel when you look back on it?” Kinnan asks.

“Stupid. Like I was a waste,” McLaurin responds. “I should’ve been studyin’ . . . If I had been studyin’ instead of smoking, there’s so much stuff I could’ve been doing.”

“I think when you look back at it, though, it can be a positive thing because it acts as a motivator for what you do going forward,” Kinnan says. “You can look back and say, ‘Back then, I really didn’t accomplish as much as I would’ve liked to and it’s because of this, so going forward, I want to accomplish more, so this can’t be a part of it. This smoking marijuana, it just doesn’t fit with my goals and what I want to do.’”

“It doesn’t,” McLaurin says.

Kinnan teaches McLaurin the serenity prayer and asks McLaurin if he forgives himself for past mistakes. But McLaurin isn’t ready to leave behind his regrets. He brings up the subject of his recently deceased father.

“Sometimes I think about when I was taking care of my father before he died, there would be times I would go smoke,” McLaurin says. “Not say, you know, neglect

him or nothing. I'd make sure before I went and smoked that he was OK and stuff.

Sometimes, I think if I hadn't been smoking, I would've spent more time with him."

Kinnan asks if spending more time together would have made a difference in their relationship. McLaurin says no, but he's clearly conflicted.

"I know that I would've been home with him," McLaurin says.

"So it sounds like grief is still a big issue," Kinnan says.

"It is," McLaurin admits.

Kinnan gently mentions the stages of grief. "Where do you think you're at now? Sounds like you're past denial. You don't sound angry about it. You don't seem to be bargaining so much. Is it just the depression?"

"It is," McLaurin says. "I don't want to say I'm depressed, but maybe I am."

"How would you feel about seeing our doctor...if you're feeling depressed?"

Kinnan asks.

McLaurin, who has been on the anti-depressant Wellbutrin for a few weeks, says he doesn't think the medication has helped.

"Well, why don't we wait and see? Wait for a week...and if you're feeling depressed, we'll talk about getting you in to see our doctor."

As he schedules another appointment, Kinnan compliments McLaurin on his openness at the last group session. Instead of judging the group, McLaurin shared his thoughts about going back to college and his bias against going to a local historically black college.

"They seemed pretty accepting of it," Kinnan says. "Maybe they're capable of understanding other things, too."

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About a month later, McLaurin is back at Duke Hospital. This time, though, he's in the hematology ward, waiting to be called back for his bi-monthly medical appointment.

He's also waiting to hear back from a counselor he called, who is checking into whether Medicaid will cover bereavement therapy for his depression.

He still has some things to work on. He lapsed at his about two weeks ago at his 30th birthday party, his third lapse in a social situation since he started treatment three months ago. It was another setback.

Having worked through his pain trigger, McLaurin is realizing his biggest triggers are his friends. "Marijuana has always been the base of our socialization," McLaurin says. "If I could just not hang out with them – but they're my friends, you know?"

And in retrospect, he sees that for him, the pain was an excuse to keep smoking. "I don't think I needed it," he says. "The pain is no lesser or no stronger since I cut back on marijuana."

He's still worried about lapsing again, especially since he is facing two drug tests. But he's realistic about the consequences of a positive drug test and what they mean for him.

"If it's positive, then I'll just continue gettin' treatment and just not have my pain meds," he says matter-of-factly.

McLaurin is trying his best to put the past behind him and look to the future now. He was recently accepted at North Carolina Central University to start coursework on his second undergraduate degree.

“It’s that structure I’ve been needing,” he says.

He plans to continue treatment for at least another year. Besides a few slip-ups, McLaurin hasn’t smoked heavily for more than two months. He’s proud of himself, though admits he’s surprised, too.

“I didn’t expect it to be hard,” he says. “It’s the first goal that I have that I kinda stuck to.”

## CHAPTER VI SILENT KILLER: METHADONE IN NORTH CAROLINA

North Carolina has been hit hard by the devastating consequences of prescription drug abuse. Over the past decade, over 2,500 North Carolinians have died from accidental prescription drug overdoses – from 42 deaths in 1997 to nearly 600 in 2006.

It's an alarming nationwide trend. As doctors prescribe more drugs to more patients, the rate of abuse has skyrocketed. In fact, abuse of prescription drugs is now more widespread than abuse of heroin, cocaine and hallucinogens combined. And increased abuse has translated into more overdose deaths.

In most states, the drugs most to blame for overdose deaths are pain-relieving opioids like hydrocodone and oxycodone, marketed as Vicodin and OxyContin. But North Carolina is one of a few states facing the majority of its overdose deaths from one particularly deadly type of opioid: methadone.

Of the nearly 600 deaths in 2006, 308 occurred from methadone overdose, although public health officials believe that is a low estimate. Many people who die from a methadone overdose do so with other drugs in their bodies, making it hard to pinpoint the exact cause of death.

Methadone has proved uniquely challenging for both law enforcement officials and the medical community. Methadone is not related to the street drug "meth," or methamphetamine, which is a stimulant; methadone is prescribed widely for the



treatment of heroin addiction and chronic pain. Although the drug has been used since the 1950s, fatal overdoses from methadone were rare until just a few years ago – when methadone became more widely prescribed for pain management.

Kay Sanford was one of the first people in the state to become aware of the rising overdose deaths. An epidemiologist at the North Carolina Division of Public Health, Sanford saw the deaths as a public health problem, but only partly so.

“It was a medical problem; it was a substance abuse problem; it was a law enforcement problem,” she said. “It just went on and on and on.”

And to understand fully the origins of the problems and to find their solutions, state and national authorities have needed to delve into the complexities of the drug, from its chemical properties to its use in addiction and pain treatment and its resulting lethality on the streets.

### **Distribution**

Methadone is an opioid, a group of drugs that include morphine and heroin. It works by binding to receptors in the body that modulate pain sensation, said Linda Dykstra, a psychology professor at UNC-Chapel Hill who studies opioids.

Methadone is usually safe and effective when prescribed and taken appropriately. But like any drug, it can be dangerous when misused or abused.

The drugs bind to breathing centers in the brain, Dykstra said. If too much of the drug is taken, the breathing centers shut down, which can be fatal without immediate medical intervention.

What makes methadone particularly dangerous is that people seldom feel any warning signs when they’ve taken too much methadone, Sanford said.

“The only symptom is that people get sleepy,” she said. “They take a nap and then they don’t wake up.”

As state public health officials launched an investigation into the overdose deaths in 2002, they critically examined the facilities that legally distributed methadone, whether in substance abuse treatment centers, doctor’s offices or pharmacies.

In North Carolina, methadone can be prescribed for addiction treatment only by a licensed substance abuse facility. And even then, the state has strict standards regarding how methadone is dispensed within these facilities. Witnessed by medical personnel, patients drink a liquid mixture of the drug and are given drug tests once a week to make sure they aren’t taking additional drugs.

Rarely do patients have access to methadone without medical personnel present. “It takes years to get take-home privileges,” Sanford said.

The distribution of methadone for pain, however, is starkly different. Any licensed physician who is registered with the Drug Enforcement Administration (DEA) can prescribe methadone.

Both the state’s investigation and a later national assessment by the Substance Abuse and Mental Health Services Administration (SAMHSA) found that opioid treatment centers were not a major contributor to the increase. Death rates from methadone, like those from other prescription opioids, were linked to their use in pain management.

### **Prescription, Diversion and Death**

Pain management has undergone a transformation over the last two decades. In the 1980s, multiple studies reported that patients weren’t being adequately treated for

their pain. State medical boards updated pain practice guidelines encouraging treatment with opioid medication, if it was necessary. Advocacy groups helped push through Congressional legislation that declared 2000 to 2010 the “Decade of Pain Control and Research.”

In response, doctors began prescribing more pain medication. According to the Drug Enforcement Administration, prescriptions of opioids increased 933 percent for methadone, 588 percent for oxycodone and 198 percent for hydrocodone from 1997 to 2005.

That’s also when law enforcement began seeing more diversion, or use of prescription drugs for recreational rather than medical purposes, said James Bowman, Drug Diversion Special Agent in Charge for the North Carolina State Bureau of Investigation (SBI). The greater availability of prescription drugs in the medical community meant more opportunities for diversion and sale of those drugs on the street.

But unraveling the intricate system by which legitimately prescribed drugs end up in the hands of people without prescriptions is messy work. Diversion can occur anywhere along the line from manufacturing to retail.

The Drug Enforcement Administration has reported increasing thefts of courier trucks transporting prescription drugs en route to retail distributors. Other methods include pharmacy theft, forged prescriptions, doctor shopping and fraudulent practices within health care facilities, according to the National Drug Intelligence Center. A 2006 SAMHSA survey reported that a majority of prescription drug abusers simply pilfer pills straight from the bottle prescribed to a friend or relative.

Surprisingly, methadone is not highly trafficked on the streets. According to the SBI's Drug and Environmental Crimes Unit, in 2004 and 2005, more than 145,000 pills were seized. Of those, the most widely diverted drug was hydrocodone, accounting for half of the pills seized. Methadone accounted for only about 1,400 of those pills.

A prescription drug that is diverted infrequently also causes the most overdose deaths, illustrating how lethal methadone is compared to other opioids, Sanford said.

The properties that make methadone so lethal when abused also make it an especially effective pain reliever. It is released slowly, has reduced euphoria and relatively few side effects.

It is also affordable when compared to other prescription opioid pain relievers. Ninety tablets of methadone costs approximately \$50 versus nearly \$200 for the same number of oxycodone pills, according to the Web site [www.pharmacychecker.com](http://www.pharmacychecker.com).

But methadone has a more complex chemistry than other opioid pain relievers.

Methadone is highly variable among patients. Elimination of the drug from patients' systems may take from eight hours to more than 50 hours, according to the Food and Drug Administration (FDA). The pain-relieving effect of methadone lasts much shorter, from four to eight hours.

"The pain relief may be gone, but the drug is still working," Sanford explained. "So patients may be tempted to self-medicate."

Doctors say that opioids are only one component of pain management and that certain precautions must be taken when prescribing opioids for pain.

Methadone is a good choice when the patient has long-term, chronic pain and other opioid medications have failed to control that pain, said Dr. Veeraindar Goli,

director of the Pain Evaluation and Treatment Service at Duke University Health System. Goli occasionally prescribes methadone for pain.

“[But] you want to understand pharmacology, the side effects, everything about it before you do anything,” Goli said.

Methadone’s unique pharmacology can be especially devastating for illegal abusers.

People take methadone expecting a high, she said. When that doesn’t happen, they take more or different drugs, the level of the drug builds up in their bodies, and they overdose.

### **Reducing the Risks**

Following publication of the state’s task force report and SAMHSA’s national assessment of overdose deaths in 2004, methadone-related fatal overdoses continued to increase. According to the CDC’s National Center for Health Statistics, the number of poisoning deaths nationally involving methadone increased 390 percent from 1999 to 2004. Over the five-year period, methadone had claimed 10,957 lives.

National health agencies responded to the problems triggered by methadone in the clinical setting. On Nov. 26, 2006, the FDA issued a public health advisory notifying the medical community of side effects in patients using methadone and announcing the approval of new prescribing information from the drug’s maker, Roxane Labs.

The advisory notified doctors that they should be familiar with methadone’s toxicities and “unique pharmacological properties” before prescribing it. It also reminded physicians that the 40-milligram methadone tablets are FDA-approved only for detoxification and maintenance treatment.

Roxane's patient package insert for methadone, the information given to patients prescribed with the drug, also carried a new "black box" warning. It said that taking higher doses of methadone or taking it more often than prescribed could "lead to an overdose and possible death."

State authorities, meanwhile, have worked to implement programs focused on law enforcement gaps. In August 2005, the North Carolina General Assembly passed a bill that would set up the controlled substances reporting system (CSRS), a centralized database that monitors all out-patient dispensing of prescription drugs considered to have a potential for abuse, including methadone.

In November 2007, the U.S. Department of Justice's National Drug Intelligence Center released a report on methadone diversion, abuse and misuse. And in January of this year, the DEA announced that the manufacturers of methadone had agreed to restrict distribution of 40-milligram tablets of methadone only to facilities authorized to treat opioid detoxification and addiction.

The Controlled Substances Reporting System, which is managed by the North Carolina Division of Mental Health, Developmental Disabilities and Substance Abuse Services, provides patient profiles to doctors that show if a patient is going to different health care facilities and multiple pharmacies. Through CSRS, physicians can investigate whether their patients are receiving prescription drugs or seeing other doctors they don't know about, said John Womble, program consultant for CSRS. Such behavior might be a sign that the patient is misusing or abusing their medications, he said.

CSRS, which went into effect in July 2007, is still in the early stages of operation. Getting every physician in the state registered to use the system is an immediate goal, Womble said.

It's too early to tell if the CSRS and actions by the FDA and DEA have influenced prescription drug overdose deaths. Sanford said she believes they will, but also knows that the solution to reducing overdose deaths is a tricky one.

"How do you make sure you don't compromise the treatment of chronic and severe pain while you are trying to reduce the misuse and abuse of the drugs we know work to cure that pain?" Sanford said. "That continues to be the greatest dilemma."

The answer is not taking the drugs away. "It might be pain management a patient couldn't otherwise afford," she said.

But there are too many preventable deaths.

Her warning is tempered with an equilibrium that both health care workers and law enforcement officials grapple with in fighting prescription drug abuse and overdose deaths.

"Drugs are dangerous," she said. "Drugs are wonderful, but drugs are dangerous."

## CHAPTER VII CONCLUSION

Unlikely as it may seem, the genesis of this project began with a reporting assignment on a sickle cell anemia patient. The path from that original story idea to the final one in these pages has indeed been circuitous. Research for the story of Carl McLaurin led me to interview his physician Dr. Laura DeCastro, who spoke about the liabilities and responsibilities she faced as a physician who regularly prescribed addictive medication. McLaurin and DeCastro's circumstances piqued my curiosity and encouraged me to dig more deeply into the policy issues related to prescription drugs, a topic I would previously have never dreamed I would tackle for my thesis.

Writing about a multi-faceted policy issue has been quite an undertaking. As a consumer of news, I appreciate when reporters confront and explain complex issues. I've tried to do that here, and I encourage other journalism students not to be intimidated by difficult topics. This project has been both challenging and rewarding; it has also been a considerable learning experience.

One lesson I have learned from this project is that the beginning of a story is just that, a beginning. From the bloom of an idea, a story can branch off into many directions worth following. Taking a risk and pursuing those leads might result in a story that hasn't yet been told; I think readers appreciate when journalists take those kinds of risks.

Another lesson I learned is the importance of terminology in writing about drug addiction. Reporters have enormous power with the words we wield and too often, we



overlook their connotative meanings. We strive to be precise, but changing one word in a sentence can radically alter its meaning for a reader. I let many of the expert sources cited in these stories guide the language I used. For example, McLaurin's addiction counselor, Rob Kinnan, referred to McLaurin's first slip-up with marijuana as a "lapse," rather than a "relapse." The difference is critical in the field of addiction studies and recovery. Lapse suggests a temporary return to use, whereas relapse suggests a return to a previous lifestyle. One word connotes a setback, the other, a failure. I urge any reporter embarking on a complex topic, especially a scientific or medical one, to be mindful of the specifics of the language he or she uses to communicate with the reader.

These related yet distinct articles demonstrate the range of foci available within prescription drugs and policy, and the reporting opportunities available to an ambitious journalist. Such stories include the disparity in the severity of prescription drug abuse among states, the continued absence of a prescription monitoring program in some states, and the lack of a uniform dosing regimen for opioid medication prescribed for pain, just to name a few. I hope that, as the fight against prescription drug abuse continues, stories about prescription drug abuse continue to increase and deepen.

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Dispensing of Controlled Substances for the Treatment of Pain, 69 Fed. Reg. 67,170, 67,171 (Nov. 16, 2004)

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Issuance of Multiple Prescriptions for Schedule II Controlled Substances, 72 Fed. Reg. 64,921, 64,922 (Nov. 19, 2007) (to be codified at 21 C.F.R. pt. 1306)

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