Usage of Controlled Substance Pain Medications in Medicaid

Prepared by: Special Needs Consulting Services, Inc.

Joel Menges
Nathaniel Feingold
Ashley Garvin
Amira Mouna
Masih Siavoshan, RPh

January 2013

Table of Contents

I. Executive Summary

Prescription drug abuse is a nationwide phenomenon that has been declared an "epidemic" by the Centers for Disease Control and Prevention (CDC) and is considered one of the fastest growing drug problems in the United States. Special Needs Consulting Services (SNCS) has prepared this report to establish baseline data on the volume of narcotic prescriptions occurring in the Medicaid arena, the level of growth occurring in the usage of these medications, and state variation in narcotics use among Medicaid-covered adults. While much more in-depth analyses are needed to better identify the degree to which inappropriate narcotics usage is occurring, and to guide appropriate action steps, the baseline information tabulated in this report is intended to spur such further action. Some of the report's key statistical findings are presented in Exhibit ES-1.

Across the 14 state Medicaid programs we assessed during 2010, an average of two narcotics prescriptions occurred per covered Medicaid beneficiary between the ages of 15-64. This population's median age is approximately 25. For the *entire* adult Medicaid-covered population to be averaging two narcotic prescriptions per year suggests that there is considerable abuse, misuse, over-prescribing, etc. of these medications in the Medicaid arena. The rapid growth in the usage of narcotics is also troubling. The 14 Medicaid programs collectively experienced a 31% increase in narcotic prescriptions from 2007-2010. After adjusting for increases in the covered population, this still represented a 15% increase in narcotic prescriptions per Medicaid-covered adult. There exists substantial variation in the usage rate of narcotics across different states' Medicaid programs, as well as with the growth rate for these drugs.

Exhibit ES-1. Medicaid Narcotic Prescriptions in 14 States, 2007 and 2010

State	Narcotics Scripts Per Beneficiary Age 15-64			Narcotic Prescriptions		
	2007	2010	% Change, 2007-2010	2007	2010	% Change, 2007-2010
Alaska	1.96	2.31	18%	64,998	87,651	35%
Arkansas	1.07	1.21	14%	235,514	257,226	9%
Louisiana	1.63	1.65	1%	513,851	673,442	31%
Maine	1.97	2.49	27%	269,912	324,312	20%
Mississippi	1.18	1.55	31%	243,619	319,490	31%
Nebraska	2.00	2.14	7%	107,010	134,764	26%
New Hampshire	2.54	3.41	34%	85,771	139,697	63%
North Carolina	2.11	2.59	23%	893,684	1,329,226	49%
North Dakota	1.78	2.38	34%	29,878	45,602	53%
Oklahoma	1.92	2.38	24%	352,582	500,834	42%
Tennessee	2.00	2.38	19%	1,006,464	1,195,293	19%
Texas	1.26	1.36	8%	920,298	1,240,189	35%
Utah	2.60	2.63	1%	184,065	227,500	24%
West Virginia	3.42	3.90	14%	408,953	511,206	25%
TOTAL, All 14 States	**1.75**	**2.01**	**15%**	**5,316,599**	**6,986,432**	**31%**

II. Introduction

The excessive usage and abuse of narcotic prescription drugs -- opioids and other pain medication is difficult to quantify precisely -- but has unarguably birthed a prescription drug abuse epidemic in the United States. The therapeutic use of opioids and other pain medications have exploded in the US, witnessed by increased distributions and sales of hydrocodone and oxycodone. From 1997 to 2007, sales of hydrocodone have increased by 280%, while oxycodone has increased by 866%[1]. As a result, prescription opioid abuse has led to a surge in the number of emergency department visits, deaths, and federal drug spending.

The purposes of this report are to: a) document baseline information on the volume of narcotic medications being prescribed within the Medicaid program; and b) demonstrate the considerable geographic variation in the volume of narcotic medications being prescribed across different states' Medicaid populations. The report focuses on 14 states where the data sources used permit accurate tabulations on the volume of all medications purchased by these states' Medicaid programs. Key statistics produced in the report include:

- the number and variability of pain medication prescriptions occurring in each state's Medicaid program by drug schedule during 2007 and 2010; and
- narcotic medication prescriptions per adult Medicaid-covered person in each state and year (excluding Medicaid/Medicare dual eligibles from the denominator since these persons' medications are paid for through Medicare Part D and thus are not captured in our tabulations).

III. Background on Dynamics of Narcotic Medications

Numerous important dynamics surround prescription pain medication, several of which are described briefly below.

- Pain is a common and often debilitating affliction that can significantly impair a person's quality of life. Pain often warrants medical attention – both for purposes of treating acute short-term pain and long-term chronic pain. Narcotic medications are a valuable and even essential form of treatment for some persons experiencing pain. At the same time, the presence of pain does not automatically warrant narcotic medication treatment – other medications and/or non-medication treatment approaches are often effective.

- Narcotic medications can be abused or misused in numerous ways. These products are often used to feed an addiction – not only for the person directly obtaining the prescription, but also often indirectly for a family member or friend. Pain medications may also be sold to others. OxyContin is reportedly regularly sold on the street for roughly $80 *per pill.*[1] The abuse of narcotic medications appears to serve as a gateway to heroin use.[2] Prescription pain medication diversion has created a vibrant "black market." Research shows that the majority of prescription drugs used for non-medical purposes are prescribed by a physician and then they are shared among family members. Among persons 12 and older who used pain relievers non-medically in the past 12 months, 56% reported that they received drugs for free from a relative or friend.[2]

- The addictive nature of the narcotic painkillers and their use by pregnant women has also created an emerging problem with infants being born addicted to these medications.[3]

- The impact of drug diversion in the Medicaid program goes beyond just the cost of prescription drugs. There are costs associated with physician's visits, emergency department treatment, rehabilitation centers, and other healthcare needs. The Centers for Disease Control and Prevention (CDC) has reported that people on Medicaid are

[1] Meyers, K.C. "Pills Leading Cape's Youth to Heroin." *Cape Cod Times* 12 September 2010. http://www.capecodonline.com/apps/pbcs.dll/article?AID=20100912/NEWS/100909841

[2] Manchikanti L, Fellows B, Ailinani H, Pampati V. Therapeutic Use, Abuse, and Nonmedical Use of Opioids: A Ten Year Perspective. *Pain Physician* 2010; 13:401-435.

[3] Leger, D. "Doctors see surge in newborns hooked on mothers' pain pills." *USA Today.* 14 November 2011. http://www.usatoday30.usatoday.com/news/health/wellness/babies/story/2011-11-13/Doctors-see-surge-in-newborns-hooked-on-mothers-pain-pills/51186076/1

prescribed painkillers at twice the rate of non-Medicaid patients and are at six times the risk for prescription painkillers overdoses[4]

- Numerous deaths are directly attributable to pain medication abuse, addiction and diversion. Drug overdose death rates have more than tripled since 1990.[4] According to the CDC, nearly three out of four prescription drug overdoses are caused by prescription painkillers.[4] In 2009, more than 475,000 emergency department visits were due to the abuse of prescription painkillers.[4] Most pain medication overdose deaths are not associated with patients who recently received pain medication prescriptions. In addition, law enforcement officials have indicated that some patients addicted to pain medications are switching to even more lethal and addictive substances (such as heroin) due to the relatively high cost of pain medication addiction. Some law enforcement officials have further indicated that the problems associated with pain medication abuse are so rampant in their community that the local police force could easily do nothing else (although it is not realistic that any police department could or would focus this heavily).

- It is difficult for providers to discern whether a patient has a legitimate need for a narcotic medication or an illegitimate desire to obtain such a prescription. Both groups of patients may describe their situation in an identical manner. Pain is subjective, therefore it is difficult to determine the amount of pain a patient is experiencing and makes it difficult for a physician to deny a requested pain medication. Even when a physician strongly suspects that the patient is being deceptive, it is difficult to not prescribe a pain medication.

- Both federal and state governments have recognized the rise in prescription drug abuse during the past decade and are exploring ways to deter abuse. For example, the CDC has urged physicians to prescribe opioids more judiciously and consider substituting less addictive treatment regimens. Most states have also started to implement prescription drug monitoring programs for controlled substances to identify suspicious prescription activity.

- Misuse and abuse of pain medication in the Medicaid arena creates excess costs that states are not in a position to afford given their fiscal situations.

While these dynamics pose vexing challenges, the nature and magnitude of narcotic medication abuse and misuse clearly warrants considerable attention and collaboration across the public health, health policy and law enforcement communities. The report's Appendix lists an array of website links to studies, articles, and videos on the dynamics of pain medication use, misuse, and abuse.

[4] Centers for Disease Control and Prevention. Policy Impact Prescription Painkiller Overdoses Policy Impact Brief; 19 Dec 2011. http://www.cdc.gov/HomeandRecreationalSafety/pdf/PolicyImpact-PrescriptionPainkillerOD.pdf

IV. Methodology Description

The report has tabulated all controlled substance painkillers. Narcotic painkillers constitute the vast majority of these prescriptions and this term is broadly used throughout the report. However, some of the controlled substance painkillers included in the report (e.g., tramadol, fentanyl, meperidines) are not narcotics. The report has excluded non-painkiller controlled substances like amphetamines and sedatives.

SNCS relied upon two sources to identify narcotic drugs and to determine the volume of narcotic medications purchased by state Medicaid programs. Those sources include the State Drug Utilization Data provided by the Centers for Medicare and Medicaid Services (CMS) and the Drug Enforcement Administration's (DEA) Controlled Substance List. SNCS used the DEA's Controlled Substance List to determine which opioid pain relievers and other painkillers contained within CMS's data files to focus on.

To ensure that all narcotic pain relievers were captured within the CMS data files, we created a crosswalk file that included the FDA drug name and its respective National Drug Code (NDC). Afterward, we consulted with a pharmacist, who identified the most appropriate narcotics and other controlled substance pain medications to tabulate. A snapshot of our crosswalk file is displayed in Appendix B. Opioid pain relievers were defined according to the DEA's Office of Diversion Control controlled substance schedules. The SNCS opioid pain reliever crosswalk file contains drugs that fall under one of the following categories:

- **Schedule II Controlled Substances**- substances that have a high potential for abuse which may lead to severe psychological or physical dependence. Examples of Schedule II Controlled Substances include fentanyl, oxycodone, and methadone.

- **Schedule III-V Controlled Substances and State Controlled Drugs**- drugs in this schedule have a potential for abuse, but less potential than substances in Schedules I or II. Examples of Schedule III-V and state controlled substances include hydrocodone and controlled cough suppressants such as Phenergan with Codeine®.

All opioid pain medications of interest were extracted from the data files and underwent further data manipulation, cleaning, and analyses. For purposes of this report, opioid pain relievers of the same name, but with varying dosages and or dosage forms (i.e. tablet, capsule) were grouped together under a common name. For example, the drugs Codeine 10mg, Codeine 30mg and Codeine 60mg were grouped together under the drug name Codeine. To aid in this data cleaning attempt, we utilized the Food and Drug Administration's (FDA) National Drug Code Directory (NDC) Database. The NDCs of the opioid medications were added to the database to verify the drug's active ingredient using its non-proprietary name.

While prescription drug information is available in the State Drug Utilization Data file for essentially every state, full Medicaid pharmacy information is not available in most states for the following key reasons:

- Roughly 30 states have capitated managed care programs whereby at least some Medicaid prescription drugs are paid for by Medicaid managed care organizations (MCOs) rather than by the State. Prescriptions paid for by MCOs are not included in the State Drug Utilization Data set, and thus a complete tally of Medicaid narcotic prescriptions in these states was not achievable. Note, however, that states with Medicaid managed care programs that use a pharmacy carve-out model remained under consideration for inclusion in this report.

- In some states, the overall prescription volume (not just the narcotic volume) fluctuates so extensively from quarter to quarter in the State Drug Utilization Data that the credibility of the information is called into question. A key statistic produced in this report, the average annual narcotic prescriptions per adult covered by Medicaid (excluding those without Medicare coverage), required that the numerator (prescription drug volume) be trustworthy.

- The report also sought to quantify the change in narcotics volume from 2007-2010. Some states did not have reliable information in the State Drug Utilization Data set in both of these years.

Once this selection process was completed, fourteen states were retained for inclusion: Alaska, Arkansas, Louisiana, Maine, Mississippi, Nebraska, New Hampshire, North Carolina, North Dakota, Oklahoma, Tennessee, Texas, Utah, and West Virginia.

The average number of monthly narcotics prescriptions in each Medicaid program was derived to adjust for the fact that some calendar quarters are missing from the CMS State Drug Utilization Data for some of the included states (although the quarters of data available in these states appeared consistent with data from other calendar years). The 2010 information had the most quarterly gaps, but we wanted the report to focus on as current a year as possible.

To identify the number of Medicaid-covered disabled adults in each state, SNCS conducted tabulations using Medicaid Statistical Information System (MSIS) data available on the CMS website. The denominator in the prescriptions per adult statistic is non-dual eligible beneficiaries between the ages of 15-64. This age cohort was selected because narcotic pain medication is not often prescribed to children. It is important to note that the Medicaid-covered adult population is skewed toward the younger end of this age spectrum – the median age of the Medicaid 15-64 population is approximately 25, with only 16% being above age 44. The prevalence of chronic pain is directly correlated with advancing age. Thus, the relatively young age mix of the Medicaid-covered non-dual eligible adult population would not be expected to yield a high usage rate of narcotic pain medication.

Data Findings

SNCS' tabulations are summarized in Exhibit A for each of the fourteen states. This table presents the following information for each state (as well as the aggregated total across these states) for both 2007 and 2010:

- Annual narcotic prescriptions per Medicaid adult beneficiary (excluding beneficiaries who are dually enrolled in Medicare, as these persons receive pharmacy coverage through Medicare Part D)
- Percentage changes in the above statistics between 2007 and 2010
- Schedule II drugs as a percentage of all narcotics prescriptions

Exhibit A. Narcotic Prescription Usage in 14 State Medicaid Programs

State	Narcotics Scripts Per Beneficiary Age 15-64			Schedule II Drugs as % of All Narcotic Prescriptions	
	2007	2010	% Change, 2007-2010	2007	2010
Alaska	1.96	2.31	18%	43%	41%
Arkansas	1.07	1.21	14%	21%	23%
Louisiana	1.63	1.65	1%	18%	17%
Maine	1.97	2.49	27%	33%	35%
Mississippi	1.18	1.55	31%	14%	16%
Nebraska	2.00	2.14	7%	28%	33%
New Hampshire	2.54	3.41	34%	55%	61%
North Carolina	2.11	2.59	23%	37%	49%
North Dakota	1.78	2.38	34%	36%	42%
Oklahoma	1.92	2.38	24%	23%	24%
Tennessee	2.00	2.38	19%	23%	25%
Texas	1.26	1.36	8%	7%	10%
Utah	2.60	2.63	1%	35%	42%
West Virginia	3.42	3.90	14%	20%	24%
TOTAL, All 14 States	**1.75**	**2.01**	**15%**	**23%**	**28%**

The figures in Exhibit A are interesting in several respects as described in the ensuing narrative.

Narcotics Usage is Extremely High in the Medicaid Program: Across the 14 states' Medicaid programs, 7 million narcotics prescriptions occurred during 2010, a 31% increase from 5.1 million narcotic prescriptions during 2007. The CY2010 usage of 2.01 narcotic prescriptions per Medicaid-covered adult is a troubling statistic. If one of every ten Medicaid adults was receiving a narcotic medication all year long (e.g., 12 prescriptions), and one-third of all other adults received one narcotic each year (e.g., to treat a short term pain problem such as a dental flare-up), this would create an overall usage of 1.50 narcotic prescriptions per covered person. However, it is difficult to envision that one of every ten Medicaid-covered adults legitimately requires continuous narcotic therapy. (An assumption that one-third of the remaining covered adults would legitimately receive one narcotic prescription each year also seems to be overly generous or excessive.) Yet the average narcotics usage per adult beneficiary across the fourteen states is well above these illustrative usage levels and the usage rates in several of these states are *far* above this average.

Given that 14.2% of the country's Medicaid-covered adults (excluding those also receiving Medicare) reside in the 14 states included in Exhibit A, the 2.01 usage per adult enrollee translates to roughly 50 million annual Medicaid narcotics prescriptions across the nation's Medicaid-covered adult population (which includes approximately 25 million persons).

Rapid Growth in Narcotics Usage Has Occurred: The 15% increase in the narcotics usage rate (per Medicaid-covered adult) from 2007 to 2010 and the 37% rate within the Schedule II narcotics that are particularly prone to abuse are also grounds for concern. There is little reason to expect that the incidence of pain in the Medicaid population would have increased this much, if at all. The total number of narcotics prescriptions across the 14 states increased 31% between 2007 and 2010. Given that the size of the Medicaid adult covered population increased 15% during this timeframe, a "raw increase" in the number of Medicaid narcotic prescriptions would be expected to have occurred. However, the observed 15% usage rate increase adjusts for this population growth. In any event, a strong case can be made that given the excess usage and other adverse dynamics occurring with these medications, a considerable reduction in volume from 2007-2010 would have been a more desirable and appropriate outcome.

Substantial Usage and Usage Trend Variation Exists Across States: Exhibit A demonstrates widespread state differences in the rate of narcotic prescriptions per adult, ranging in 2010 from a low of 1.56 in Arkansas to a high of 3.90 in West Virginia. The West Virginia figure is stunningly high. Continuing with the assumption that one third of all other Medicaid adults receive one narcotic prescription each year to treat a short-term pain issue, 30% of West Virginia Medicaid-covered adults would need to be receiving continuous (12 prescriptions per year) narcotics therapy for the overall average to be 3.90.[5] Other states with particularly high narcotics usage rates in 2010 include New Hampshire (3.41), Utah (2.63) North Carolina (2.59), and Maine (2.49).

[5] Undoubtedly, some patients are receiving more than 12 narcotics prescriptions in a given year, and some are receiving between 1 and 12 prescriptions. Patient-specific usage was not discernible in the data sources used; thus SNCS is only able to provide examples of patient usage patterns that would tie to the overall observed usage rates.

State-specific detail in the same format as in Exhibit B is provided in Appendix A for each of the fourteen states.

The data in Exhibits B and Appendix A demonstrate that the Medicaid narcotics prescriptions are dominated by hydrocodone. Hydrocodone represents roughly two-thirds of all narcotics prescriptions across the 14 states, ranging from 46% of narcotic prescriptions in North Dakota to a high of 78% in Texas. Tramadol accounts for roughly half of the remaining narcotics prescriptions, with this medication ranging from a low of 10% of narcotic prescriptions in Arkansas to a high of 19% in North Dakota. The remaining narcotic prescriptions (roughly 15% of narcotic prescriptions) are dispersed across a broad array of different drugs.

Exhibit B. Controlled Substance Pain Medication Usage Across 14 States by Drug and Drug Category

Narcotic Category	2007	2010	% Change, 2007 - 2010
Schedule II Medications			
Fentanyl	83,490	177,815	113%
Meperidines	20,883	62,196	198%
Methadone	85,357	72,026	-16%
Morphine & Derivatives	191,569	472,780	147%
Oxycodone & Relatives	853,299	1,140,719	34%
Other Schedule II Narcotics	216	4,831	2137%
Schedule III-V Medications			
Controlled Cough Suppressants	117,620	36,061	-69%
Detoxifiers	52,550	197,980	277%
Hydrocodone & Relatives	3,192,031	3,916,455	23%
Painkillers for Headache/Migraine	207,277	204,089	-2%
Tramadol	512,149	701,001	37%
Other Schedule III-V Narcotics	152	479	215%
TOTAL SCRIPTS, ALL NARCOTICS	**5,316,593**	**6,986,432**	**31%**
Average Covered Persons 15-64	3,045,640	3,467,929	14%
Prescriptions Per Person Per Year (age 15-64)	**1.75**	**2.01**	**15%**
Hydrocodone as % of all Narcotic Prescriptions	**60%**	**56%**	Cell left blank
Subtotal, Schedule II Narcotic Prescriptions	1,234,814	1,930,367	56%
Subtotal, Schedule III-V Narcotic Prescriptions	4,081,779	5,056,065	24%
Schedule II Drugs as % of Narcotic Scripts	**23.2%**	**27.6%**	Cell left blank
Schedule II Scripts Per Person Per Year (15-64)	**0.41**	**0.56**	**37%**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.34**	**1.46**	**9%**

V. Discussion

The volume of narcotic prescriptions occurring in the Medicaid program, and the significant growth in that volume, are significant areas of concern. The aggregate nature of the data used in this report cannot identify a specific instance of clinically detrimental, unnecessary, or fraudulent utilization of narcotic medications. Nonetheless, it is widely known and well-documented that addiction, fraud, and other excess usage issues with regard to narcotic medications constitute a major national problem.

This report provides baseline data on the level of narcotics usage in the Medicaid arena. The usage rates quantified herein – the aggregate figure of narcotics prescriptions per Medicaid covered adult (2.01 in CY2010) and the state-specific figures shown in Table 1 – demonstrate the large volume of narcotic prescriptions the Medicaid program is purchasing. The report also quantifies the rapid increase in narcotics prescriptions in Medicaid; a 15% increase occurred in the narcotics usage rate between 2007 and 2010 across the 14 states.

Numerous challenges exist in discerning the clinically therapeutic narcotic prescriptions from those that are fraudulent, clinically detrimental, or excessive. At the same time, it is clearly not sufficient to simply pay for whatever narcotics prescriptions are ordered by a physician. One example approach in Medicaid involves reducing the days supply from a month to roughly one week when a beneficiary claims to have lost her/his existing narcotics prescription. This can be effective in reducing the degree to which medications are sold on the black market, since sealed bottles carry a much higher "street price" relative to an unsealed bottle of a few days' supply of pills. Another approach involves "locking in" suspected narcotics abusers to certain physicians and pharmacies to eliminate the "doctor shopping" that can cause a multitude of excessive prescriptions to be obtained. Many other approaches are being designed and implemented.

Website references to a set of articles about narcotics usage – as well as linkages to some publicly available documentaries – are provided in Appendix C.

SNCS encourages that narcotic prescription usage in Medicaid receive much more extensive data analysis attention and corresponding program design, implementation, and modification efforts to better ensure that needed therapies are reaching patients, but that the fraud/abuse/excess usage is increasingly identified and eliminated.

APPENDICES

Appendix A. State-Specific Narcotic Volume

Appendix B. Crosswalk of Opioid Medication and Other Painkillers

Appendix C. Bibliography of Relevant Web References, Articles, Videos

ALASKA

	Alaska	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	157	84
Detoxifiers	884	2,787
Fentanyl	989	3,505
Hydrocodone & Relatives	31,150	39,930
Meperidines	713	709
Methadone	3,103	2,201
Misc	4	7
Morphine & Derivatives	4,850	6,323
Oxycodone & Relatives	18,248	23,180
Painkillers for Headache/Migraine	366	914
Talwin	-	-
Tramadol	4,534	7,883
(blank)	-	128
TOTAL	**64,998**	**87,651**
MONTHLY TOTAL	**5,416**	**7,304**
Average Covered Persons 15-64	**33,204**	**38,014**
Scripts Per Person Per Year (age 15-64)	**1.96**	**2.31**
Hydrocodone as % of all Narcotics	**47.9%**	**45.6%**
Schedule II Drugs	**27,907**	**36,828**
Schedule III-V Drugs	**37,091**	**51,613**
Schedule II Drugs as % of Narcotic Scripts	**42.9%**	**42.0%**
Schedule II Scripts Per Person Per Year (15-64)	**0.84**	**0.97**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.12**	**1.34**

-Note: The report has tabulated all controlled substance painkillers. Narcotic painkillers constitute the vast majority of these prescriptions and this term is broadly used throughout the report. However, some of the controlled substance painkillers included in the report (e.g., tramadol, fentanyl, meperidines) are not narcotics. The report has not included or tabulated medications that are controlled substances but which are not painkillers (e.g., certain amphetamines and sedatives).

ARKANSAS

	Arkansas	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	11,701	1,265
Detoxifiers	104	1,016
Fentanyl	1,245	911
Hydrocodone & Relatives	145,792	167,011
Meperidines	1,312	9,145
Methadone	6,340	5,260
Misc	7	7
Morphine & Derivatives	10,937	9,150
Oxycodone & Relatives	28,472	34,356
Painkillers for Headache/Migraine	7,378	7,650
Talwin	2	-
Tramadol	22,224	20,346
(blank)	-	1,109
TOTAL	**235,514**	**257,226**
MONTHLY TOTAL	**19,626**	**21,436**
Average Covered Persons 15-64	**221,056**	**211,799**
Scripts Per Person Per Year (age 15-64)	**1.07**	**1.21**
Hydrocodone as % of all Narcotics	**62%**	**65%**
Schedule II Drugs	48,313	59,938
Schedule III-V Drugs	187,201	197,288
Schedule II Drugs as % of Narcotic Scripts	**20.5%**	**23.3%**
Schedule II Scripts Per Person Per Year (15-64)	**0.22**	**0.28**
Schedule III-V Scripts Per Person Per Year (15-64)	**0.85**	**0.93**

LOUISIANA

	Louisiana	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	307	272
Detoxifiers		9,372
Fentanyl	7,631	8,402
Hydrocodone & Relatives	327,281	404,100
Meperidines	6,457	8,617
Methadone	9,530	-
Misc	5	-
Morphine & Derivatives	8,646	21,580
Oxycodone & Relatives	61,437	77,108
Painkillers for Headache/Migraine	31,932	45,875
Talwin	57	15
Tramadol	60,568	98,101
(blank)	-	-
TOTAL	**513,851**	**673,442**
MONTHLY TOTAL	**42,821**	**56,120**
Average Covered Persons 15-64	**314,645**	**408,471**
Scripts Per Person Per Year (age 15-64)	**1.63**	**1.65**
Hydrocodone as % of all Narcotics	**63.7%**	**60.0%**
Schedule II Drugs	**93,706**	**115,707**
Schedule III-V Drugs	**420,145**	**557,735**
Schedule II Drugs as % of Narcotic Scripts	**18.2%**	**17.2%**
Schedule II Scripts Per Person Per Year (15-64)	**0.30**	**0.28**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.34**	**1.37**

MAINE

	Maine	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	251	256
Detoxifiers	26,811	47,981
Fentanyl	2,349	4,203
Hydrocodone & Relatives	124,363	122,451
Meperidines	370	297
Methadone	9,823	9,202
Misc	26	39
Morphine & Derivatives	13,978	14,752
Oxycodone & Relatives	61,283	85,327
Painkillers for Headache/Migraine	7,445	9,954
Talwin	-	-
Tramadol	23,213	29,828
(blank)	-	22
TOTAL	**269,912**	**324,312**
MONTHLY TOTAL	**22,493**	**27,026**
Average Covered Persons 15-64	**136,921**	**127,347**
Scripts Per Person Per Year (age 15-64)	**1.97**	**2.55**
Hydrocodone as % of all Narcotics	**46%**	**38%**
Schedule II Drugs	87,829	113,842
Schedule III-V Drugs	182,083	210,470
Schedule II Drugs as % of Narcotic Scripts	**32.5%**	**35.1%**
Schedule II Scripts Per Person Per Year (15-64)	**0.64**	**0.89**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.33**	**1.65**

MISSISSIPPI

	Mississippi	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	3,921	5,953
Detoxifiers	787	3,286
Fentanyl	5,724	7,596
Hydrocodone & Relatives	160,979	213,838
Meperidines	858	2,679
Methadone	1,264	1,271
Misc	1	5
Morphine & Derivatives	4,878	9,282
Oxycodone & Relatives	22,053	28,725
Painkillers for Headache/Migraine	14,962	13,261
Talwin	1	-
Tramadol	28,191	33,594
(blank)	-	-
TOTAL	**243,619**	**319,490**
MONTHLY TOTAL	**20,302**	**26,624**
Average Covered Persons 15-64	**205,764**	**206,526**
Scripts Per Person Per Year (age 15-64)	**1.18**	**1.55**
Hydrocodone as % of all Narcotics	**66%**	**67%**
Schedule II Drugs	34,778	49,558
Schedule III-V Drugs	208,841	269,932
Schedule II Drugs as % of Narcotic Scripts	**14.3%**	**15.5%**
Schedule II Scripts Per Person Per Year (15-64)	**0.17**	**0.24**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.01**	**1.31**

NEBRASKA

	Nebraska	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	11,290	979
Detoxifiers	38	41
Fentanyl	3,006	6,271
Hydrocodone & Relatives	50,986	69,246
Meperidines	257	965
Methadone	1,589	1,991
Misc	16	1
Morphine & Derivatives	4,783	11,060
Oxycodone & Relatives	20,137	24,772
Painkillers for Headache/Migraine	3,960	4,242
Talwin	-	-
Tramadol	10,948	15,149
(blank)	-	47
TOTAL	**107,010**	**134,764**
MONTHLY TOTAL	**8,917**	**11,230**
Average Covered Persons 15-64	**53,417**	**63,100**
Scripts Per Person Per Year (age 15-64)	**2.00**	**2.14**
Hydrocodone as % of all Narcotics	**47.6%**	**51.4%**
Schedule II Drugs	**29,788**	**45,107**
Schedule III-V Drugs	**77,222**	**89,657**
Schedule II Drugs as % of Narcotic Scripts	**27.8%**	**33.5%**
Schedule II Scripts Per Person Per Year (15-64)	**0.56**	**0.71**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.45**	**1.42**

NEW HAMPSHIRE

	New Hampshire	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	1,565	264
Detoxifiers	1,888	7,050
Fentanyl	1,887	8,997
Hydrocodone & Relatives	24,831	31,979
Meperidines	339	1,311
Methadone	4,474	5,482
Misc	56	56
Morphine & Derivatives	5,362	17,688
Oxycodone & Relatives	35,296	52,028
Painkillers for Headache/Migraine	4,035	5,023
Talwin	-	-
Tramadol	6,038	9,811
(blank)	-	8
TOTAL	85,771	139,697
MONTHLY TOTAL	7,148	11,641
Average Covered Persons 15-64	33,758	41,006
Scripts Per Person Per Year (age 15-64)	2.54	3.41
Hydrocodone as % of all Narcotics	29.0%	22.9%
Schedule II Drugs	47,414	85,570
Schedule III-V Drugs	38,357	54,127
Schedule II Drugs as % of Narcotic Scripts	55.3%	61.3%
Schedule II Scripts Per Person Per Year (15-64)	1.40	2.09
Schedule III-V Scripts Per Person Per Year (15-64)	1.14	1.32

NORTH CAROLINA

	North Carolina	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	48,383	429
Detoxifiers	2,106	26,710
Fentanyl	22,230	62,672
Hydrocodone & Relatives	399,140	499,939
Meperidines	2,431	11,547
Methadone	21,874	20,738
Misc	25	10
Morphine & Derivatives	29,876	171,649
Oxycodone & Relatives	255,393	380,049
Painkillers for Headache/Migraine	31,843	38,793
Talwin	-	251
Tramadol	80,383	114,400
(blank)	-	2,039
TOTAL	**893,684**	**1,329,226**
MONTHLY TOTAL	**74,474**	**110,769**
Average Covered Persons 15-64	**424,252**	**513,221**
Scripts Per Person Per Year (age 15-64)	**2.11**	**2.59**
Hydrocodone as % of all Narcotics	**45%**	**38%**
Schedule II Drugs	331,829	648,704
Schedule III-V Drugs	561,855	680,522
Schedule II Drugs as % of Narcotic Scripts	**37.1%**	**48.8%**
Schedule II Scripts Per Person Per Year (15-64)	**0.78**	**1.26**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.32**	**1.33**

NORTH DAKOTA

	North Dakota	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	663	227
Detoxifiers	178	617
Fentanyl	1,082	2,027
Hydrocodone & Relatives	13,523	17,943
Meperidines	154	410
Methadone	930	775
Misc	-	-
Morphine & Derivatives	1,580	6,705
Oxycodone & Relatives	6,931	8,983
Painkillers for Headache/Migraine	382	507
Talwin	-	-
Tramadol	4,455	7,354
(blank)	-	54
TOTAL	**29,878**	**45,602**
MONTHLY TOTAL	**2,490**	**3,800**
Average Covered Persons 15-64	16,819	19,135
Scripts Per Person Per Year (age 15-64)	**1.78**	**2.38**
Hydrocodone as % of all Narcotics	**45%**	**39%**
Schedule II Drugs	10,677	18,954
Schedule III-V Drugs	19,201	26,648
Schedule II Drugs as % of Narcotic Scripts	**35.7%**	**41.6%**
Schedule II Scripts Per Person Per Year (15-64)	**0.63**	**0.99**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.14**	**1.39**

OKLAHOMA

	Oklahoma	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	46	137
Detoxifiers	536	3,649
Fentanyl	6,718	17,665
Hydrocodone & Relatives	227,598	312,369
Meperidines	1,065	2,981
Methadone	3,804	3,900
Misc	18	10
Morphine & Derivatives	12,823	24,319
Oxycodone & Relatives	55,329	70,958
Painkillers for Headache/Migraine	11,273	16,906
Talwin	9	-
Tramadol	33,363	47,493
(blank)	-	447
TOTAL	**352,582**	**500,834**
MONTHLY TOTAL	**29,382**	**41,736**
Average Covered Persons 15-64	183,191	210,419
Scripts Per Person Per Year (age 15-64)	**1.92**	**2.38**
Hydrocodone as % of all Narcotics	**65%**	**62%**
Schedule II Drugs	79,757	120,280
Schedule III-V Drugs	272,825	380,554
Schedule II Drugs as % of Narcotic Scripts	**22.6%**	**24.0%**
Schedule II Scripts Per Person Per Year (15-64)	**0.44**	**0.57**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.49**	**1.81**

TENNESSEE

	Tennessee	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	242	110
Detoxifiers	8,878	42,108
Fentanyl	5,844	7,472
Hydrocodone & Relatives	634,438	737,827
Meperidines	3,710	8,561
Methadone	2,132	1,022
Misc	12	
Morphine & Derivatives	58,940	73,256
Oxycodone & Relatives	159,166	205,074
Painkillers for Headache/Migraine	37,420	6,953
Talwin	-	182
Tramadol	95,682	112,315
(blank)		413
TOTAL	**1,006,464**	**1,195,293**
MONTHLY TOTAL	**83,872**	**99,608**
Average Covered Persons 15-64	503,086	502,557
Scripts Per Person Per Year (age 15-64)	**2.00**	**2.38**
Hydrocodone as % of all Narcotics	**63%**	**62%**
Schedule II Drugs	229,804	295,798
Schedule III-V Drugs	776,660	899,495
Schedule II Drugs as % of Narcotic Scripts	**22.8%**	**24.7%**
Schedule II Scripts Per Person Per Year (15-64)	**0.46**	**0.59**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.54**	**1.79**

Note: Available State Drug Utilization Data file information for Tennessee data in calendar year 2007 was determined to be incomplete during the first and fourth quarters. Therefore, the usage from the second and third quarters was doubled to estimate full year 2007 usage.

TEXAS

	Texas	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	38,316	24,495
Detoxifiers	1,959	7,834
Fentanyl	14,645	22,569
Hydrocodone & Relatives	690,699	908,864
Meperidines	2,773	10,276
Methadone	10,322	11,728
Misc	21	29
Morphine & Derivatives	17,612	55,583
Oxycodone & Relatives	19,337	22,090
Painkillers for Headache/Migraine	34,245	42,781
Talwin	76	31
Tramadol	90,293	133,608
(blank)	-	301
TOTAL	**92,0298**	**124,0189**
MONTHLY TOTAL	**76,691**	**103,349**
Average Covered Persons 15-64	**728,994**	**908,840**
Scripts Per Person Per Year (age 15-64)	**1.26**	**1.36**
Hydrocodone as % of all Narcotics	**75.1%**	**73.2%**
Schedule II Drugs	**64,710**	**122,576**
Schedule III-V Drugs	**855,588**	**1,117,613**
Schedule II Drugs as % of Narcotic Scripts	**7.0%**	**9.9%**
Schedule II Scripts Per Person Per Year (15-64)	**0.09**	**0.13**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.17**	**1.23**

UTAH

	Utah	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	360	1,377
Detoxifiers	2,177	3,822
Fentanyl	2,409	11,537
Hydrocodone & Relatives	97,423	106,839
Meperidines	391	1,897
Methadone	5,326	4,090
Misc	5	10
Morphine & Derivatives	6,898	21,029
Oxycodone & Relatives	49,796	56,327
Painkillers for Headache/Migraine	3,852	11
Talwin	-	-
Tramadol	15,428	20,530
(blank)	-	31
TOTAL	**184,065**	**227,500**
MONTHLY TOTAL	**15,339**	**18,958**
Average Covered Persons 15-64	70,809	86,367
Scripts Per Person Per Year (age 15-64)	**2.60**	**2.63**
Hydrocodone as % of all Narcotics	**53%**	**47%**
Schedule II Drugs	64,825	94,921
Schedule III-V Drugs	119,240	132,579
Schedule II Drugs as % of Narcotic Scripts	**35.2%**	**41.7%**
Schedule II Scripts Per Person Per Year (15-64)	**0.92**	**1.10**
Schedule III-V Scripts Per Person Per Year (15-64)	**1.68**	**1.54**

WEST VIRGINIA

	West Virginia	
Narcotic Category	**2007**	**2010**
Controlled Cough Suppressants	418	213
Detoxifiers	6,204	41,707
Fentanyl	7,731	13,988
Hydrocodone & Relatives	263,828	284,119
Meperidines	53	2,801
Methadone	4,846	4,366
Misc	26	34
Morphine & Derivatives	10,406	30,404
Oxycodone & Relatives	60,421	71,742
Painkillers for Headache/Migraine	18,184	11,219
Talwin	7	-
Tramadol	36,829	50,589
(blank)	-	24
TOTAL	**408,953**	**511,206**
MONTHLY TOTAL	**34,079**	**42,601**
Average Covered Persons 15-64	**119,724**	**131,125**
Scripts Per Person Per Year (age 15-64)	**3.42**	**3.90**
Hydrocodone as % of all Narcotics	**65%**	**56%**
Schedule II Drugs	83,483	123,359
Schedule III-V Drugs	325,470	387,847
Schedule II Drugs as % of Narcotic Scripts	**20.4%**	**24.1%**
Schedule II Scripts Per Person Per Year (15-64)	**0.70**	**0.94**
Schedule III-V Scripts Per Person Per Year (15-64)	**2.72**	**2.96**

Note: Available State Drug Utilization Data file information for West Virginia data in calendar year 2010 was determined to be incomplete for certain drugs in different quarters. Therefore, data for some quarters were extrapolated to full year for this state.

Appendix B. Sample of SNCS Crosswalk of Opioid Medication and Other Painkillers

All	Schedule	Grouping	FDA DRUG NAME	LEVEL OF ABUSE
ALL	II	FENTANYL	ACTIQ	8
ALL	II	FENTANYL	ACTIQ 1,200	8
ALL	II	FENTANYL	ACTIQ 1,600	8
ALL	II	FENTANYL	ACTIQ 1200	8
ALL	II	FENTANYL	ACTIQ 1600	8
ALL	II	FENTANYL	ACTIQ 200	8
ALL	II	FENTANYL	ACTIQ 200M	8
ALL	II	FENTANYL	ACTIQ 400	8
ALL	II	FENTANYL	ACTIQ 400M	8
ALL	II	FENTANYL	ACTIQ 600	8
ALL	II	FENTANYL	ACTIQ 600M	8
ALL	II	FENTANYL	ACTIQ 800	8
ALL	II	FENTANYL	ACTIQ 800M	8
ALL	II	FENTANYL	ALFENTA	8
ALL	II	FENTANYL	ALFENTA 50	8
ALL	II	FENTANYL	ALFENTANIL	8
ALL	III-IV & State Controlled	HYDROCODONE & RELATIVES	APAP W/COD	5
ALL	III-IV & State Controlled	HYDROCODONE & RELATIVES	APAP WITH	5
ALL	III-IV & State Controlled	HEADACHE/MIGRAINE	APAP/CAFF/	3
ALL	III-IV & State Controlled	HYDROCODONE & RELATIVES	APAP/CODEI	5
ALL	III-IV & State Controlled	HEADACHE/MIGRAINE	APAP-BUTAL	3
ALL	III-IV & State Controlled	HEADACHE/MIGRAINE	APAP-CAFFE	3
ALL	III-IV & State Controlled	HYDROCODONE & RELATIVES	ASCOMP W/	5
ALL	III-IV & State Controlled	HYDROCODONE & RELATIVES	ASCOMP WIT	5
ALL	III-IV & State Controlled	HYDROCODONE & RELATIVES	ASPIRIN W/	5
ALL	III-IV & State Controlled	HYDROCODONE & RELATIVES	ASPIRIN WI	5
ALL	II	MORPHINE & DERIVATIVES	ASTROMORPH	7
ALL	II	MORPHINE & DERIVATIVES	AVINZA	8

Appendix C. Articles, Reports and Videos Regarding Narcotic Prescription Drugs

Breen T. Rising Painkiller Abuse Damages Lives. *USA Today*, 4 August 2007. http://usatoday30.usatoday.com/news/health/2007-08-04-painkillers_N.htm

Cecil B, Thompson M. Inside Tennessee's Medicine Cabinet How Much is Enough? Special Industry Reports. BlueCross BlueShield of Tennessee. 7 September 2012. http://www.bcbst.com/about/news/reports-issues/blue-reports/2008/08-191%20BluePaper%20%281-30-08%29.pdf

Centers for Disease Control and Prevention. Policy Impact: Prescription Painkiller Overdoses. 6 August 2012. http://www.cdc.gov/HomeandRecreationalSafety/pdf/PolicyImpact-PrescriptionPainkillerOD.pdf

Centers for Disease Control and Prevention. CDC Grand Rounds: Prescription Drug Overdoses — a U.S. Epidemic. 13 January 2012. http://www.cdc.gov/mmwr/pdf/wk/mm6101.pdf

Executive Office of the President of the United States. Epidemic: Responding to America's Prescription Drug Abuse Crisis. 20 September 2012. http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx_abuse_plan.pdf

Fauber J, Gauber E. The Anatomy of a Epidemic: The Opioid Movie. *Milwaukee Journal Sentinel*, 18 September 2012. http://www.medpagetoday.com/Neurology/PainManagement/34650

FY 2007 Monthly Cube. Medicaid Statistical Information System (MSIS) State Summary Datamarts. Centers for Medicare and Medicaid Services. 1 August 2012. http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MSIS-Mart-Home.html

FY 2007 Quarterly Cube. Medicaid Statistical Information System (MSIS) State Summary Datamarts. Centers for Medicare and Medicaid Services. 1 August 2012. http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MSIS-Mart-Home.html

FY 2008 Monthly Cube. Medicaid Statistical Information System (MSIS) State Summary Datamarts. Centers for Medicare and Medicaid Services. 1 August 2012. http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MSIS-Mart-Home.html

FY 2008 Quarterly Cube. Medicaid Statistical Information System (MSIS) State Summary Datamarts. Center for Medicare and Medicaid Services. 1 August 2012. http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MSIS-Mart-Home.html

FY 2009 Monthly Cube. Medicaid Statistical Information System (MSIS) State Summary Datamarts. Centers for Medicare and Medicaid Services. 1 August 2012. http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MSIS-Mart-Home.html

FY 2010 Quarterly Cube. Medicaid Statistical Information System (MSIS) State Summary Datamarts. Centers for Medicare and Medicaid Services. 1 August 2012. http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MSIS-Mart-Home.html

Glorioso C, Burke T. Bronx Doctors Runs "Pill Mill." *NBC 4*, 31 July 2012. http://www.nbcnewyork.com/news/local/I-Team-Bronx-Doctor-Runs-Pill-Mill-Says-Pol-164461236.html

Goodnough A, Zezima K. When Children's Scribbles Hide a Prison Drug. *The New York Times*, 28 May 2011. http://www.nytimes.com/2011/05/27/us/27smuggle.html

Gupta S. Let's end the prescription drug death epidemic. *CNN Health*, 14 November 2012. http://www.cnn.com/2012/11/14/health/gupta-accidental-overdose/index.html

Hawley C. Painkiller sales soar around U.S., fuels addiction. *Newsday*, 5 April 2012. http://www.newsday.com/news/health/painkiller-sales-soar-around-u-s-fuels-addiction-1.3644144

Karlin M. Is Big Pharma Peddling Narcotics? Take Oxycontin for Instance. *Buzzflash*, 12 April 2012. http://www.truthout.org/buzzflash/commentary/item/11441-is-big-pharma-peddling-narcotics-take-oxycontin-for-instance

Larsen D. Seniors at Higher risk of Abusing Prescriptions. *Springfield News- Sun*, 7 November 2011. http://www.springfieldnewssun.com/news/news/local/seniors-at-higher-risk-of-abusing-prescriptions-1/nMw6D

Leger D. Doctors see surge in newborns hooked on mothers' pain pills. *USA Today*, 14 November 2011. http://www.usatoday30.usatoday.com/news/health/wellness/babies/story/2011-11-13/Doctors-see-surge-in-newborns-hooked-on-mothers-pain-pills/51186076/1

Medicaid Enrollment: June 2011 Data Snapshot. Medicaid Facts. Kaiser Commission on Medicaid and Uninsured, 2012. 1 August 2012. http://www.kff.org/medicaid/upload/8050-05.pdf

Meirer B. A New Painkiller Crackdown Targets drugs Distributors. *The New York Times*, 17 October 2012. http://www.nytimes.com/2012/10/18/business/to-fight-prescription-painkiller-abuse-dea-targets-distributors.html

Meyers K.C. Pill Mills Help Supply Cape's Addicts. *Cape Cod Times*, 14 September 2010. http://www.capecodonline.com/apps/pbcs.dll/article?AID=/20100914/NEWS/100909983

—. "Pills Leading Cape's Youth to Heroin." *Cape Cod Times*, 12 September 2010. http://www.capecodonline.com/apps/pbcs.dll/article?AID=/20100912/NEWS/100909841

—. "Risking Everything for Drugs." *Cape Cod Times*, 13 September 2010. http://www.capecodonline.com/apps/pbcs.dll/article?AID=/20100913/NEWS/100839980

National Drug Code Directory. Silver Spring, MD: Food and Drug Administration Center for Drug Evaluation and Research. 31 March 2012. http://www.accessdata.fda.gov/scripts/cder/ndc/default.cfm

Piette B. Overdose Deaths? Most Come from Prescription Painkillers. 25 July 2012. http://www.workers.org/2012/07/25/overdose-deaths-most-come-from-prescription-painkillers

Tadena N. America's Most Medicated State? West Virginia. *Forbes*, 16 August 2010. http://www.msnbc.msn.com/id/38727236/ns/health-forbes_com/t/americas-most-medicated-state-west-virginia

Thomas K, Meier B. Drug Makers Losing a Bid to Foil Generic Painkillers. *The New York Times*, 2 January 2013 http://www.nytimes.com/2013/01/02/health/drug-makers-losing-a-bid-to-foil-generic-painkillers.html

Thomas L. Maker of Oxycontin Reaches Settle with West Virginia. *The New York Times*, 6 November 2004. 20 September 2012. http://www.nytimes.com/2004/11/06/business/06drug.html

U.S. Department of Justice Drug Enforcement Administration. Controlled Substance Schedule. 2 July 2012. http://www.deadiversion.usdoj.gov/schedules/index.html