Written Testimony of

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before the

Senate Committee on Veterans Affairs

on

VA Opioid Prescription Policy, Practice, and Procedures

March 26, 2015

Mr. Chairman and Members of the Committee:

Thank you for this opportunity to testify today on United States (US) data and strategies on opioid overprescribing to put into context VA opioid prescription policy, practice and procedures. I am a retired Veterans Health Administration (VHA) executive and clinical pharmacist who served in a number of Federal and private sector health care executive and clinical roles, most in direct support of high quality health care for Veterans (e.g., VHA National Chief of Clinical Pharmacy/Quality Management; Director of Clinical [Pharmacy] Services, PharmMark Corporation; Vice President for Clinical [Pharmacy] Services for AARP Pharmacy Services; VHA Chief of Staff).

I will frame my testimony around six questions to ensure that Committee has adequate context for its discussions today:

1. What is the magnitude of the opioid abuse problem in the United States?
2. Which are the higher-risk opioids and where are they being prescribed?
3. What are the major recommendations to address overprescribing of opioids?
4. What major actions actually have been taken nationally to address opioid overprescribing?
5. Are VHA's actions, as a system, adequate and consistent with the national momentum on this issue?
6. What more could VHA do to improve opioid prescribing?

The first question to ask is "What is the magnitude of the opioid abuse problem in the United States?"

According to the CDC[1]:

- From 1999 through 2012, the age-adjusted drug-poisoning death rate nationwide more than doubled, from 6.1 per 100,000 population in 1999 to 13.1 in 2012 (Table 1).

- During the same period, the age-adjusted rates for drug-poisoning deaths involving opioid analgesics more than tripled, from 1.4 per 100,000 in 1999 to 5.1 in 2012 (Figure 1). Opioid-analgesic death rates increased at a fast pace from 1999 through 2006, with an average increase of about 18% each year, and then at a slower pace from 2006 forward. The 5% decline in opioid-analgesic death rates from 2011 through 2012, is the first decrease seen in more than a decade.

- Also from 1999 through 2012, the age-adjusted rates for drug-poisoning deaths involving heroin nearly tripled, from 0.7 deaths per 100,000 in 1999 to 1.9 in 2012. The rates increased substantially beginning in 2006. Between 2011 and 2012, the rate of drug-poisoning deaths involving heroin increased 35%, from 1.4 per 100,000 to 1.9.

- In 2012, 14 states had age-adjusted drug-poisoning death rates that were significantly higher than the overall U.S. rate of 13.1 per 100,000 population (Figure 2). The states with the highest rates per 100,000 population were West Virginia (32.0), Kentucky (25.0), New Mexico (24.7), Utah (23.1), and Nevada (21.0).

- In 2012, there were 41,502 deaths due to drug poisoning (often referred to as drug-overdose deaths) in the United States (Table 1), of which 16,007 [38.6%] involved opioid analgesics and 5,925 involved heroin.

The second question relates to the prescribing patterns. "Which are the higher-risk opioids and where are they being prescribed?"

[1] CDC: NCHS Health E-Stat: Trends in Drug-poisoning Deaths Involving Opioid Analgesics and Heroin: United States, 1999–2012. Margaret Warner, Ph.D., Division of Vital Statistics; and Holly Hedegaard, M.D., M.S.P.H., and Li-Hui Chen, M.S., Ph.D., Office of Analysis and Epidemiology

CDC recently studied 2012 prescribing patterns of 57,000 pharmacies, which dispense nearly 80% of the retail prescriptions in the United States. Prescriptions included in the study were dispensed at retail pharmacies and paid for by commercial insurance, Medicaid, Medicare, or cash. The study examined prescribing patterns for opioid pain relievers (OPRs), long acting/extended release (LA/ER) OPRs, high dose OPRs, and benzodiazepines[2]. *According to CDC, LA/ER OPRs are more prone to abuse[3], and high-dose formulations were more likely to result in overdoses, so they deserved special focus; Benzodiazepines were often prescribed in combination with OPR, even though this combination increases the risk for overdose*.

CDC found that State prescribing rates varied for all drug types (See Table 2) with rates that were 2.7-fold for OPR and 22-fold for one type of OPR, oxymorphone. Overall, prescribing rates varied widely by state for all drug types (See table 2). When looking for patterns by Region, the southern US had the highest rate of prescribing OPR and benzodiazepines. The Northeast had the highest rate for high-dose OPR and long acting and extended release OPR, although high rates also were observed in individual states in the South and West. In the Northeast, 17.8% of OPR prescribed were LA/ER OPR. States in the South ranked highest for all individual opioids except for hydromorphone, fentanyl, and methadone, for which the highest rates were in Vermont, North Dakota, and Oregon, respectively.[4]

The third question is " What are the major recommendations to address overprescribing of opioids?"

In the general US population, **Center for Disease Control** recommends:

- Use of prescription data combined with insurance restrictions to prevent "doctor shopping" and reduce inappropriate use of opioids.
    - Users of multiple providers for the same drug, people routinely obtaining early refills, and persons engaged in other inappropriate behaviors can be tracked with state prescription drug monitoring programs or insurance claim information.
    - Public and private insurers can limit the reimbursement of claims for opioid prescriptions to a designated doctor and a designated pharmacy. This action is especially important for public insurers because Medicaid recipients and other low-income populations are at high risk for prescription drug overdose. Insurers also can identify inappropriate use of certain opioids for certain diagnoses (e.g., the use of extended-release or long-acting opioids like transdermal fentanyl or methadone for short-term pain).
- Improving legislation and enforcement of existing laws.
    - Most states now have laws against doctor shopping, but they are not enforced uniformly. In contrast, only a few states have laws regulating for-profit clinics that distribute controlled prescription drugs with minimal medical evaluation. Laws against such "pill

[2] Benzodiazepines are antianxiety drugs like alprazolam (Versed), diazepam (Valium), and chlordiazepoxide (Librium). The class includes approximately 39 unique agents.

[3] In September 2013, FDA announced labeling changes for these products. The updated labeling states that ER/LA opioids are indicated for the management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate.

The updated labeling further clarifies that, because of the risks of addiction, abuse, and misuse, even at recommended doses, and because of the greater risks of overdose and death, these drugs should be reserved for use in patients for whom alternative treatment options (e.g., non-opioid analgesics or immediate-release opioids) are ineffective, not tolerated, or would be otherwise inadequate to provide sufficient management of pain; ER/LA opioid analgesics are not indicated for as-needed pain relief.

[4]CDC Vital Signs (Weekly): Variation Among States in Prescribing of Opioid Pain Relievers and Benzodiazepines — United States, 2012. MMWR **July 4, 2014 / 63(26);563-568**

mills" as well as laws that require physical examinations before prescribing might help reduce the diversion of these drugs for nonmedical use.
    - In addition, a variety of other state controls on prescription fraud are being employed. For example, according to the National Alliance for Model State Drug Laws, 15 states required or permitted pharmacists to request identification from persons obtaining controlled substances as of March 2009.
- Improve medical practice in prescribing opioids.
    - Care for patients with complex chronic pain problems is challenging, and many prescribers receive little education on this topic. As a result, prescribers too often start patients on opioids and expect unreasonable benefits from the treatment. In a prospective, population-based study of injured workers with compensable low back pain, 38% of the workers received an opioid early in their care, most at the first doctor visit. Among the 6% who went on to receive opioids for chronic pain for 1 year, most did not report clinically meaningful improvement in pain and function, even though their opioid dose rose significantly over the year.
    - Evidence-based guidelines can educate prescribers regarding the under-appreciated risks and frequently exaggerated benefits of high-dose opioid therapy. Such guidelines especially are needed for emergency departments because persons at greater risk for overdose frequently visit emergency departments seeking drugs. Guidelines will be more effective if health system or payer reviews hold prescribers accountable for their behaviors.
- Develop a public health approach of secondary and tertiary prevention measures to improve emergency and long term treatment.
    - Overdose "harm reduction" programs emphasize broader distribution (to nonmedical users) of an opioid antidote, naloxone, that can be used in an emergency by anyone witnessing an overdose. Efforts also are under way to increase the ability of professionals responding to emergencies to administer optimum treatment for overdoses.
    - Substance abuse treatment programs also reduce the risk for overdose death. Continued efforts are needed to remove barriers to shifting such programs from methadone clinics to office-based care using buprenorphine. Office-based care can be less stigmatizing and more accessible to all patients, especially those residing in rural areas. [5]

The **National Association of Boards of Pharmacy** recommends:

- Recognizing "red flag" warnings. These warnings are based on how the patient presents, how the medication has been taken, how the patient is communicating, and how the patient does (or does not) participate in the treatment plan.
- Based on patient populations and behaviors, physicians and pharmacists should identify situations that indicate whether a patient may be more likely to be abusing or diverting prescription drugs.
- When warning signs are present, health care practitioners should immediately assess the situation and/or the patient's medical and psychological condition and determine the appropriate action (e.g., continuation of treatment, intensify monitoring, refer for substance use/addiction treatment, refuse to issue/dispense a prescription).

The Behavioral Health Coordinating Committee of the Prescription Drug Abuse Subcommittee of **Health and Human Services** recommends (in addition to activities underway; See Appendix I for details) :

- Strengthen surveillance systems and capacity
- Build the evidence-base for prescription drug abuse prevention programs

[5] CDC Grand Rounds (Weekly): Prescription Drug Overdoses — a U.S. Epidemic; **January 13, 2012 / 61(01);10-13.**

- Enhance coordination of patient, public, and provider education programs among federal agencies
- Further develop targeted patient, public, and provider education programs
- Support efforts to increase provider use of Prescription Drug Monitoring Programs (PDMPs)
- Leverage health information technology to improve clinical care and reduce abuse
- Synthesize pain management guideline recommendations and incorporate them into clinical decision support tools
- Collaborate with insurers and pharmacy benefit managers to implement robust claims review programs
- Collaborate with insurers and pharmacy benefit managers to identify and implement robust programs that improve oversight of high-risk prescribing.
- Improve analytic tools for regulatory and oversight purposes
- Continue efforts to integrate drug abuse treatment and primary care
- Expand efforts to increase access to medication-assisted treatment
- Expand Screening, Brief Intervention, and Referral to Treatment services
- Prevent opioid overdose through new formulations of naloxone

The fourth question is "What major actions actually have been taken nationally to address opioid overprescribing?"

The States have taken various actions to control opioid prescribing. As automation has improved, States have introduced electronic prescription monitoring systems to aggregate data, for use by health care providers and enforcement agencies.

- In one example, New York established the Prescription Monitoring Program (PMP) on August 27, 2013. Most prescribers are required to consult the PMP Registry when writing prescriptions for Schedule II, III, and IV controlled substances. The PMP Registry provides practitioners with direct, secure access to view dispensed controlled substance prescription histories for their patients. The PMP is available 24 hours a day/7 days a week. Patient reports include all controlled substances that were dispensed in New York State and reported by the pharmacy/dispenser for the past six months. This information will allow practitioners to better evaluate their patients' treatment with controlled substances and determine whether there may be abuse or non-medical use.

Many States and professional associations have published pain treatment guidelines to better inform prescribers of evidence-based treatment guidelines for pain.

- For example, the Medical Board of California published Guidelines for Prescribing Controlled Substances for Pain in 2014 (http://www.mbc.ca.gov/licensees/prescribing/pain_guidelines.pdf) This comprehensive, 90 page document includes information for providers on the various types of pain, considerations of treating pain in different populations, patient treatment options and risks, and patient contracts (which include agreement to urine screening). Similarly, the state of Washington has published comprehensive guidelines (http://www.agencymeddirectors.wa.gov/files/opioidgdline.pdf)
- As an example of a professional association guideline, the American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine published updated practice guidelines for chronic pain management.

Regulators have taken action to better educate providers and improve labeling.

- The Food and Drug Administration (FDA) required manufacturers to make educational materials available for prescribers and patients based on FDA-approved materials for continuing education for prescribers.
- FDA established a website to assist providers in quickly identifying and accessing educational programs (https://search.er-la-opioidrems.com/Guest/GuestPageExternal.aspx)

- FDA changed labeling on long acting opioid drugs. Older labeling stated that "[Name of drug] is indicated for the relief of moderate to severe pain in patients requiring continuous around the clock opioid treatment for an extended period of time." Newer labeling states that "[Name of drug] is indicated for the management of pain severe enough to require continuous around the clock opioid treatment and for which alternative treatment options are inadequate."
- FDA required a new boxed warning on long acting opioid drugs that increased emphasis on risks, including abuse, overdose, death, and Neonatal Opioid Withdrawal Syndrome
- FDA's newer labeling urges prescribers to "assess each patient's risk" for abuse before prescribing and to "monitor all patients regularly for the development of abuse."
- FDA has recently approved several "abuse deterrent" opioids to minimize the risk for prescription diversion or abuse.
- FDA approved a naloxone auto-injectable product for the emergency treatment of known or suspected opioid overdose outside of a healthcare setting. Naloxone is a medication that rapidly reverses the effects of opioid overdose.

National enforcement agencies have taken action to require more frequent prescribing by providers. Previously, opioid combination products could be prescribed for up to a 30 day supply with 5 refills (e.g, up to a 6 month period between physician visits). That changed under new DEA rules:

- Hydrocodone combination products are now in a more restrictive category of controlled substances, along with other opioid drugs for pain like morphine and oxycodone. After a scientific review, FDA made the recommendation that DEA take this step.
    - If a patient needs additional medication, the prescriber must issue a new prescription. Phone–in refills for these products are no longer allowed.
    - In emergencies, small supplies can be authorized until a new prescription can be provided for the patient.
    - Patients will still have access to reasonable quantities of medication, generally up to a 30-day supply.
- In addition, DEA continues its community "Take Back" programs to assist consumers in the proper disposal of unused medication, including opioid prescriptions.

The fifth question is: "Are VHA's actions, as a system, adequate and consistent with the national momentum on this issue?"

- In August 2013, VHA implemented a national opioid surveillance program (Opioid Safety Initiative) to monitor utilization. The program analyzes data to identify outliers in terms of opioid (and benzodiazepine) prescribing and refers that information to VA medical centers for more critical evaluation and action, as appropriate. Recent VHA prescription dispensing data shows improvement since the implementation of the program. For example, VHA has advised that:
    - In Q4 FY2012, 59,499 patients were dispensed greater than 100 MEDD.[6] By Q1 FY 2015, only 49,356 patients were dispensed greater than 100 MEDD -- **a 17% reduction**.
    - From Q4 FY2012 through Q1 FY2015, 91,614 **fewer patients received an opioid prescription**. This reduction was seen despite an overall increase (1.8% -from 3,966,139 to 4,035,695) in the number of pharmacy patients during the same period.
    - From Q4 FY2012 through Q1 FY2015, there were **67.466 fewer pharmacy patients on long term opioids**. During this same period, urine drug screening (screening essential to detecting potential drug diversion) increased by 71,255 patients.
- In 2014, outside research experts assessed VHA's opioid utilization and testified before the U.S. Senate Committee on Veterans' Affairs that VHA was exercising appropriate vigilance. "The research, funded by the National Institute on Drug Abuse, showed that the percentage of VHA patients with chronic pain who receive higher doses of opioids is relatively small and lower than those in other health care systems. The amount of days in which chronic pain patients receive opioids is typically higher within the VHA; however, the median dose of opioids is lower than other

[6] VHA defines higher-risk patients as those receiving prescriptions of greater than (or equal to) 100 morphine sulfate equivalent doses dispensed (100 MEDD).

health care systems, according to Edlund... Edlund reported that the VHA, overall, screens out substance abuse patients from high use of opioids better than other health care systems."[7]

- VHA has published opioid treatment guidelines (with education and decision support tools and pocket guides) in 2010, updated in 2013 (http://www.healthquality.va.gov/guidelines/Pain/cot/) In addition, VHA's treatment guidelines for substance use disorder (http://www.healthquality.va.gov/guidelines/MH/sud/) are directly linked to and complement the opioid guidelines. These guidelines are equally comprehensive to the State and professional guidelines cited previously.
- Academic detailing is a model of peer based education intended to improve prescribing performance (http://www.narcad.org/) where there is a gap between best practice and current treatment patterns. VHA conducted a 3 year pilot of academic detailing program to change prescribing habits in a variety of practice settings. Based on the extraordinary success of VHA's initial pilot, the program will be expanded nationwide and include opioid prescribing as one of the focus areas.
- VHA has developed software to interact with State Prescription Drug Monitoring Programs (PDMPs). This will ensure that opioid prescriptions for Veterans receiving purchased care and/or VHA care are monitored consistently. (But deployment of the software has been problematic. See recommendation below.)
- VHA has expanded its health care model to include treatment modalities (e.g., chiropractic care, yoga, acupuncture, etc.) that can provide attractive alternatives to opioid treatment.
- In 2014, VHA has instituted a naloxone distribution program (http://www.pbm.va.gov/PBM/clinicalguidance/clinicalrecommendations/Naloxone_Kits_Recommendations_for_Use_Rev_Sep_2014.pdf) to reverse life-threatening opioid overdoses. The program has already literally saved lives.
- VHA has increased its use of injectable naltrexone, a drug used to prevent relapse after opioid detoxification.
- VHA has a robust substance use disorder program that can support provider and patient efforts to discontinue opioid use when addiction and abuse is apparent.
- VHA has a national Pain Management Office that coordinates information and programs to ensure that providers have the most current information at their fingertips (http://www.va.gov/PAINMANAGEMENT/Clinical_Resources.asp)

The final question is "What more could VHA do to improve opioid prescribing?"

While overprescribing patterns are improving, there is always more that can be done to ensure continued progress. VHA should:

- Resource the national opioid surveillance and academic detailing initiatives appropriately to ensure success. Many of the initiatives are currently minimally staffed and sustainment is at risk if staffing is not adequate.
- Expedite VA's deployment of software to interact with State Prescription Drug Monitoring Programs (PDMP). The deployment is at risk due to an assessment by the Office of Information Technology of a security risk. The Department should be encouraged to report its progress on a quarterly basis to drive this to successful resolution.

In conclusion, I find that the actions of VHA, as a system, are consistent with the national momentum on this issue. I reached this conclusion based on the review of outside studies, VHA's internal surveillance data, and my own evaluation relative to other national and State program benchmarks. I believe that this momentum can be sustained and improved given adequate resources.

Mr. Chairman and members of the Committee, I wish to thank you for this opportunity to present this perspective today.

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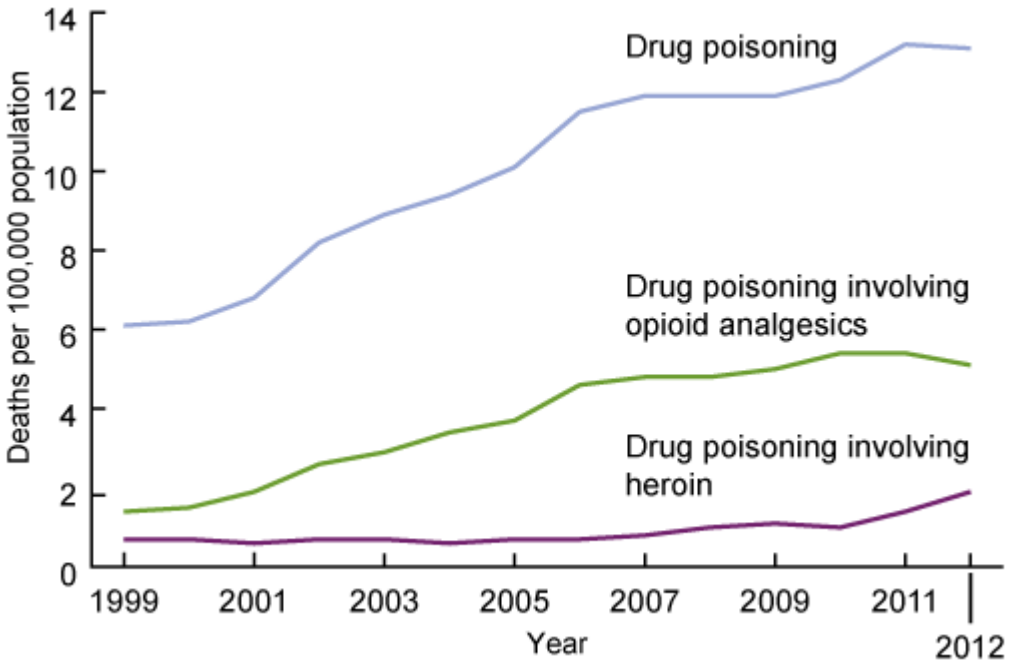
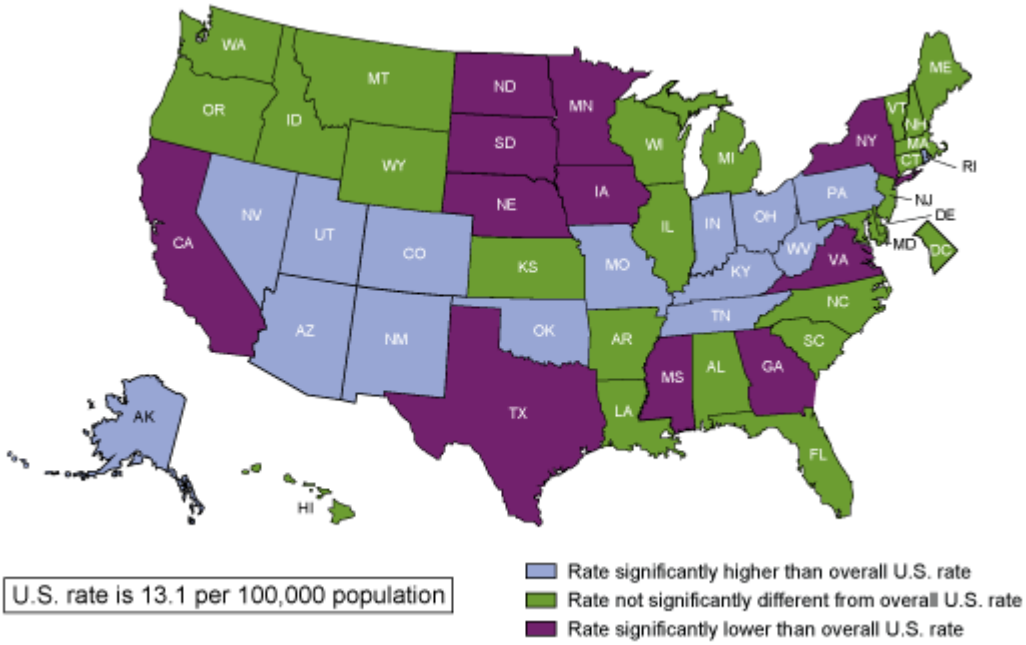
[7] http://www.rti.org/newsroom/news.cfm?obj=01E25DFA-9549-3A9E-0A638C19F38BDD1E

Figure 1. Age-adjusted drug-poisoning death rates: United States 1999–2012



NOTE: Drug-poisoning deaths may involve both opioid analgesics and heroin.
SOURCE: CDC/NCHS, National Vital Statistics System, Mortality File.

Figure 2. Age-adjusted drug-poisoning death rates, by state: United States, 2012



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality File.

Table 1. Number and age-adjusted rate of drug-poisoning deaths involving opioid analgesics and heroin: United States, 1999-2012

	All		Opioid analgesics		Heroin	
Year	Number	Rate	Number	Rate	Number	Rate
1999	16,849	6.1	4,030	1.4	1,960	0.7
2000	17,415	6.2	4,400	1.5	1,842	0.7
2001	19,394	6.8	5,528	1.9	1,779	0.6
2002	23,518	8.2	7,456	2.6	2,089	0.7
2003	25,785	8.9	8,517	2.9	2,080	0.7
2004	27,424	9.4	9,857	3.4	1,878	0.6
2005	29,813	10.1	10,928	3.7	2,009	0.7
2006	34,425	11.5	13,723	4.6	2,088	0.7
2007	36,010	11.9	14,408	4.8	2,399	0.8
2008	36,450	11.9	14,800	4.8	3,041	1.0
2009	37,004	11.9	15,597	5.0	3,278	1.1
2010	38,329	12.3	16,651	5.4	3,036	1.0
2011	41,340	13.2	16,917	5.4	4,397	1.4
2012	41,502	13.1	16,007	5.1	5,925	1.9

NOTES: Deaths are classified using the *International Classification of Diseases, Tenth Revision* (ICD–10). Drug-poisoning deaths are identified using ICD–10 underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Opioid-analgesic drug-poisoning deaths are drug-poisoning deaths with a multiple cause-of-death code of T40.2, T40.3, or T40.4. Heroin drug-poisoning deaths are drug-poisoning deaths with a multiple cause-of-death code of T40.1. Approximately 25% of drug-poisoning deaths lack information on the specific drugs involved. Some of these deaths may have involved heroin, opioid analgesics, or both.

SOURCE: CDC/NCHS, National Vital Statistics System, Mortality File

TABLE 2. Prescribing rates per 100 persons, by state and drug type — IMS Health, United States, 2012

State	Opioid pain relievers	Rank	Long-acting/ extended-release opioid pain relievers	Rank	High-dose opioid pain relievers	Rank	Benzodiazepines	Rank
Alabama	142.9	1	12.4	22	6.8	4	61.9	2
Alaska	65.1	46	10.7	31	4.2	26	24.0	50
Arizona	82.4	26	14.5	12	5.5	12	34.3	33
Arkansas	115.8	8	9.6	37	4.1	29	50.8	8
California	57.0	50	5.8	49	3.0	42	25.4	47
Colorado	71.2	40	11.8	24	4.1	31	28.0	44
Connecticut	72.4	38	14.1	13	5.4	13	46.2	11
Delaware	90.8	17	21.7	2	8.8	1	41.5	19
District of Columbia	85.7	23	13.7	17	5.7	10	38.4	24
Florida	72.7	37	11.3	26	6.6	5	46.9	10
Georgia	90.7	18	8.6	43	4.1	30	37.0	27
Hawaii	52.0	51	8.8	42	3.9	36	19.3	51
Idaho	85.6	24	10.3	33	3.9	34	29.1	42
Illinois	67.9	43	5.2	50	2.0	50	34.2	34
Indiana	109.1	9	10.7	30	4.9	20	42.9	17
Iowa	72.8	36	7.3	47	2.2	48	37.3	26
Kansas	93.8	16	10.3	34	4.0	32	38.9	23
Kentucky	128.4	4	11.6	25	5.0	19	57.4	5
Louisiana	118.0	7	7.8	46	3.6	39	51.5	7
Maine	85.1	25	21.8	1	5.6	11	40.7	22
Maryland	74.3	33	16.0	6	5.0	18	29.9	40
Massachusetts	70.8	41	14.9	8	3.5	41	48.8	9
Michigan	107.0	10	9.1	40	4.5	22	45.5	14
Minnesota	61.6	48	10.2	35	2.2	49	24.9	48
Mississippi	120.3	6	7.2	48	2.9	43	46.2	12
Missouri	94.8	14	9.5	38	3.5	40	42.6	18
Montana	82.0	27	14.0	15	4.4	23	33.7	35
Nebraska	79.4	28	7.8	45	2.3	46	35.0	32
Nevada	94.1	15	14.8	10	8.2	3	37.5	25
New Hampshire	71.7	39	19.6	3	6.1	7	41.2	21

New Jersey	62.9	47	11.3	27	5.8	9	36.5	28
New Mexico	73.8	35	12.7	21	3.8	38	31.5	37
New York	59.5	49	9.5	39	4.3	24	27.3	45
North Carolina	96.6	13	13.7	18	4.3	25	45.3	15
North Dakota	74.7	32	10.5	32	2.3	47	31.1	39
Ohio	100.1	12	11.2	28	4.2	27	41.3	20
Oklahoma	127.8	5	12.8	20	6.0	8	44.5	16
Oregon	89.2	20	18.8	4	5.2	16	31.4	38
Pennsylvania	88.2	21	14.9	9	5.4	14	46.1	13
Rhode Island	89.6	19	14.0	14	5.2	17	60.2	4
South Carolina	101.8	11	11.0	29	3.9	33	52.6	6
South Dakota	66.5	45	9.0	41	2.5	45	28.0	43
Tennessee	142.8	2	18.2	5	8.7	2	61.4	3
Texas	74.3	34	4.2	51	1.9	51	29.8	41
Utah	85.8	22	12.1	23	5.3	15	35.9	30
Vermont	67.4	44	13.9	16	4.7	21	35.5	31
Virginia	77.5	29	9.9	36	3.8	37	36.4	29
Washington	77.3	30	14.6	11	4.1	28	27.1	46
West Virginia	137.6	3	15.7	7	6.2	6	71.9	1
Wisconsin	76.1	31	13.1	19	3.9	35	33.4	36
Wyoming	69.6	42	8.0	44	2.7	44	24.1	49
Mean	87.3	—	12.0	—	4.5	—	39.2	—
Standard deviation	22.4	—	3.9	—	1.6	—	11.1	—
Coefficient of variation	0.26	—	0.32	—	0.36	—	0.28	—
Median	82.4	—	11.3	—	4.2	—	37.3	—
25th percentile	71.7	—	9.5	—	3.7	—	31.1	—
75th percentile	96.6	—	14.1	—	5.4	—	46.1	—
Interquartile ratio	1.3	—	1.5	—	1.4	—	1.5	—

APPENDIX 1
December 5, 2013 Report recommendations of The Behavioral Health Coordinating Committee of the Prescription Drug Abuse Subcommittee of Health and Human Services

- Enhance surveillance:
    - Review current surveillance systems to identify ways to better detect changing patterns of abuse and health outcomes, and inform policy decisions and programmatic interventions.
    - Explore the predictive value of potential measures of abuse such as doctor-shopping metrics in claims data and other data sources.
    - Examine the role of prescriber dispensing in prescription drug abuse and overdose.
    - Better understand the relationship of opioid dose and duration that increases the risk of abuse and overdose.
    - Explore risk factors for addiction among patients receiving opioids for legitimate medical purposes.
    - Examine potential unintended consequences that may result of interventions aimed at reducing prescription drug abuse, such as a decrease in legitimate access to pain treatment.
- Enhance drug abuse prevention (through HHS funded research)
    - Evaluate the effectiveness of drug abuse prevention programs to reduce prescription drug abuse in order to inform the implementation of evidence-based programs.
    - Conduct social science research to understand the initiation of prescription drug abuse and to identify risk and protective factors to prevent initiation.
    - Evaluate the impact of medication disposal programs on prescription drug abuse and overdose. Evaluations should include sampling to determine the proportion of returned drugs that are controlled substances.
- Enhance patient and public education.
    - Convene federal agencies to assure that patient education activities and messaging is evidence-based and consistent across agencies.
    - Leverage DEA's National Take Back Days, International Overdose Awareness Day, National Substance Abuse Prevention Month, National Drug Facts Week, and other special occasions as opportunities to highlight the dangers of prescription drug abuse to patients across the U.S.
    - Partner with professional societies, patient education organizations, and others to expand targeted patient education programs, focusing on the addiction risks of medications, the dangers of mixing medications or mixing them with alcohol, and what patients can do to safeguard their medications.
    - Work with public and private insurers and pharmacy benefit managers to include targeted educational information to beneficiaries receiving opioid analgesics and other prescription drugs prone to abuse based on demographics, medications prescribed, and conditions being treated.
    - Conduct research to determine the effectiveness of patient education programs and use the findings to inform future educational programs.
- Enhance provider education.
    - Convene federal agencies to further coordinate the development and dissemination of provider education programs to ensure maximum reach and benefit.
    - Partner with health professional schools, educational accrediting bodies and professional societies to continue development of targeted educational programs to meet the needs of different types of providers and practice settings.
    - Evaluate educational programs to determine the most effective programs with respect to changing provider behavior, improving prescribing, and reducing abuse and overdose.
    - Conduct research to determine the most effective ways to provide educational programs and training to providers.

- Enhance Clinical Practice Tools
    - Convene professional societies to identify barriers and potential incentives to increase provider use of Prescription Drug Monitoring Programs (PDMPs).
    - Partner with electronic health record (EHR)/Health Information Technology (HIT) stakeholders to expand the ongoing work of the Health eDecisions (HeD) project to identify, define, and harmonize standards to transmit data for use in clinical decision support, including incorporating data from state PDMPs, screening tools such as Screening, Brief Intervention, and Referral to Treatment clinical decision support, and other relevant clinical information.
    - Work with stakeholders to harmonize the data standards necessary for the interoperable exchange of PDMP data with EHRs.
    - Support pilot projects focused on the use of EHRs and health information exchanges (HIEs) to improve clinical decision making through real-time access to intrastate and interstate PDMP data.
    - Support efforts to integrate clinical tools into EHRs and other electronic media to provide just in time information to improve clinical decision-making.
    - Convene professional societies and subject matter experts to synthesize information from available pain management guidelines and the published literature to develop a set of prescribing recommendations that can be incorporated into clinical decision support tools.
    - Conduct research to determine the impact of opioid prescribing guidelines on prescribing behaviors and health outcomes such as opioid abuse and overdose.
    - Test the effectiveness of clinical decision support tools designed to improve care and reduce prescription drug abuse and overdose.
    - Partner with health information technology developers and healthcare providers to validate electronic screening tools and clinical decision support tools in EHRs.
- Opportunities to enhance regulatory oversight
    - Convene partners to develop indicators of inappropriate prescribing and patient abuse that can be applied in regulatory and oversight settings.
    - Encourage insurers and pharmacy benefit managers to regularly review claims data and PDMP data, where available, to identify and address healthcare providers prescribing outside of accepted medical standards and patients at high-risk for overdose.
    - Collaborate with state Medicaid programs, other public and private insurers, and pharmacy benefit managers to identify and implement robust programs that improve oversight of high-risk prescribing.
    - Collaborate with stakeholders to research the effectiveness of insurer benefit designs aimed at reducing prescription drug abuse, and pill mill and doctor shopping laws, including unintended consequences of these laws.
- Enhance drug abuse treatment
    - Partner with professional societies to identify barriers and promote the integration of drug abuse treatment, including SBIRT and medication assisted treatment, and primary care.
    - Collaborate with states, national associations, insurers, and PBMS to assure standard benefit packages cover medication-assisted treatment and SBIRT, and to develop reimbursement strategies that will increase the number of primary care providers offering such treatment in a variety of medical settings.
    - Partner with public and private insurers to develop and disseminate materials to inform healthcare providers about SBIRT billing codes and other administrative information.
    - Work with researchers and drug manufacturers to develop additional medical treatments for opioid addiction and new medical treatments for addiction to other abused prescription drugs.
    - Support the development and testing of behavioral interventions for screening and treating prescription drug abuse, including interventions targeting youth and pregnant women.
- Enhance overdose prevention

- Expand efforts to support the development of new formulations of naloxone, such as nasal spray or auto-injector formulations.
- Partner with national, state and local EMS and other first responder organizations to disseminate information on the use of naloxone.
- Evaluate naloxone programs to better understand how and under what conditions it is most effectively being used.
- Examine the impact of immunity from prosecution laws.