

Opioids Crisis: Drug diversion, abuse and deaths

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Nothing to declare

Agenda

Definition of diversion

Scope of the problem

Cost of drug diversion and abuse

Deaths related

Interventions

Conclusions

Definition:

Drug diversion is “the transfer of a controlled substance from a lawful to an unlawful channel of distribution or use.”

Nurse stealing pills from an elderly patient

Physician writing fraudulent prescriptions.

Providers may tamper with vials or syringes of powerful controlled substances, potentially exposing themselves and patients to infectious diseases—

47.2 million doses lost due to
healthcare employee misuse and
theft in 2018

Protenus, Inc. 2019 DRUG DIVERSION DIGEST

Comparing 2018 data to that of 2017, the number of incidents decreased by 11%, from 365 incidents in 2017 to 324 incidents in 2018.

However, looking at the volume of dosages lost, there was a 126% increase in total volume lost, from 21 million doses in 2017 to 47 million doses in 2018.

Finally, in 2018, healthcare organizations lost nearly \$454 million due to clinical drug diversion—a 50% increase from the previous year's figure of \$301 million.

It continues to be **essential for healthcare leaders to collaborate** within their organizations and with other systems to better understand the severity and scale of this ongoing challenge.

THE STATE OF OPIOID MISUSE IN AMERICA (2017)

11.4 million people misused opioids in the past year

- 11.1 million misused pain relievers
- 886,000 used heroin
- 562,000 both misused pain relievers and heroin

2.1 million people had an opioid use disorder

- 1.7 million people with a prescription pain reliever use disorder
- 652,000 people with a heroin use disorder
- 252,000 had both pain reliever and heroin use disorders

53.1%

obtained the last
pain reliever they
misused from a
friend or relative

36%

from a prescription
from a healthcare
provider

Main reasons for opioid misuse: Pain 62.6%



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NSDUH, 2017 Data; published Sept. 2018

One-third of reported incidents took place in a hospital or medical center setting

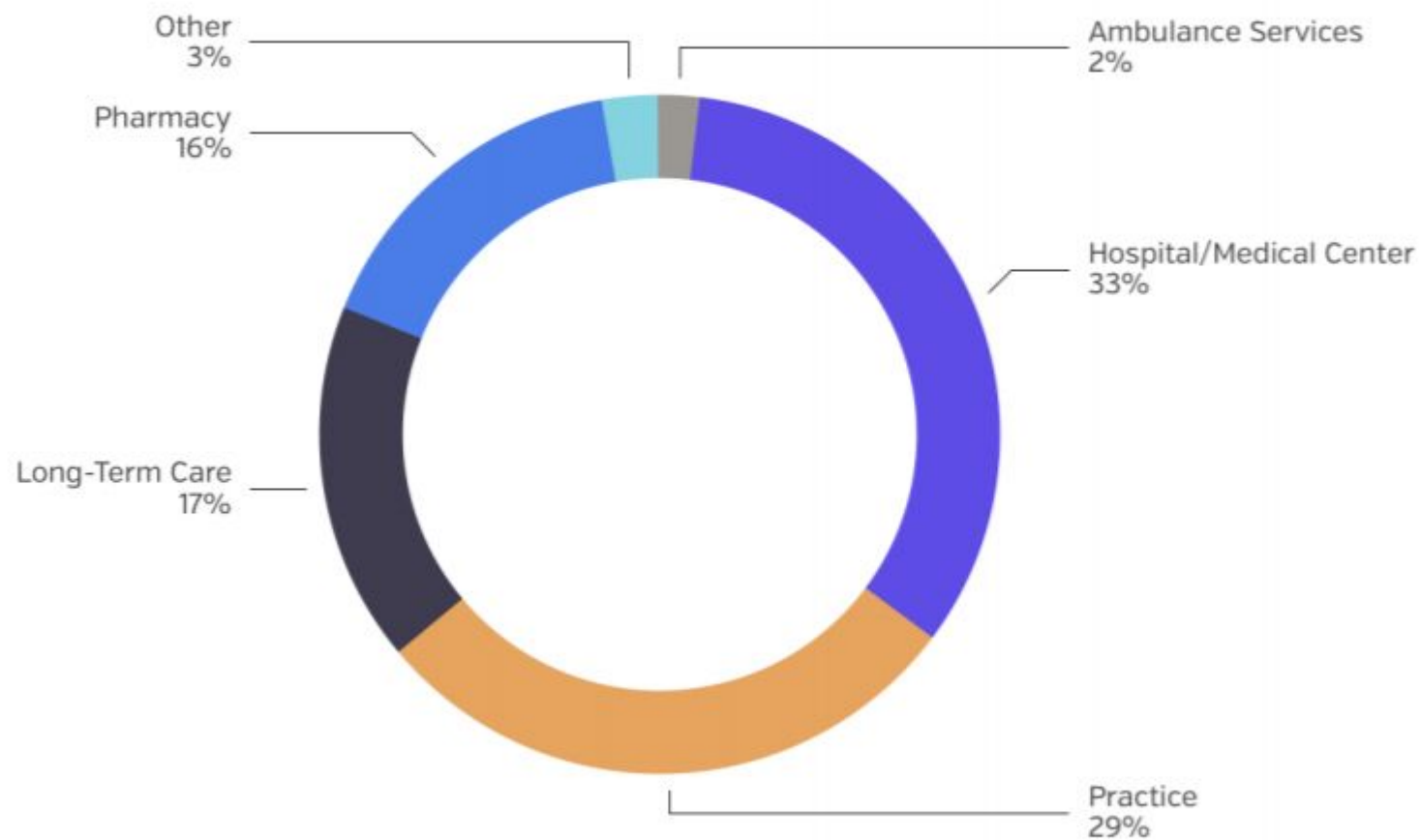


Figure 4: Types of institutions where incidents occurred, 2018 public diversion incidents

Doctors highly vulnerable and involved in 37% of publicly disclosed diversion incidents

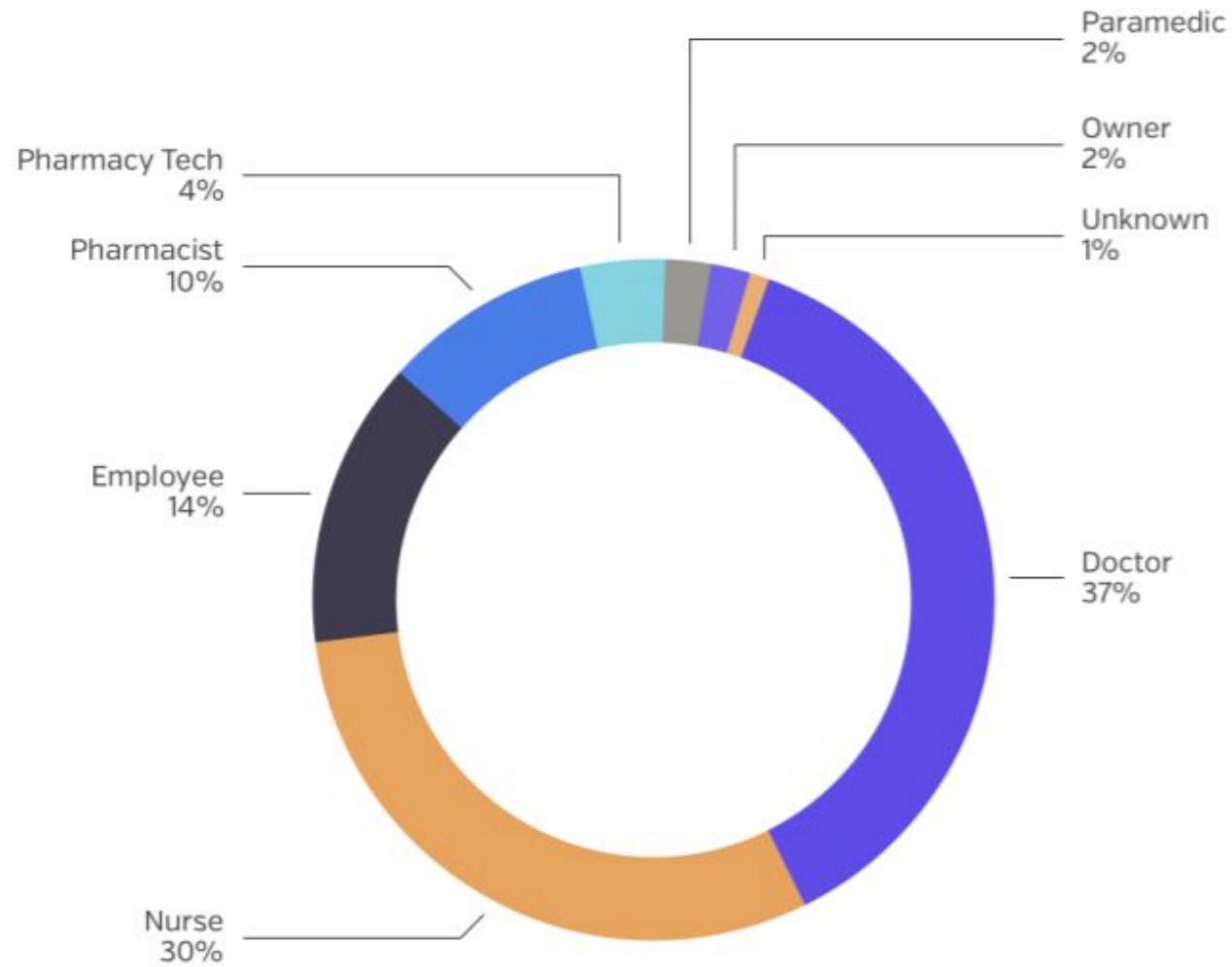


Figure 5: Healthcare worker roles involved in diversion incident, 2018 public diversion incidents

Prescription Opioid Volume Data Show Largest Single-Year Decline to Date

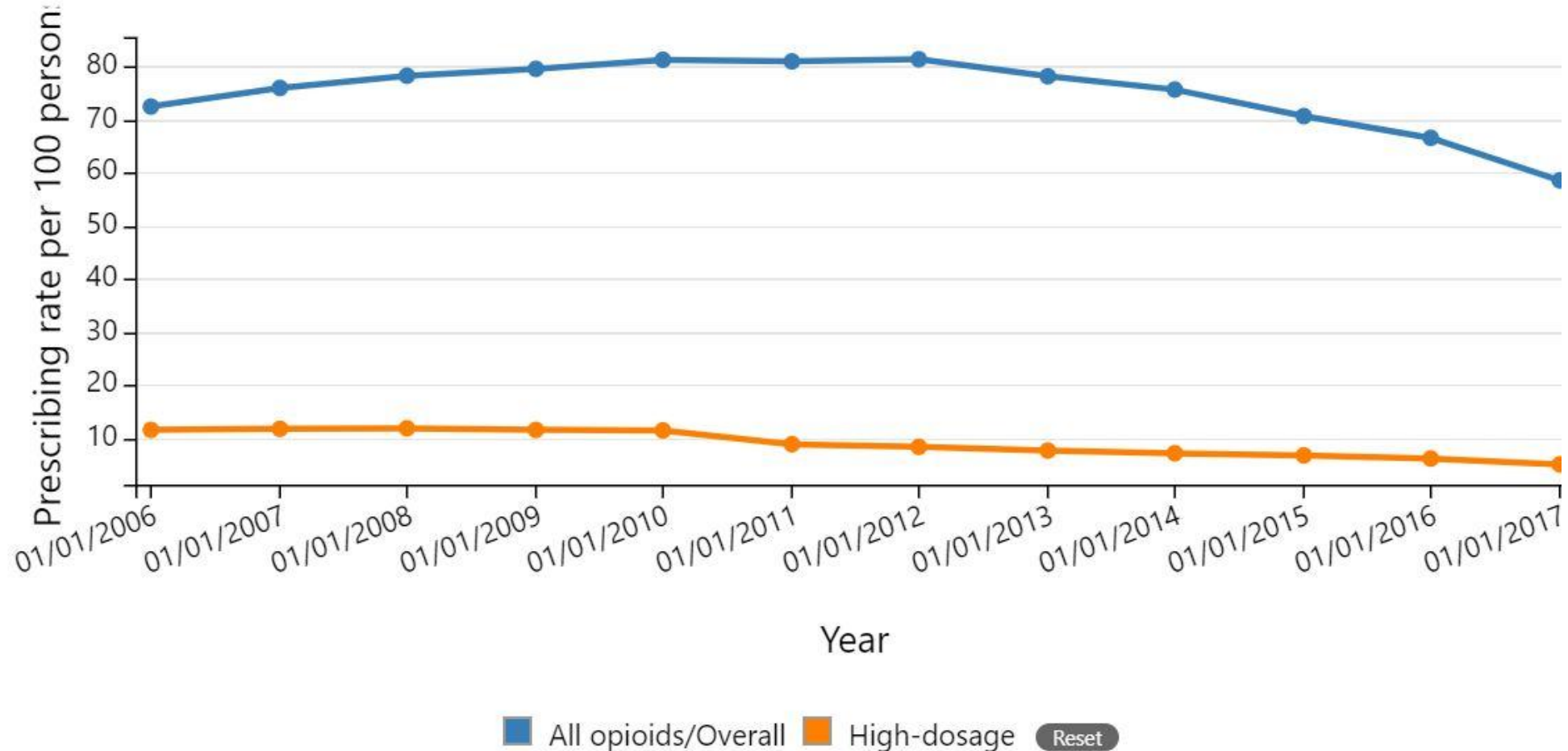
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Prescription opioid dosages declined 17% in the United States last year, as overall medication use increased.

The drop in opioid volume is the largest ever recorded for a single year in the United States market, according to the IQVIA Institute for Human Data Science.

From 2012 to 2016, the average drop per year was 4%. Those decreases were followed by a 12% decline in opioid volume in 2017 and 2018's 17% drop.

Trends in Annual Opioid Prescribing Rates by Overall and High-Dosage Prescriptions



Beyond criminal consequences imposed upon diverters, they also face enormous threats to their health and well-being. It's widely believed that most diverters in healthcare steal drugs for self-use rather than resale, and 10-15% of healthcare personnel will misuse drugs or alcohol at some point during their careers.

Understanding the opioid crisis through prescribing patterns

- **1. Fewer patients overall are receiving opioids**
- **2. Lower initial doses are leading to a shorter length of treatment**
- **3. Providers are recognizing and treating more opioid-dependent patients**
- **4. Fewer patients are starting on opioids**

Implementation of an Opioid Guideline Impacts on Opioid Prescriptions, Adverse Outcomes, and an Association with a State Opioid-Related Fatalities

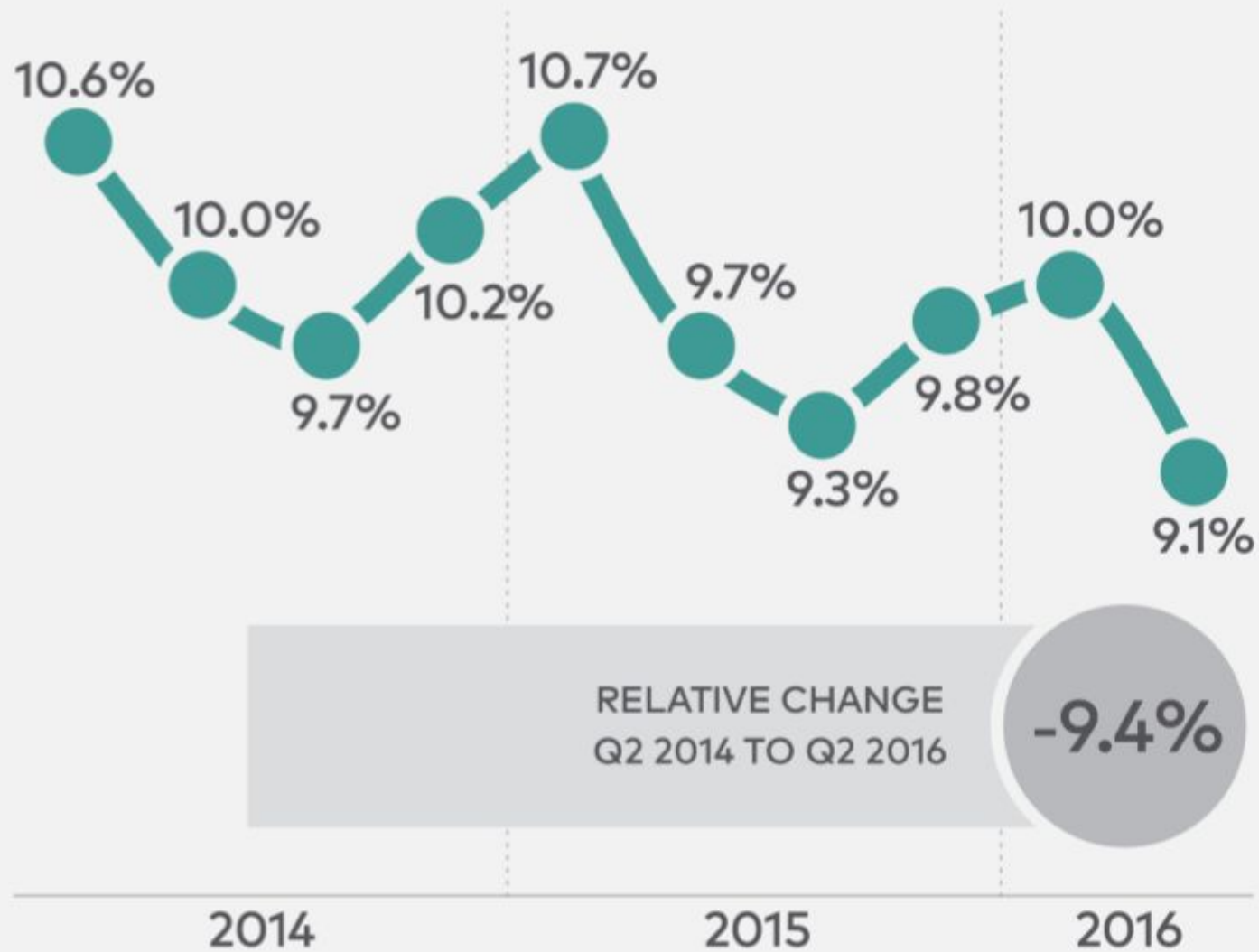
Phillips, Andrew L. MD; Thiese, Matthew S. PhD; Freeman, Mitch PharmD; Kartchner, Roger BSc; Hegmann, Kurt T. MD

Journal of Occupational and Environmental Medicine: [August 2019 - Volume 61 - Issue 8 - p 653–658](#)

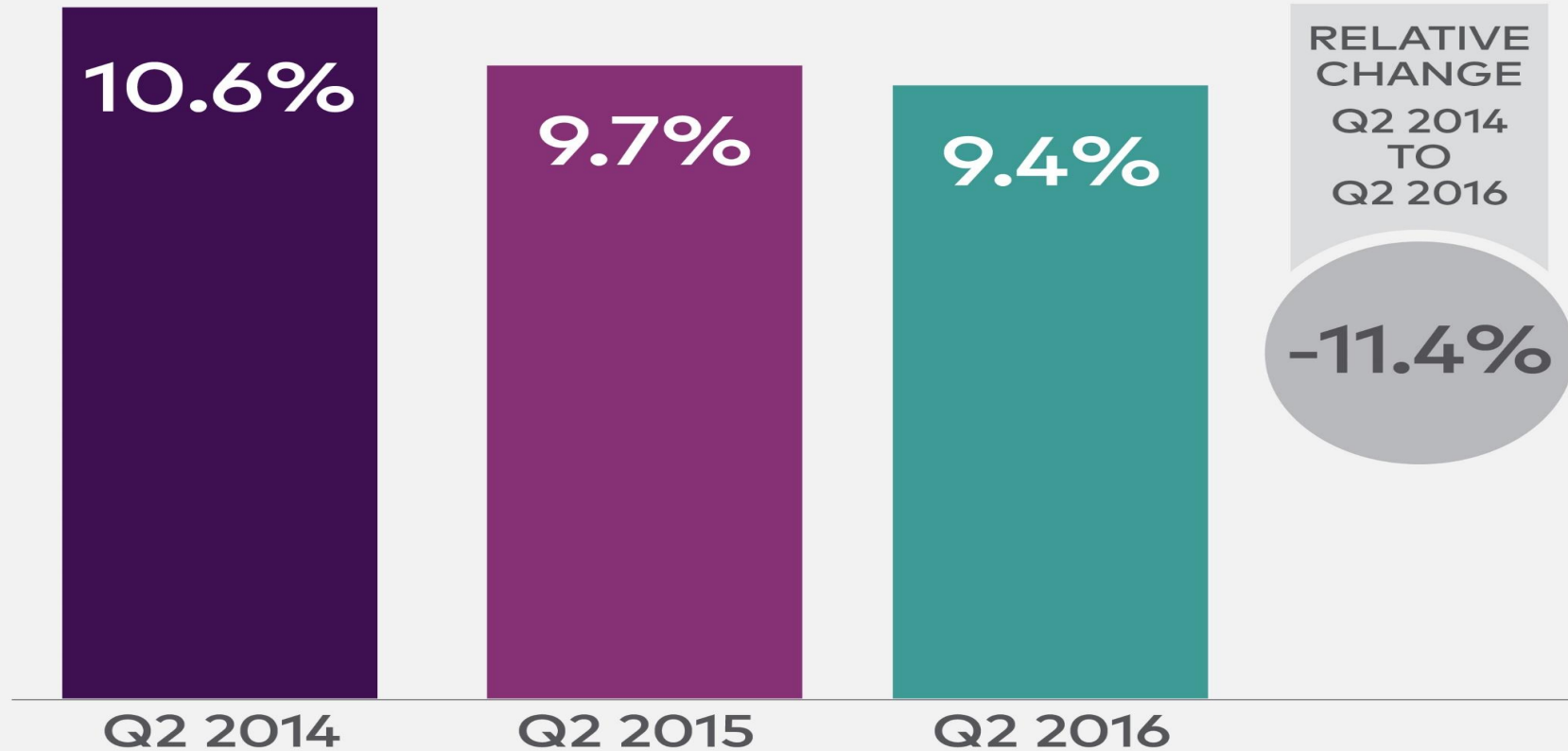
Results: There were significant ($P < 0.001$) reductions in all primary outcomes, with a reduction in MEDs in the 18 months after implementation totaling 65,502 mg.

Conclusion: This program significantly reduced the usage of opioids among acute claims. The year of program implementation, **Utah** experienced a **19.8% reduction in opioid-related fatalities**, which may be partly related to the reduction in MEDs. Regardless, this study suggests that the implementation of an evidence-based guideline is impactful and feasible.

Share of Primary Care Patients with an Opioid Prescription



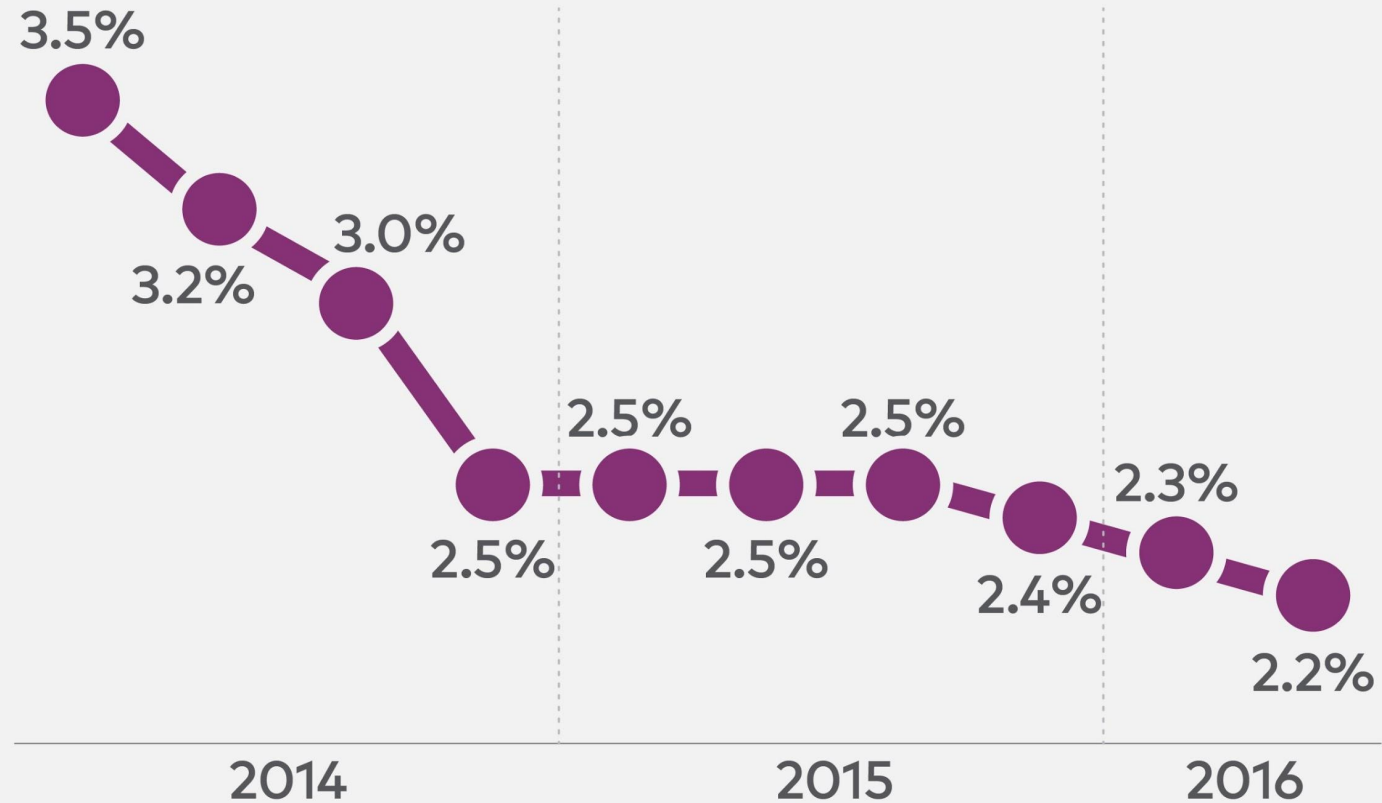
Share of Opioid Prescriptions with a Daily Strength \geq 90 Morphine Milligram Equivalents (MME)



SAMPLE: Over 500,000 opioid prescriptions written for over 280,000 patients each quarter.

SOURCE: athenaResearch

Percent of Primary Care Patients Starting a New Episode of Opioid Use

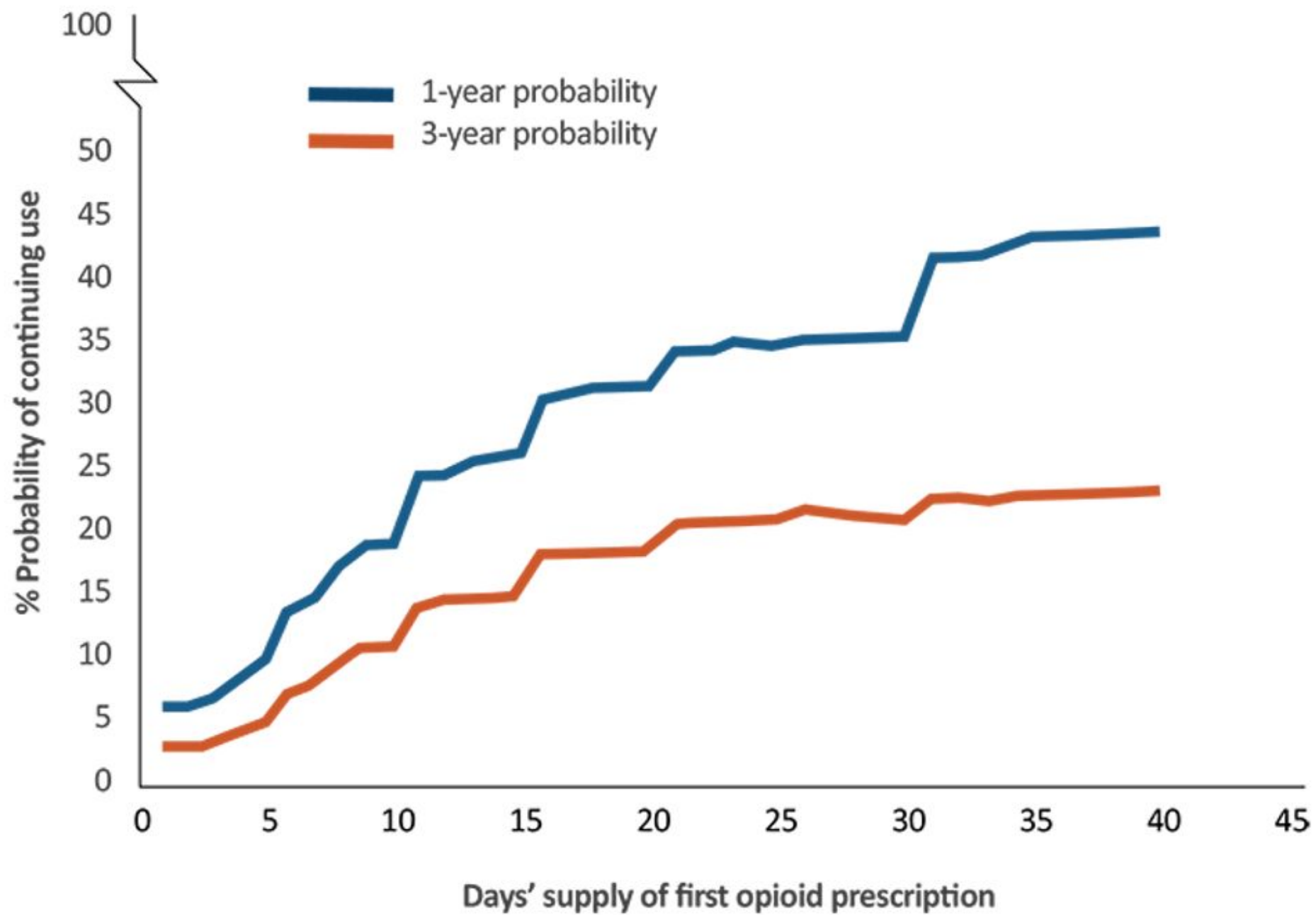


SAMPLE: Over 2 million visits from 1.5 million patients to over 2,900 individual providers each quarter.

SOURCE: athenaResearch

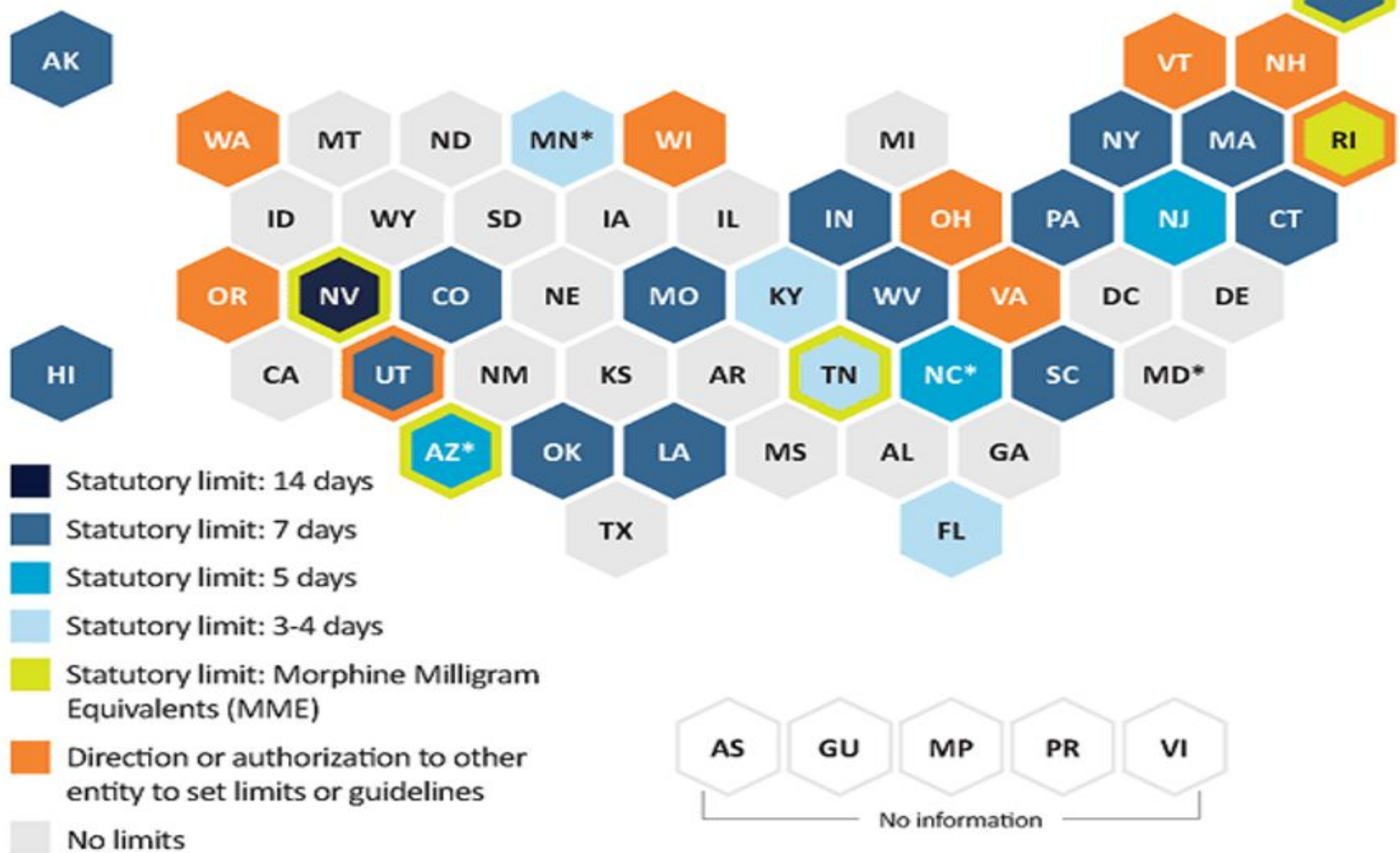
Surgeons' Opioid-Prescribing Habits Are Hard To Kick

A new data analysis by KHN and Johns Hopkins researchers shows that even as the CDC issued warnings, surgeons handed out many times the number of opioid pills needed for post-op pain.



Source: Centers for Disease Control and Prevention, 2017

Laws Setting Limits on Certain Opioid Prescriptions



*** Note:** The map displays the state's primary opioid prescription limit and does not include additional limits on certain providers or in certain settings. Arizona allows prescriptions up to 14 days following surgical procedures and North Carolina allows up to seven days for post-operative relief. Maryland requires the "lowest effective dose." Minnesota's limit is for acute dental or ophthalmic pain. The map also does not reflect limits for minors that exist in at least eight states.

Cost of Opioid Epidemic

The opioid epidemic cost the US \$696 billion in 2018 and more than \$2.5 trillion from 2015 to 2018, according to a new estimate by the White House Council of Economic Advisers.

The CEA last calculated the cost of the opioid epidemic in 2015, putting the price at more than \$500 billion. Using similar methodology, the agency calculated new numbers for the ensuing years.

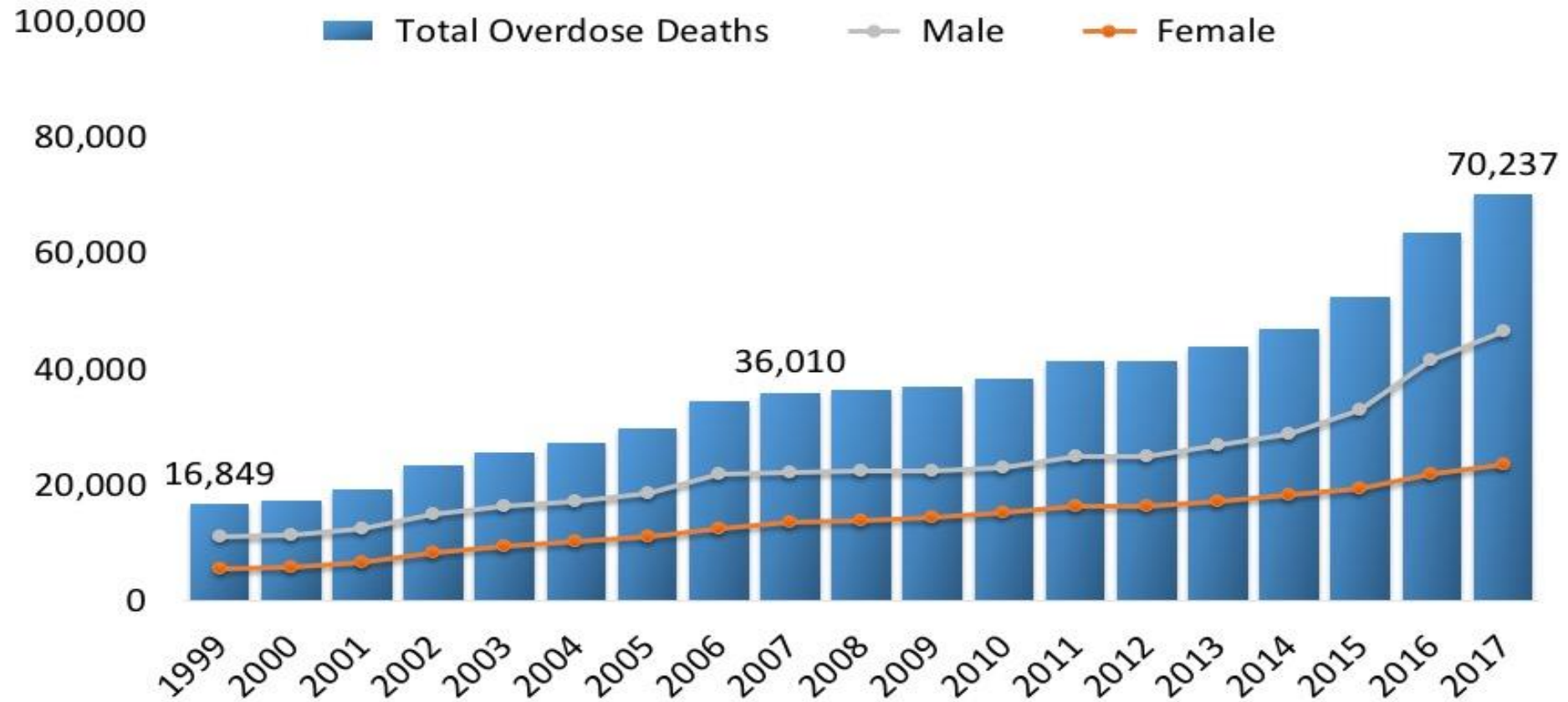
The opioid epidemic is seriously hurting the US economy.

By German

Lopez@germanlopezgerman.lopez@vox.com Nov 1,

2019, 12:40pm EDT

Figure 1. National Drug Overdose Deaths Number Among All Ages, by Gender, 1999-2017



Source: : Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018

In a January 2018 speech, former U.S. Attorney Jeff Sessions said, “DEA will surge Special Agents, Diversion Investigators, and Intelligence Research Specialists to focus on pharmacies and prescribers who are dispensing unusual or disproportionate amounts of drugs.”

HHS 5-POINT STRATEGY TO COMBAT THE OPIOIDS CRISIS



Better addiction prevention, treatment, and recovery services



Better data



Better pain management



Better targeting of overdose reversing drugs



Better research

<https://www.hhs.gov/opioids/>



ACHIEVING RESULTS IN COMBATING THE OPIOID EPIDEMIC

PROGRESS (JANUARY 2017 – NOVEMBER 2018)

- The total morphine milligram equivalents dispensed monthly by retail and mail-order pharmacies *declined by 25.6%*.
- Number of unique patients receiving buprenorphine monthly from retail pharmacies *increased by 21.9%*.
- The number of naltrexone prescriptions per month from retail and mail pharmacies has *increased more than 46.9%*.
- Naloxone prescriptions dispensed monthly by retail and mail-order pharmacies have *increased by 338%*.



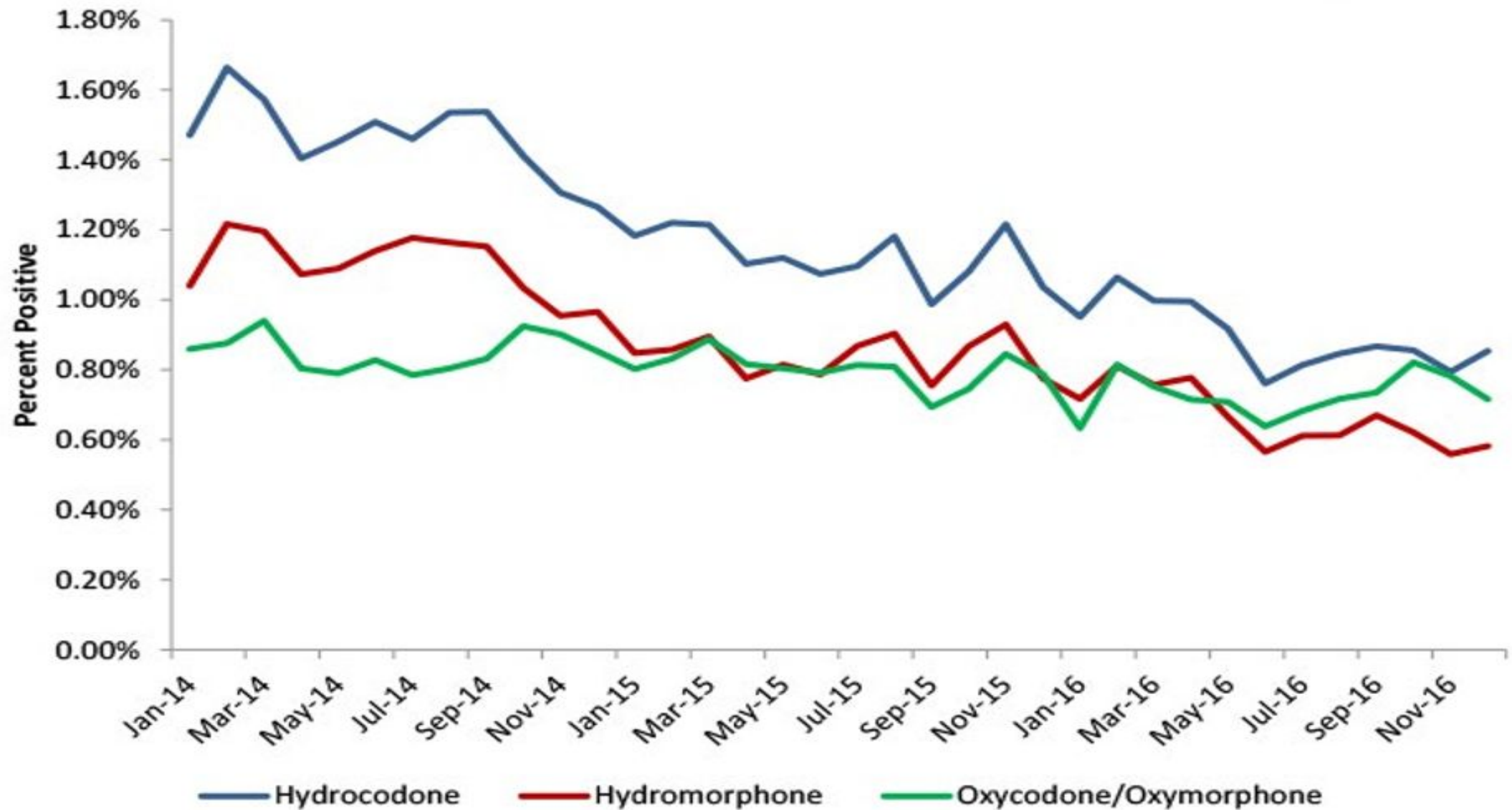
ACHIEVING RESULTS IN COMBATING THE OPIOID EPIDEMIC

PROGRESS (2015 to 2017)

- The number of individuals who misused pain relievers *decreased from 12.5 million to 11.1 million.*
- The number of individuals with pain reliever use disorder *decreased from 2.0 million to 1.7 million.*

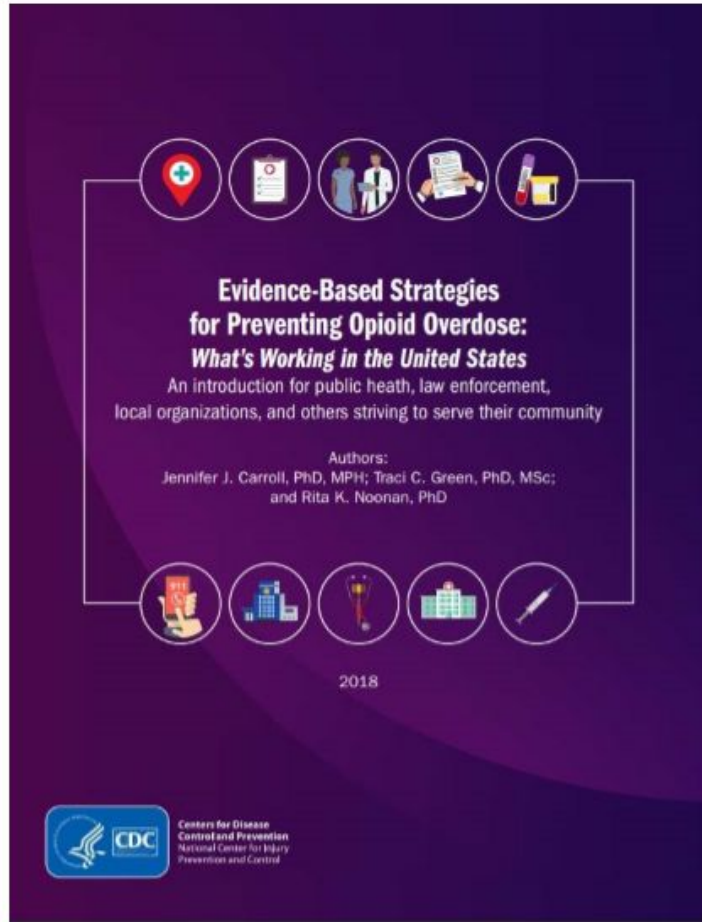


Figure 33. Workplace Positive Drug Tests for Prescription Drugs.



Source: Office of National Drug Control Policy/Quest Diagnostics

NALOXONE: AN ESSENTIAL PART OF THE OPIOIDS SOLUTION



Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms. Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (≥ 50 MME/day), or concurrent benzodiazepine use, are present.

Surgeon General's Advisory on Naloxone and Opioid Overdose

*I, Surgeon General of the United States Public Health Service, VADM Jerome Adams, am emphasizing the importance of the overdose-reversing drug naloxone. For patients currently taking high doses of opioids as prescribed for pain, individuals misusing prescription opioids, individuals using illicit opioids such as heroin or fentanyl, health care practitioners, family and friends of people who have an opioid use disorder, and community members who come into contact with people at risk for opioid overdose, **knowing how to use naloxone and keeping it within reach can save a life.***

BE PREPARED. GET NALOXONE. SAVE A LIFE.



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HHS RECOMMENDATION: PRESCRIBE NALOXONE TO ALL PATIENTS AT HIGH RISK OF OPIOID OVERDOSE



- Reinforces and expands upon prior CDC guidelines
- Clinicians should also educate patients and those who are likely to respond to an overdose, including family members and friends, on when and how to use naloxone in its variety of forms

December 19, 2018
Assistant Secretary for Health Guidance

Prescribe or co-prescribe naloxone to individuals at risk for opioid overdose including individuals who

- are on relatively high doses of opioids
- take other medications which enhance opioid complications
- have underlying health conditions



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<https://www.hhs.gov/opioids/sites/default/files/2018-12/naloxone-coprescribing-guidance.pdf>

BYSTANDER PRESENCE AND NALOXONE

Significant Opportunity for Improvement

11,884 OPIOID DEATHS (CDC ESOOS Data, 11 States, July 2016 – June 2017)

	PRESCRIPTION OPIOIDS (%)	ILLICIT OPIOIDS (%)	PRESCRIPTION AND ILLICIT OPIOIDS (%)
In Category	17.4	58.7	18.5
Previous OD	9.3	15.1	13.5
Bystander present	41.6	44.0	45.0
Bystander naloxone administration	0.8	4.3	4.4

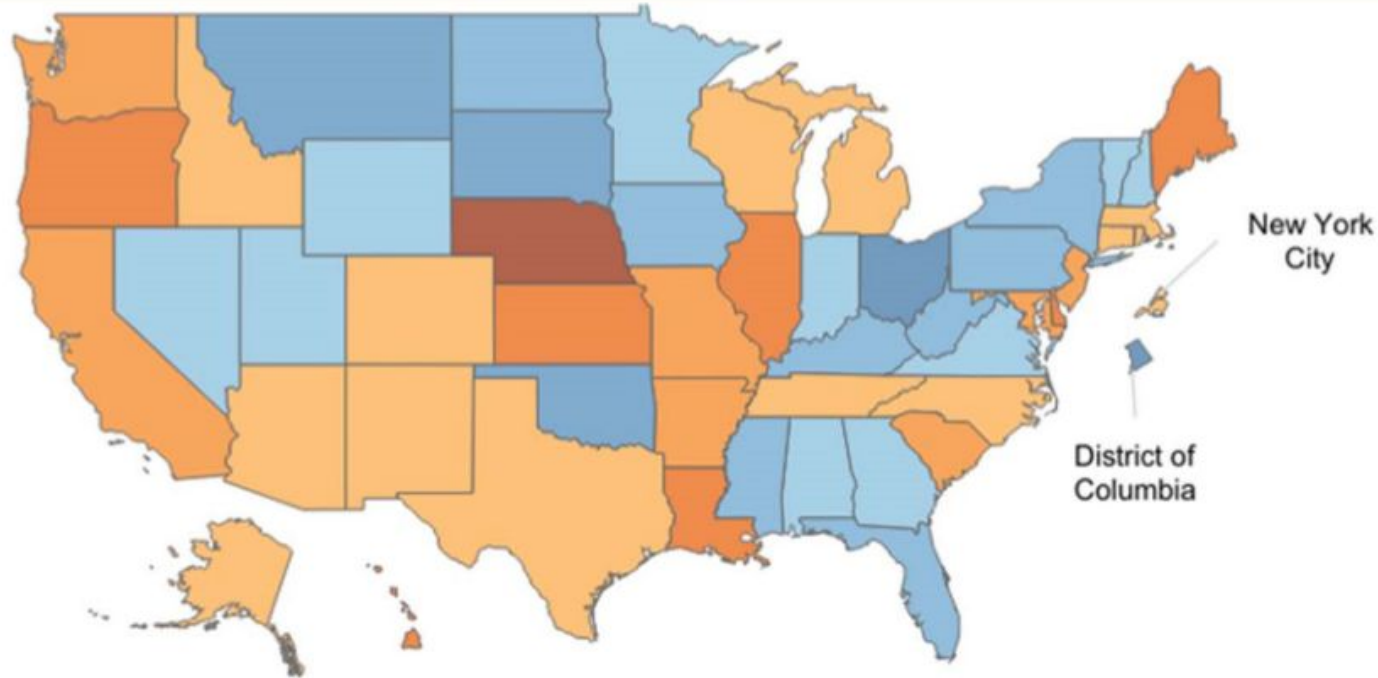


12 MONTH OVERDOSE MORTALITY: CDC JUNE 2018



OVERDOSE MORTALITY (PREDICTED): CDC JANUARY 2019

Figure 1b. Percent Change in Predicted 12 Month-ending Count of Drug Overdose Deaths, by Jurisdiction: June 2017 to June 2018

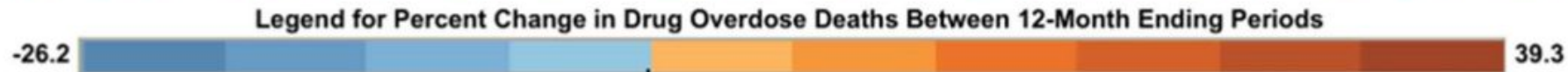


Select predicted or reported number of deaths

- Predicted
- Reported

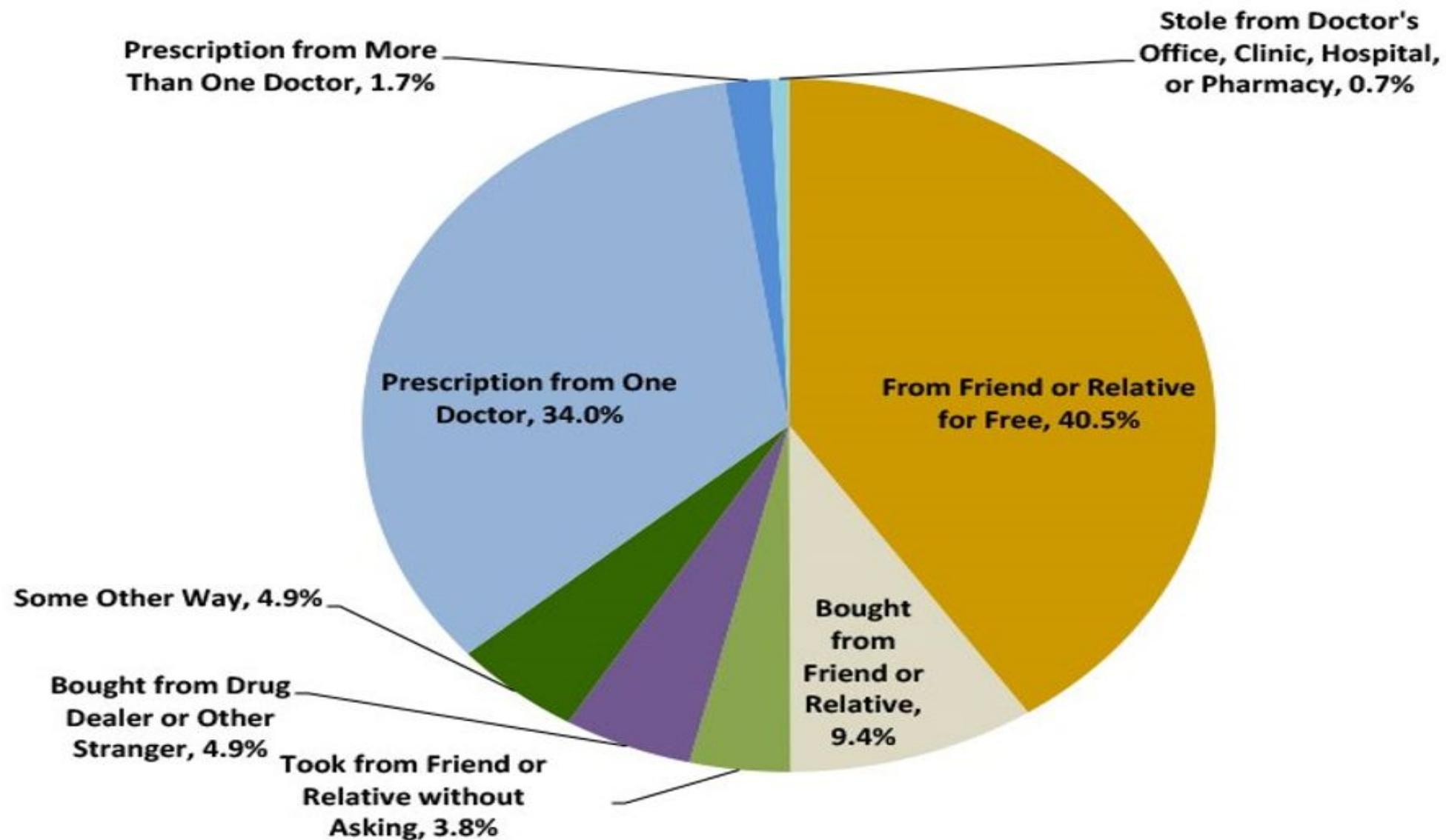
Percent Change for United States

-0.9



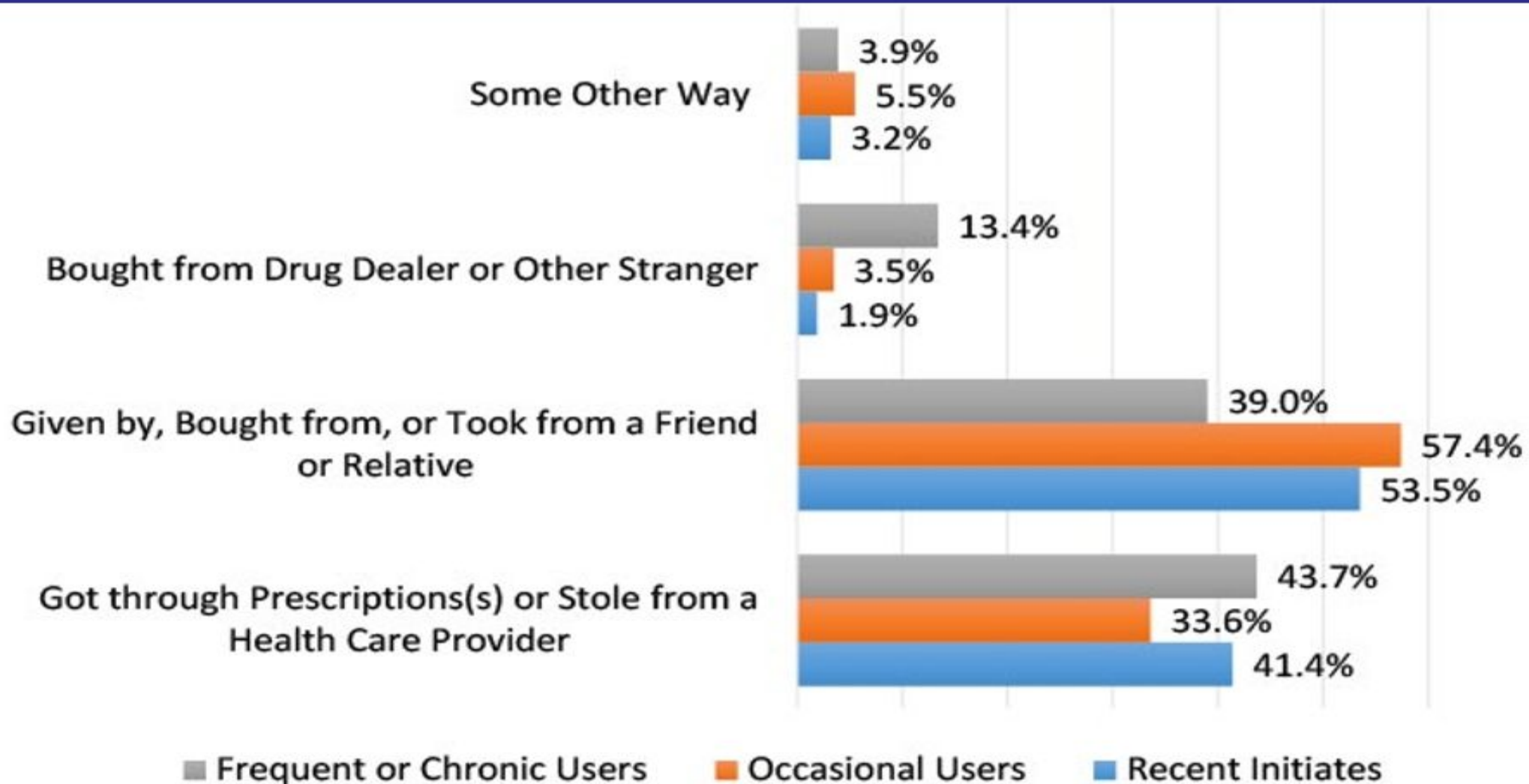
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Figure 20. Source Where Pain Relievers Were Obtained for Most Recent Misuse among Past Year Users Aged 12 or Older: 2015.



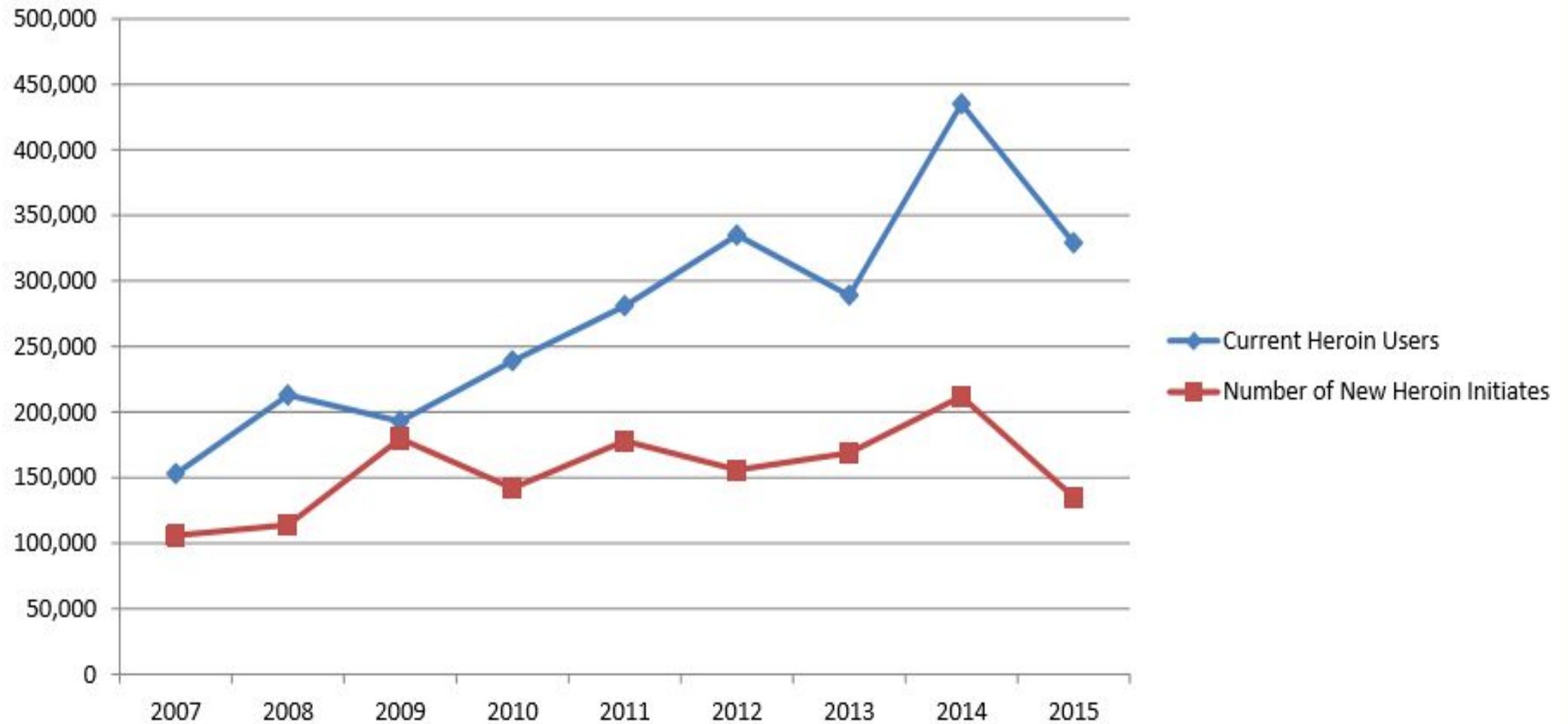
Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health (NSDUH)

Figure 21. Methods and Sources Where Pain Relievers Were Obtained for Most Recent Misuse among Past Year Users Aged 12 or Older: 2015.



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health (NSDUH)

Figure 41. Heroin Users and Past Year Initiates, 2007 – 2015.

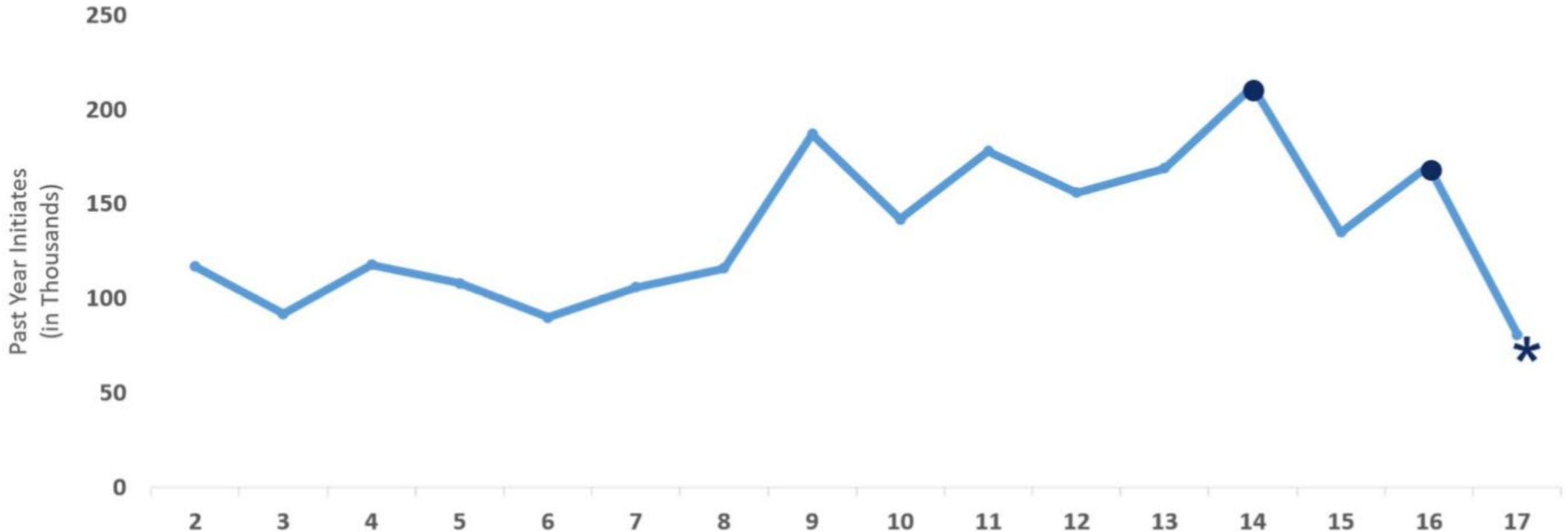


Source: National Survey on Drug Use and Health

NATIONAL SURVEY ON DRUG USE AND HEALTH, 2017

FIRST TIME HEROIN USERS DROPPED BY >60% (2016-2017)

Past Year Heroin Initiates among People Aged 12 or Older (in thousands): 2002-2017



**From 2010 to 2017,
heroin-related
overdose deaths
increased by
more than 5 times.**

www.cdc.gov

Minnesota Department of Health

Preliminary 2018 data show decline in opioid deaths dropping 17%

. While promising, **overdose rates remain at historic highs** and indicate the amount of work still needed in prevention and treatment of substance use disorder.

Chief drivers were decreases in heroin deaths and deaths that involved prescription opioids.

The preliminary shows deaths related to synthetic opioids, primarily illicitly manufactured fentanyl, continued to increase.

July 9, 2019

Prescription opioid overdoses drop, as fentanyl deaths skyrocket

[Ken Alltucker](#), USA TODAY Published 10:06 a.m. ET July 19, 2019 | Updated 6:36 p.m. ET July 23, 2019

Analytics speeds drug-diversion discovery from weeks to hours

[JESSICA KIM COHEN](#)

In the first six months of 2018 alone, healthcare organizations lost more than 18.7 million pills from employee misuse and theft, according to a [report](#) from healthcare analytics vendor Protensus. That diversion costs public and private medical insurers \$72.5 billion each year, the Justice Department's National Drug Intelligence Center estimated.

Piedmont Athens Regional using software from Invistics.

Constantly monitors drug-dispensation, timekeeping and electronic health record systems to flag any suspicious activity,

From there, the program alerts designated staff—at Piedmont Athens Regional, that means a drug-diversion specialist—about any abnormal patterns, so they can begin investigating as soon as possible—often within hours after the suspicious event occurs,

.
A National Institutes of Health-funded study of the analytics tool found that it took Piedmont Athens Regional anywhere from three weeks to several months to discover a drug-diversion event before implementing the tool.

After the hospital began using the tool in 2014, it flagged roughly 200 instances of possible drug diversion, with nearly half leading to full investigations. About 25 care providers faced disciplinary actions as a result of these investigations.

A comprehensive plan to mitigate drug diversion might include analytics, manual chart reviews, random audits of syringes and even teaching staff how to detect behavioral changes associated with drug diversion among peers

Conclusions

Drug addiction is a big problem

Drug diversion is a big problem and has become bigger. There are some bad players

Rate of opioid prescription has decreased. We are hopefully making a difference

Death related to opioids continues to rise. Mainly due illicit drugs(Fentanyl)

Drug related deaths has crossed boundaries and is effecting white suburban America

Use the CDC guidelines to prescribe pain medications. But recommend DHSS guidelines for HICP patients

Contact your referring providers and give lecture titled “ **CALL ME BEBORE YOU START YOUR PATIENTS ON OPIOIDS**”

But do not deprive patients of medications, at least HICP patients

Documentation is most important

Thank You

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