
The Opioid Overdose Epidemic: Where we are, where we have been, and where we are going

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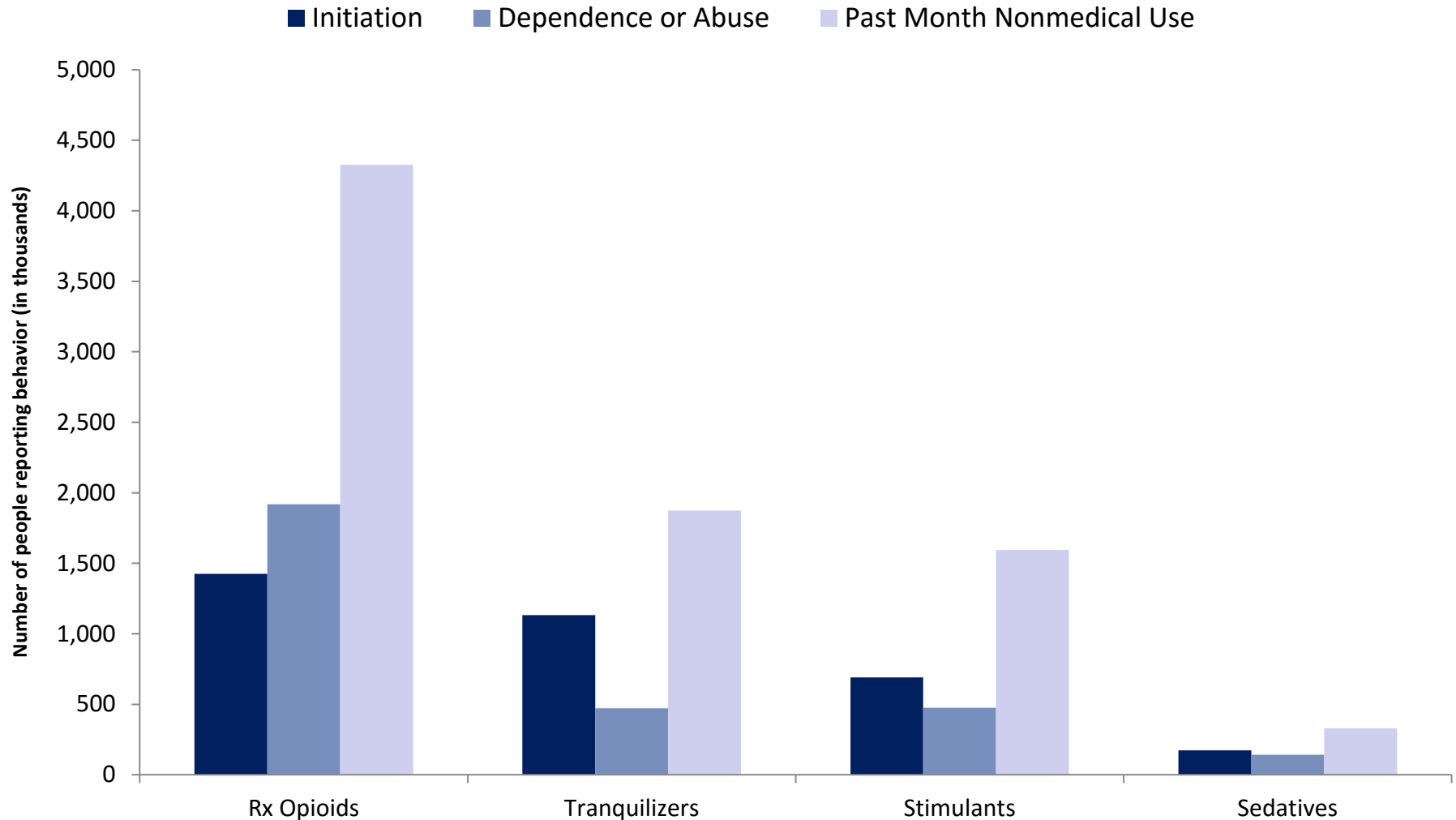
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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Overview

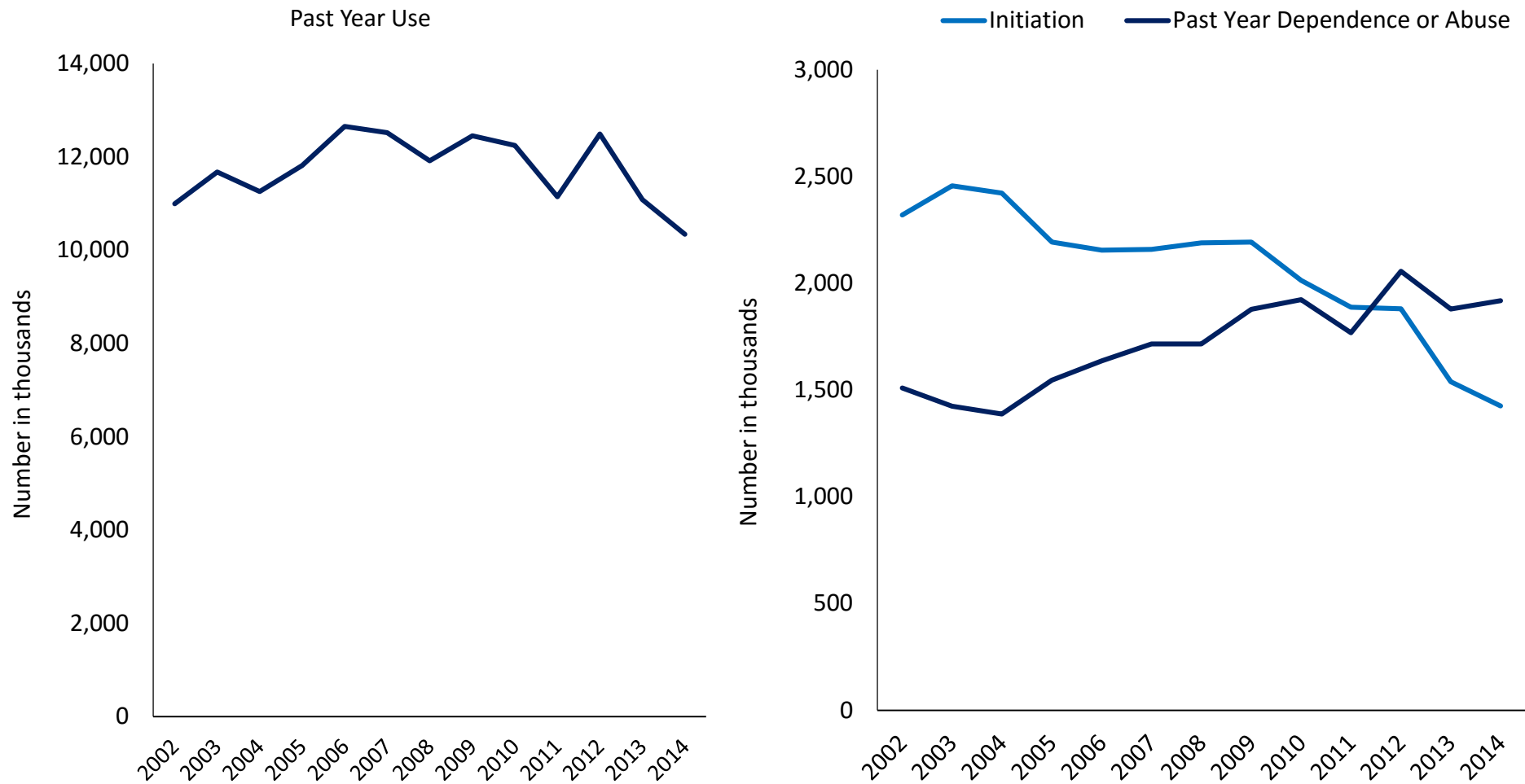
- Update on prescription opioid and heroin-related epidemiology
- Update on interventions targeting opioid-related harms
 - Prescribing practices
 - Medication-assisted treatment
 - Naloxone
- Conclusions

EPIDEMIOLOGY

Rx opioids mostly commonly abused prescription drug, US, 2014

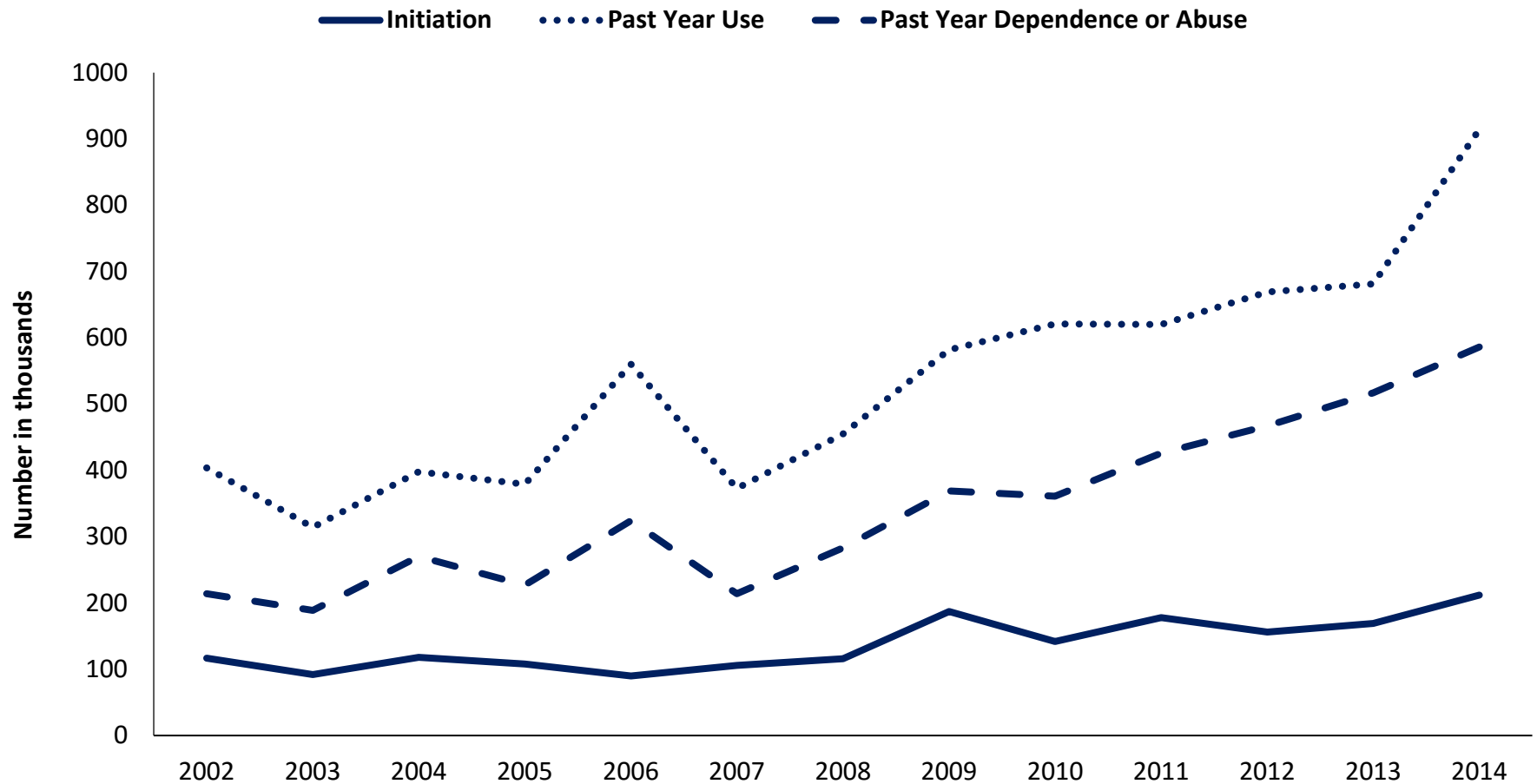


Rx opioid trends, US, 2002-2014

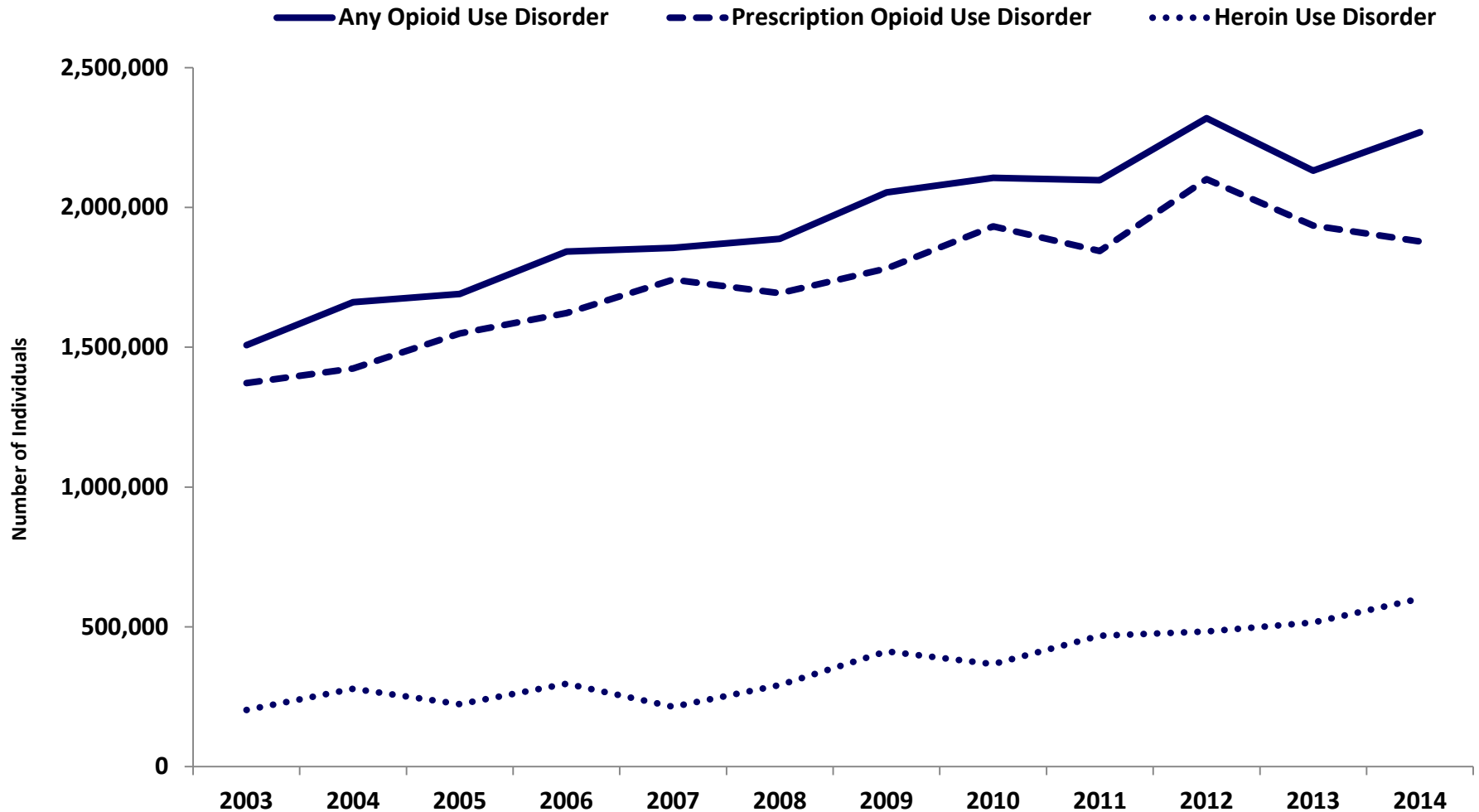


Source: SAMHSA National Survey on Drug Use and Health, 2002-2014

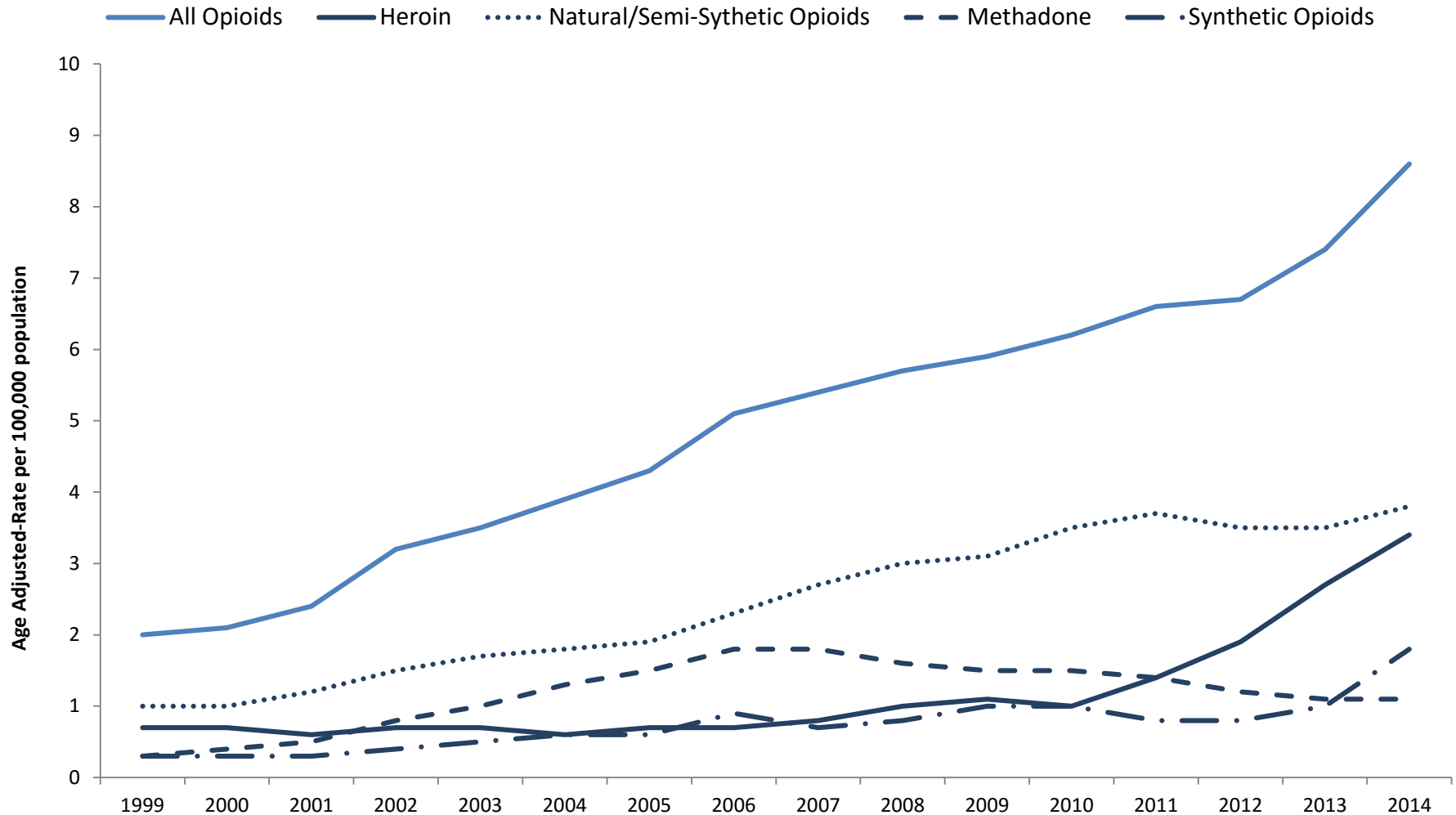
Heroin trends, US, 2002-2014



Past year opioid use disorders, US, 2003-2014



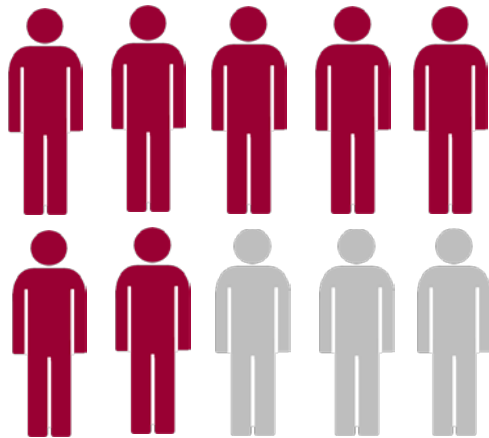
Opioid-related overdose deaths, US, 1999-2014



Nonmedical use of Rx opioids significant risk factor for heroin use

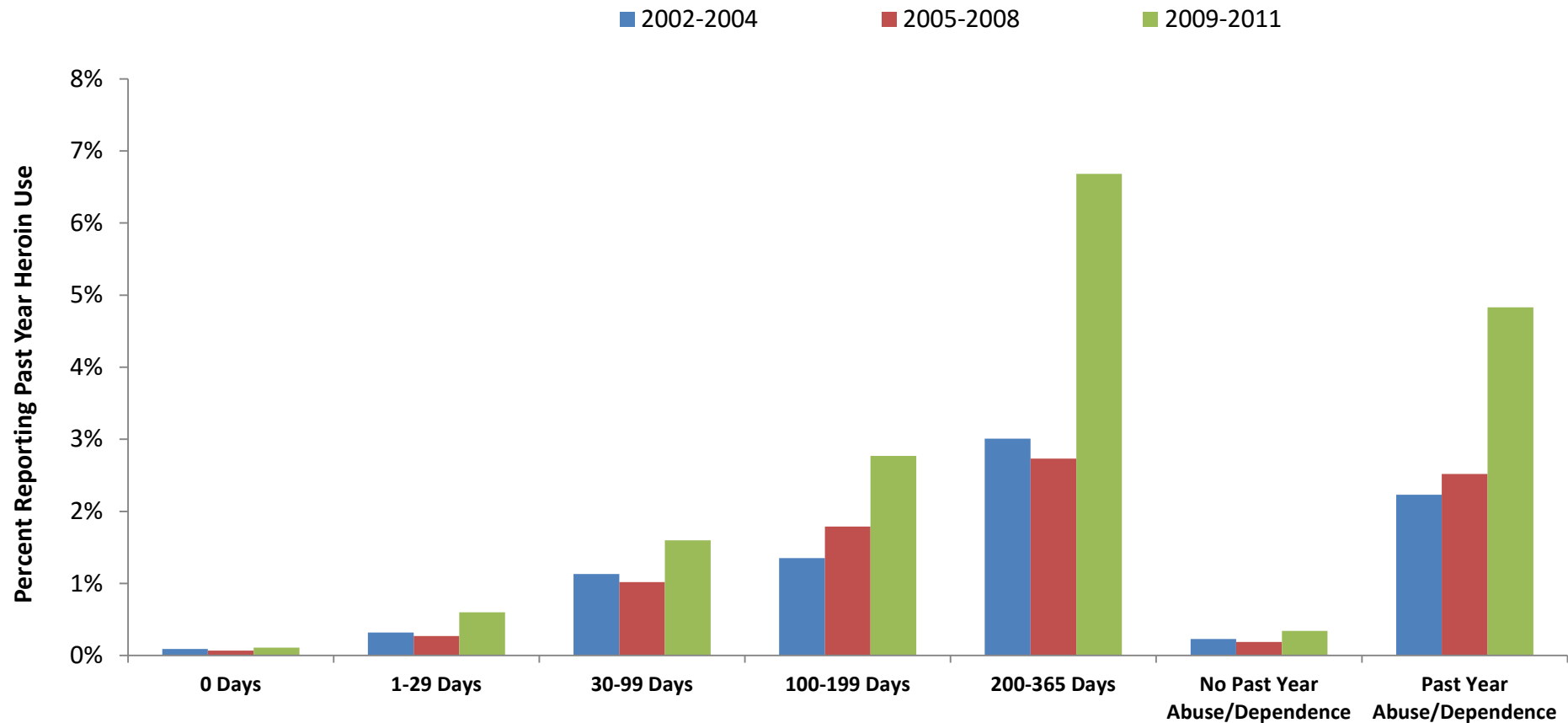


3 out of 4 people
who used heroin in the
past year misused
opioids first



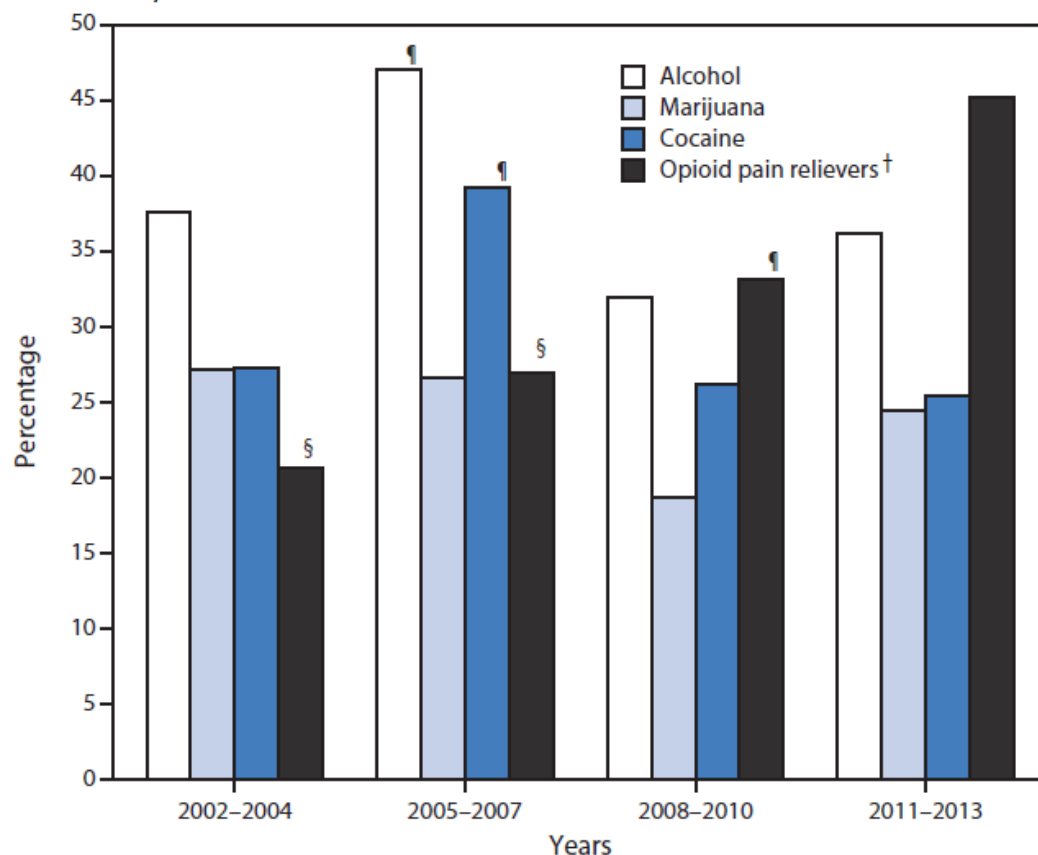
7 out of 10 people
who used heroin in the
past year also misused
opioids in the past year

Frequent nonmedical users of Rx opioids and those with abuse/dependence most likely to initiate heroin



Past year substance abuse or dependence among past year heroin users

FIGURE 1. Annual average percentage of past-year heroin users* with past-year selected substance abuse or dependence, by time interval — United States, 2002–2013



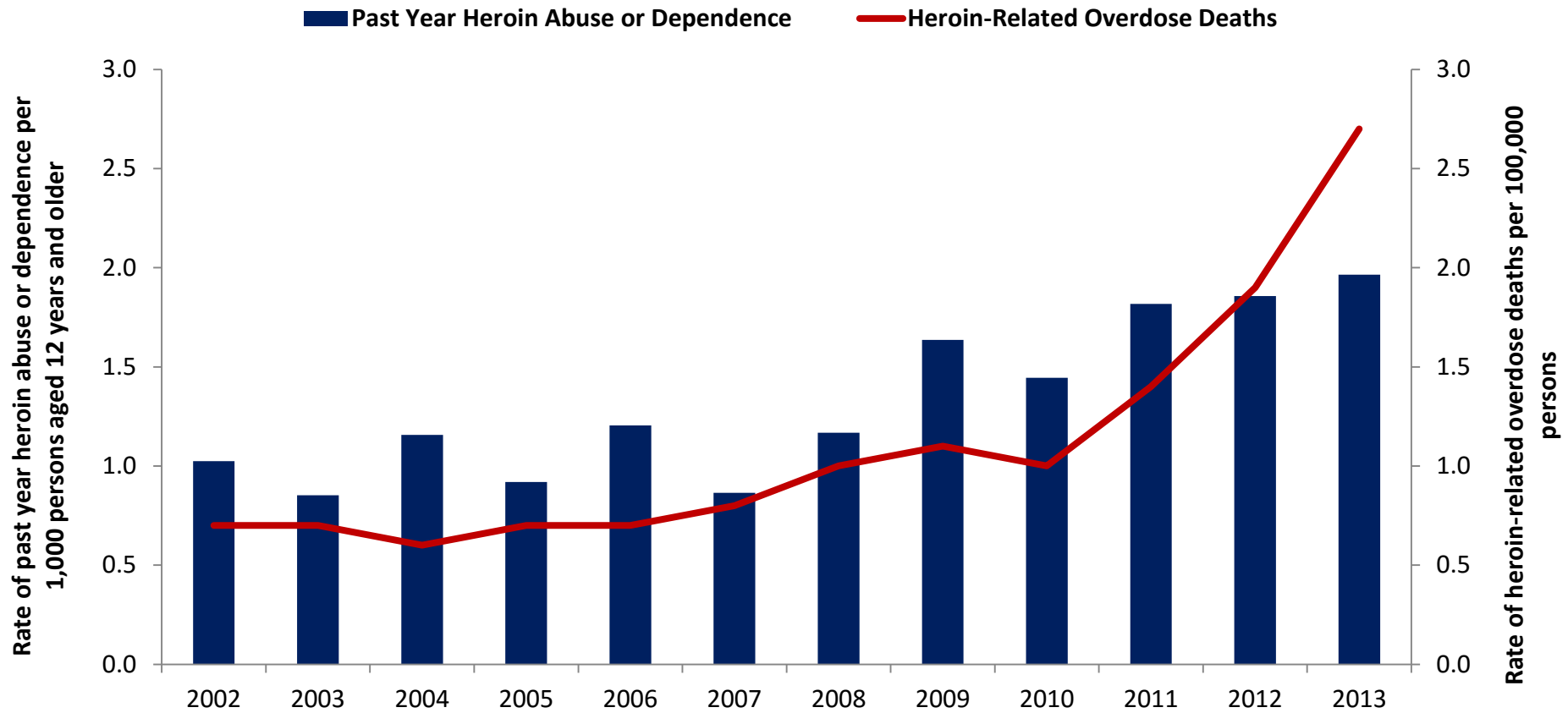
* Past-year heroin use defined as any use of heroin in the 12 months preceding the National Survey on Drug Use and Health survey interview.

† p-value for trend <0.05.

§ Rate is statistically significantly different from 2011–2013 rate; $p < 0.001$.

¶ Rate is statistically significantly different from 2011–2013 rate; $p < 0.05$.

Rise in heroin overdose deaths strongly correlated with increase in heroin abuse or dependence



Groups at increased risk for heroin abuse or dependence

Characteristic	Past-year heroin abuse or dependence	
	aOR	(95% CI)
Sex		
Male	2.1 ⁺⁺⁺	(1.4–3.0)
Female	1.0	
Age (yrs)		
12–17	0.3 ⁺⁺	(0.1–0.6)
18–25	1.0	
26	0.6 ⁺⁺	(0.4–0.9)
Race/Ethnicity		
Non-Hispanic white	3.1 ⁺⁺⁺	(1.8–5.1)
Other	1.0	
Geography		
Residing in CBSA with ≥1 million persons	2.4 ⁺⁺⁺	(1.5–3.6)
Residing in other area	1.0	
Household income (annual)		
<20,000	1.0	
\$20,000–\$49,999	0.5 ⁺⁺	(0.3–0.7)
≥\$50,000 or more	0.6 ⁺	(0.3–0.9)
Insurance coverage		
None	3.1 ⁺⁺⁺	(2.2–4.3)
Medicaid	3.2 ⁺⁺⁺	(1.9–5.4)
Private or other	1.0	
Past-year substance abuse or dependence[§]		
Alcohol	1.8 ⁺⁺	(1.2–2.9)
Marijuana	2.6 ⁺⁺	(1.5–4.6)
Cocaine	14.7 ⁺⁺⁺	(7.4–29.2)
Opioid pain relievers	40.0 ⁺⁺⁺	(24.6–65.3)
Other psychotherapeutics [¶]	1.6	(0.8–3.2)

Abbreviations: aOR = adjusted odds ratio; CBSA = core based statistical area; CI = confidence interval.

* Past-year heroin abuse or dependence is based on diagnostic criteria contained in the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition*.

† Statistically significant finding; ⁺p<0.05; ⁺⁺p<0.01; ⁺⁺⁺p<0.001.

[§] Referent group is no past-year abuse or dependence.

[¶] Other psychotherapeutics includes tranquilizers, sedatives, and stimulants.

- Men
- 18-25 year olds
- Non-Hispanic whites
- People living in large urban areas
- People with household income ≤ \$20,000 annually
- The uninsured
- People in Medicaid

People with other substance abuse or dependence also at increased risk

People with abuse or dependence on:

ALCOHOL

are

2x

MARIJUANA

are

3x

COCAINE

are

15x

Rx OPIOID PAINKILLERS

are

40x

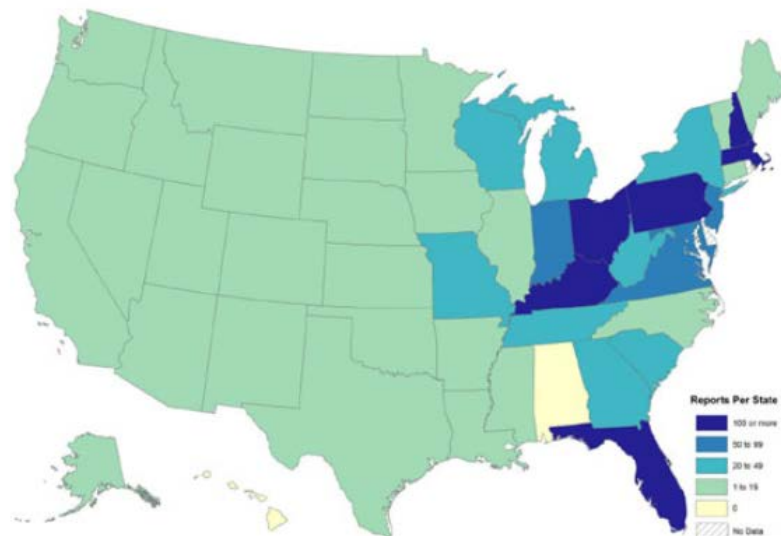
More likely to have heroin abuse or dependence

Emerging issues

Morbidity and Mortality Weekly Report

Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015

Fentanyl reports in NFLIS, by State July – December 2014



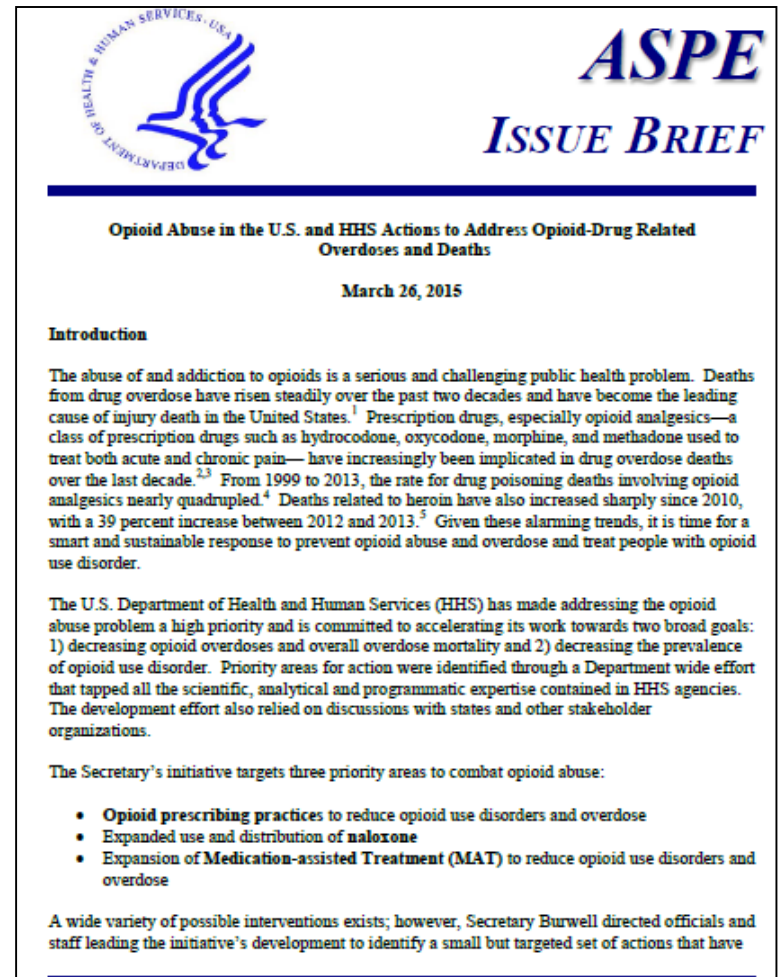
Morbidity and Mortality Weekly Report
May 8, 2015

Increases in Hepatitis C Virus Infection Related to Injection Drug Use Among Persons Aged ≤ 30 Years — Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012

POLICY RESPONSE

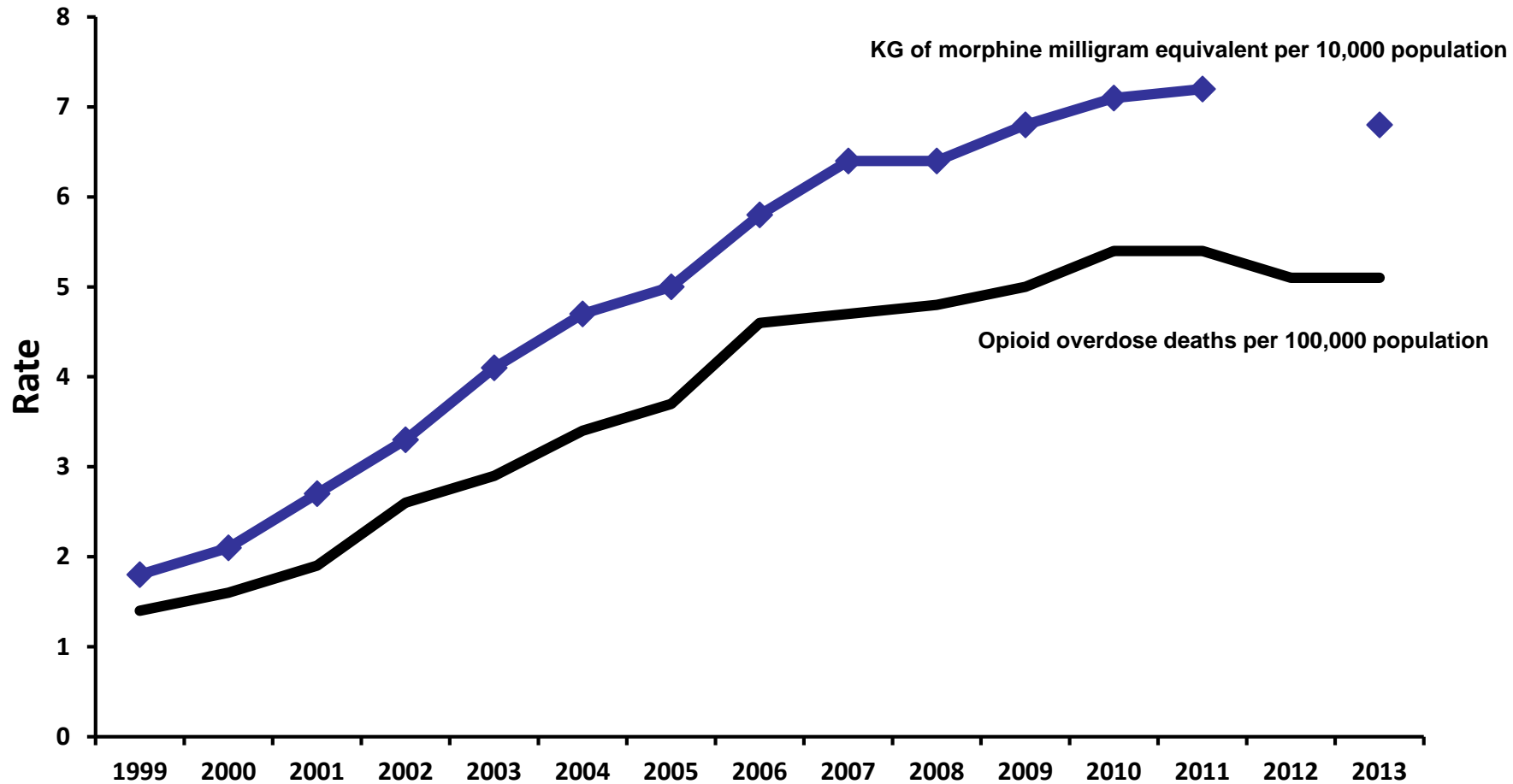
HHS Opioid Initiative

- Launched by Secretary Burwell in March 2015
- Three focus areas
 - Improve opioid prescribing
 - Increase use of naloxone to reverse opioid overdose
 - Expand use of Medication-Assisted Treatment (MAT) for opioid use disorders



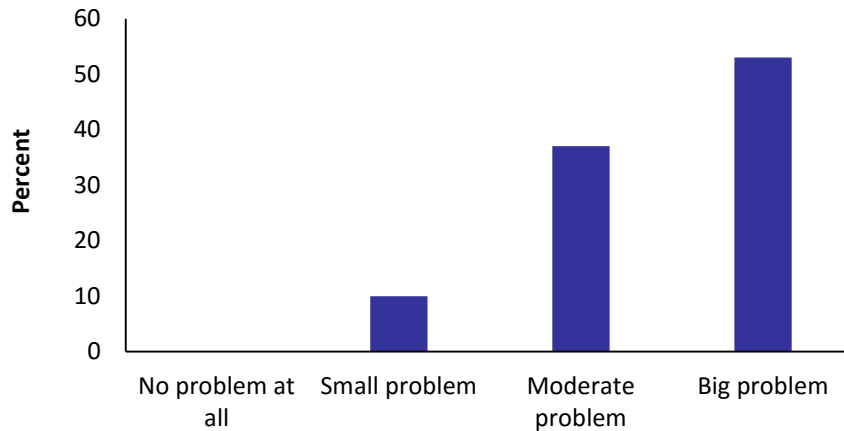
PRESCRIBING PRACTICES

Increases in Rx opioid prescribing coincide with increases in Rx opioid overdose deaths

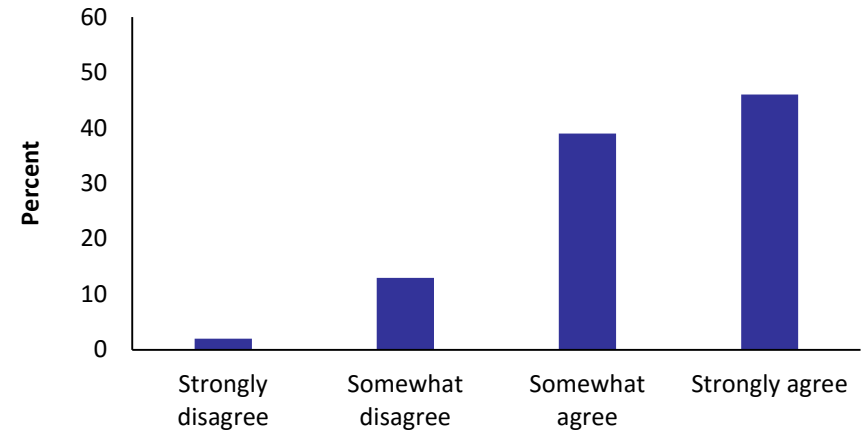


Primary care physician's views on Rx opioids

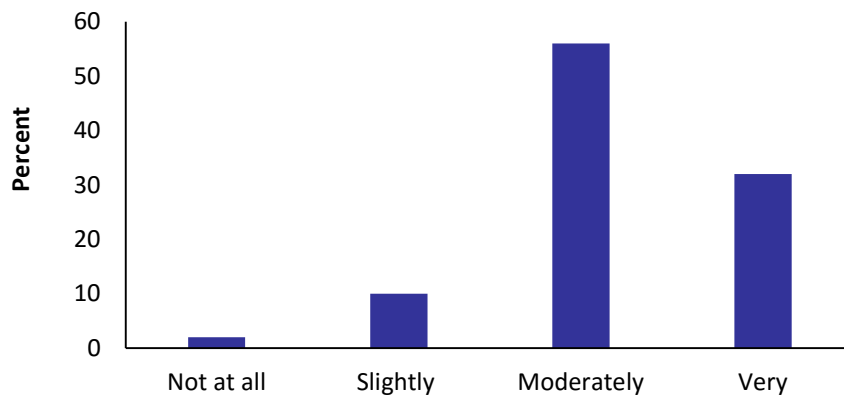
Magnitude of Rx abuse in community



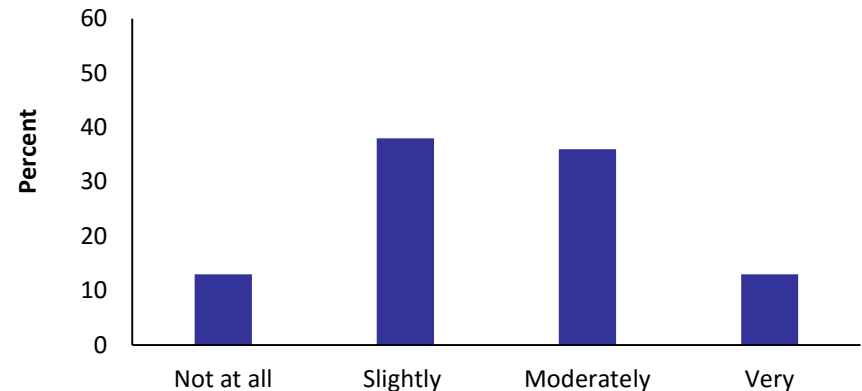
Opioids overused for pain



Confidence in clinical skills related to opioid prescribing



Comfort in prescribing opioids for chronic noncancer pain



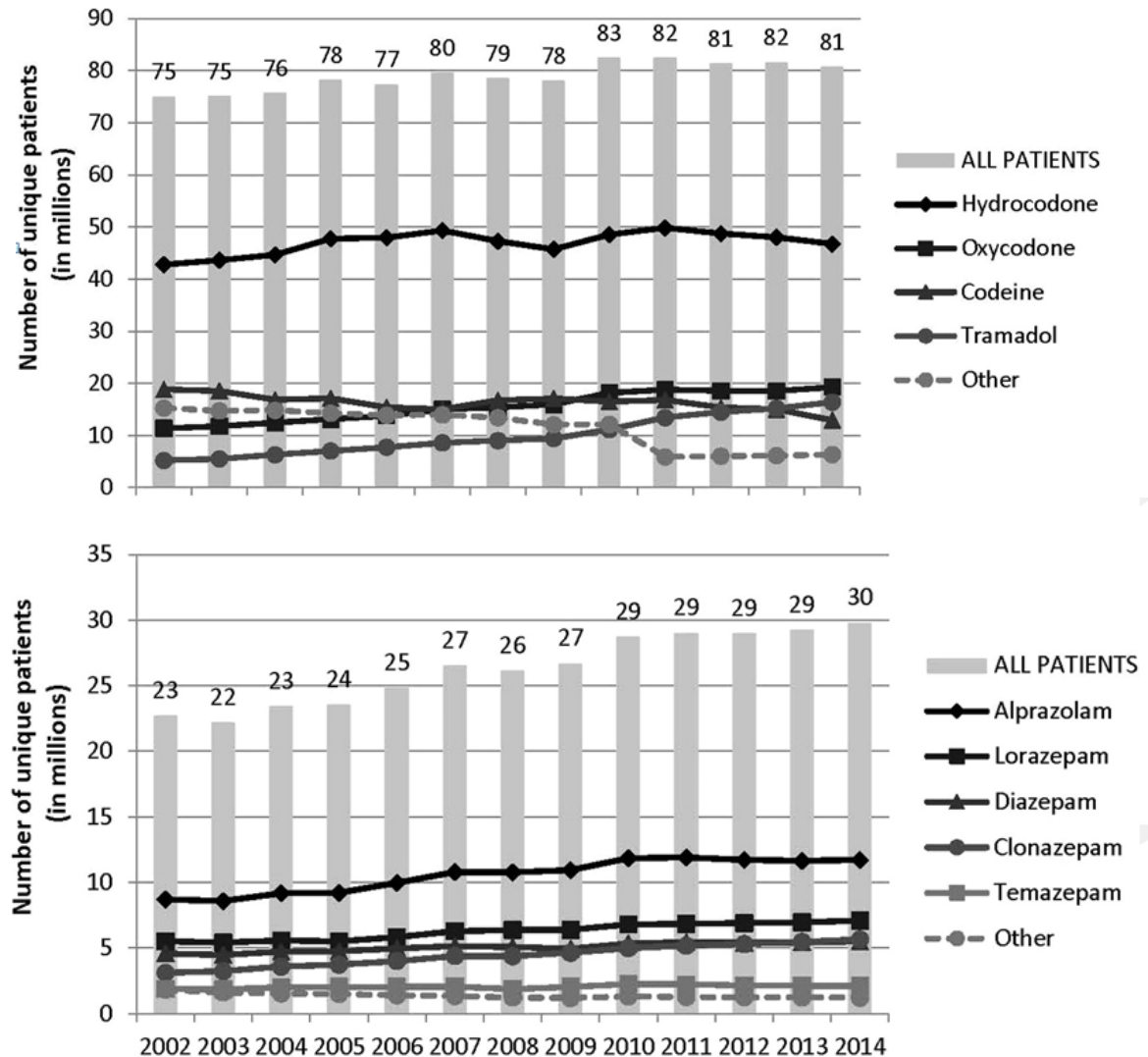
Increase in opioid prescribing dose and duration for same conditions

Table 2. Total Opioids Prescribed, Mean Daily Dose, and Duration of Prescription for Opioid-Naive Patients Who Filled an Opioid Prescription for Hydrocodone/Acetaminophen or Oxycodone/Acetaminophen Within 7 Days After Surgery (Outpatients) or Hospital Discharge (Inpatients), 2004-2012

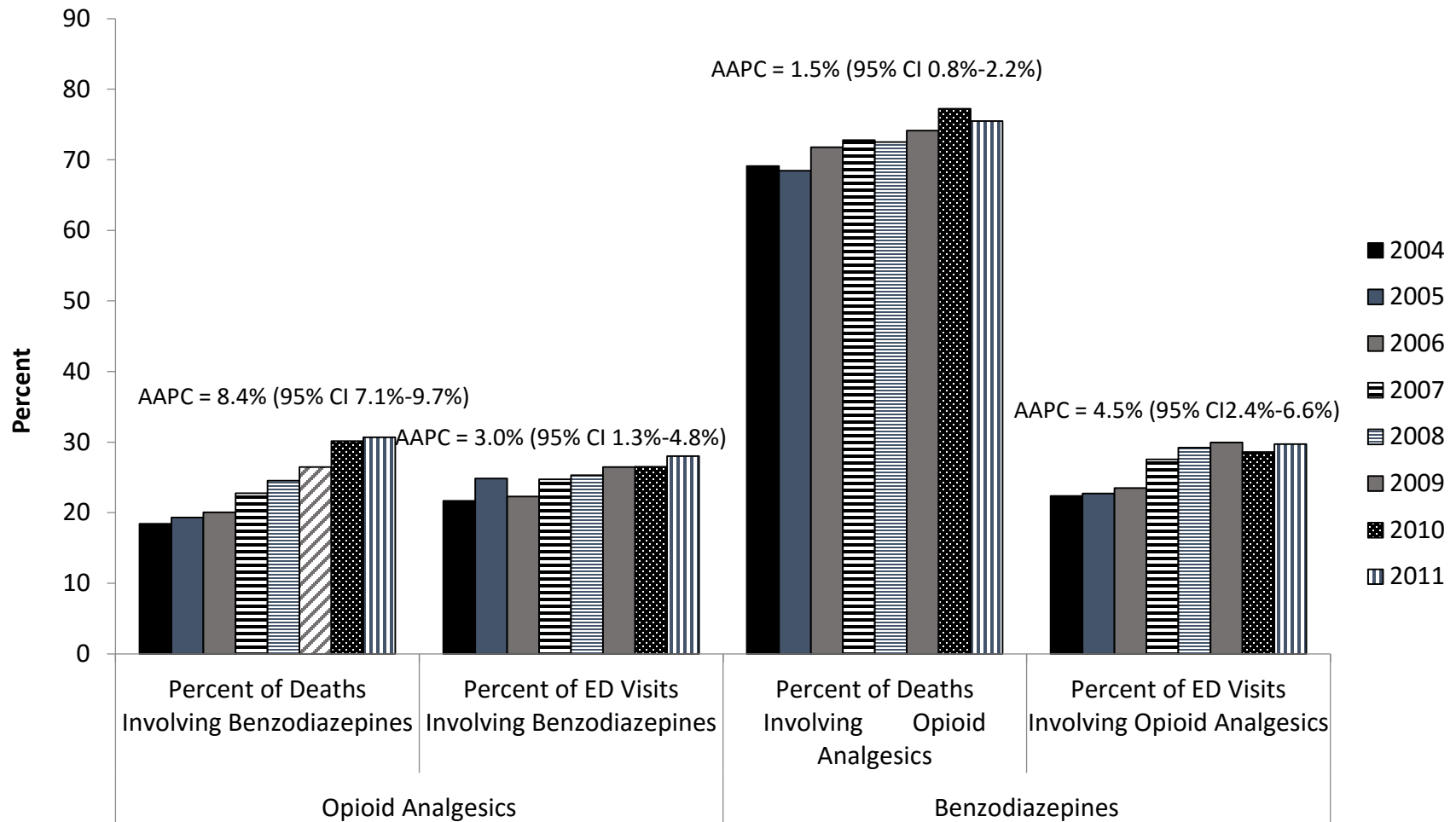
Surgery Type	Total Morphine Equivalents Prescribed			Mean Daily Dose Prescribed, mg			Duration of Prescription, d		
	Mean (95% CI)	Absolute Change (95% CI)	P Value ^a	Mean (95% CI)	Absolute Change (95% CI)	P Value ^a	Mean (95% CI)	Absolute Change (95% CI)	P Value ^a
All 4 surgical procedures ^b									
All years	235.1 (234.4 to 235.8)			51.6 (51.4 to 51.7)			5.0 (5.0 to 5.1)		
2004	219.2 (218.1 to 220.2)	Reference		48.7 (48.5 to 49.0)	Reference		5.1 (5.0 to 5.1)	Reference	
2008	237.4 (236.3 to 238.5)	17.83 (16.23 to 19.44)	<.001	51.0 (50.7 to 51.2)	2.19 (1.84 to 2.54)	<.001	5.1 (5.1 to 5.1)	0.03 (-0.01 to 0.07)	.10
2012	247.4 (246.1 to 248.8)	29.71 (28.08 to 31.35)	<.001	54.8 (54.6 to 55.1)	6.29 (5.93 to 6.65)	<.001	4.9 (4.9 to 5.0)	-0.12 (-0.17 to 0.08)	<.001

Trends in combined opioid and benzodiazepine use, US, 2002-2014

- 41% increase in proportion of opioid recipients also receiving benzos
- ~ 50% received from same prescriber on same day
- Concomitant opioids and benzos was more common among patients on chronic opioid therapy, women, and the elderly



Increasing role of benzodiazepines in Rx opioid ED visits and overdose deaths



Risk factors for Rx opioid abuse and overdose

Demographics

- Men
- 35-54 year olds (deaths)
- 18-35 (abuse)
- Whites
- American Indians/Alaska Natives



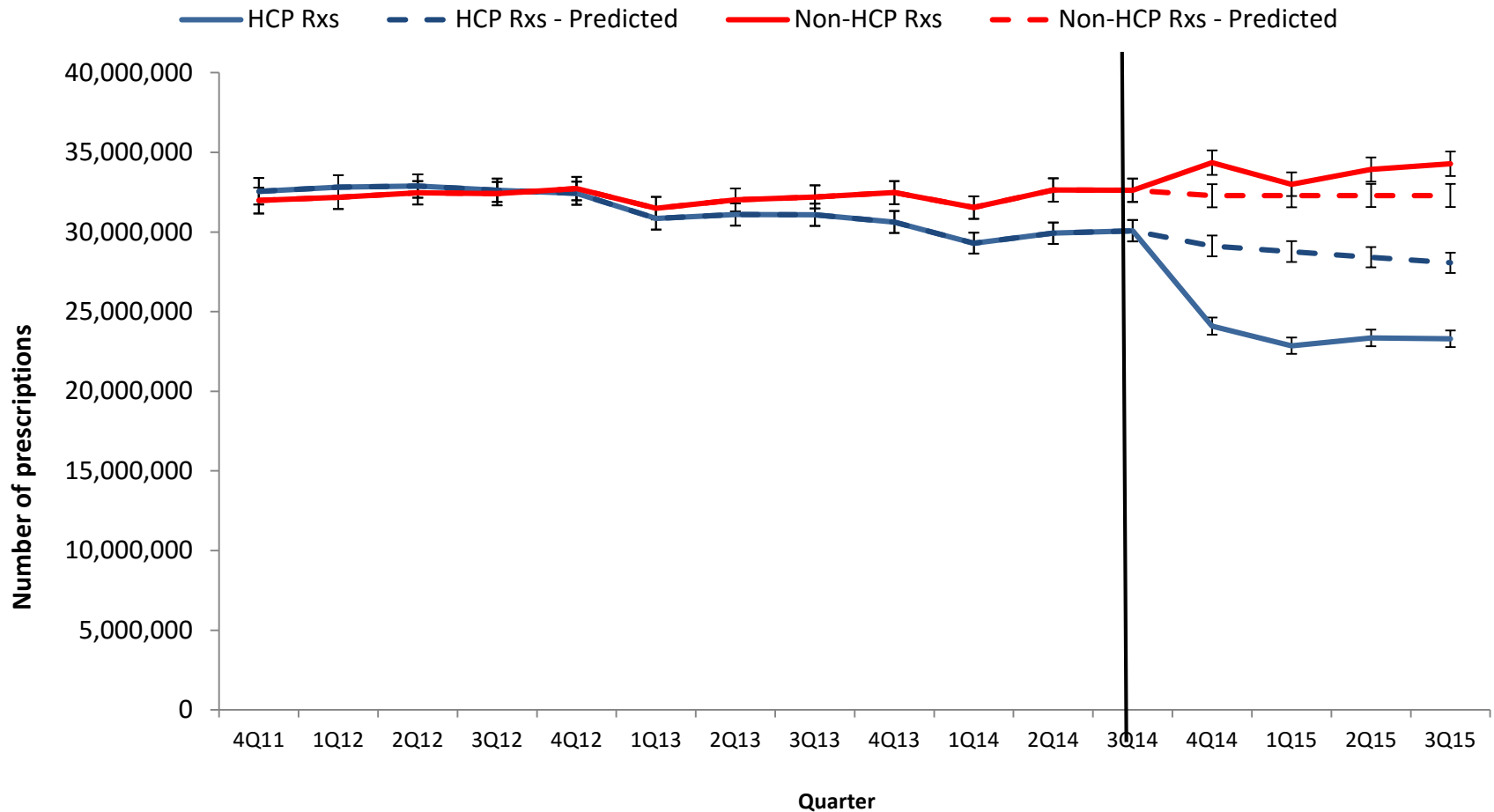
Socioeconomics and Geography

- Medicaid, uninsured
- Rural

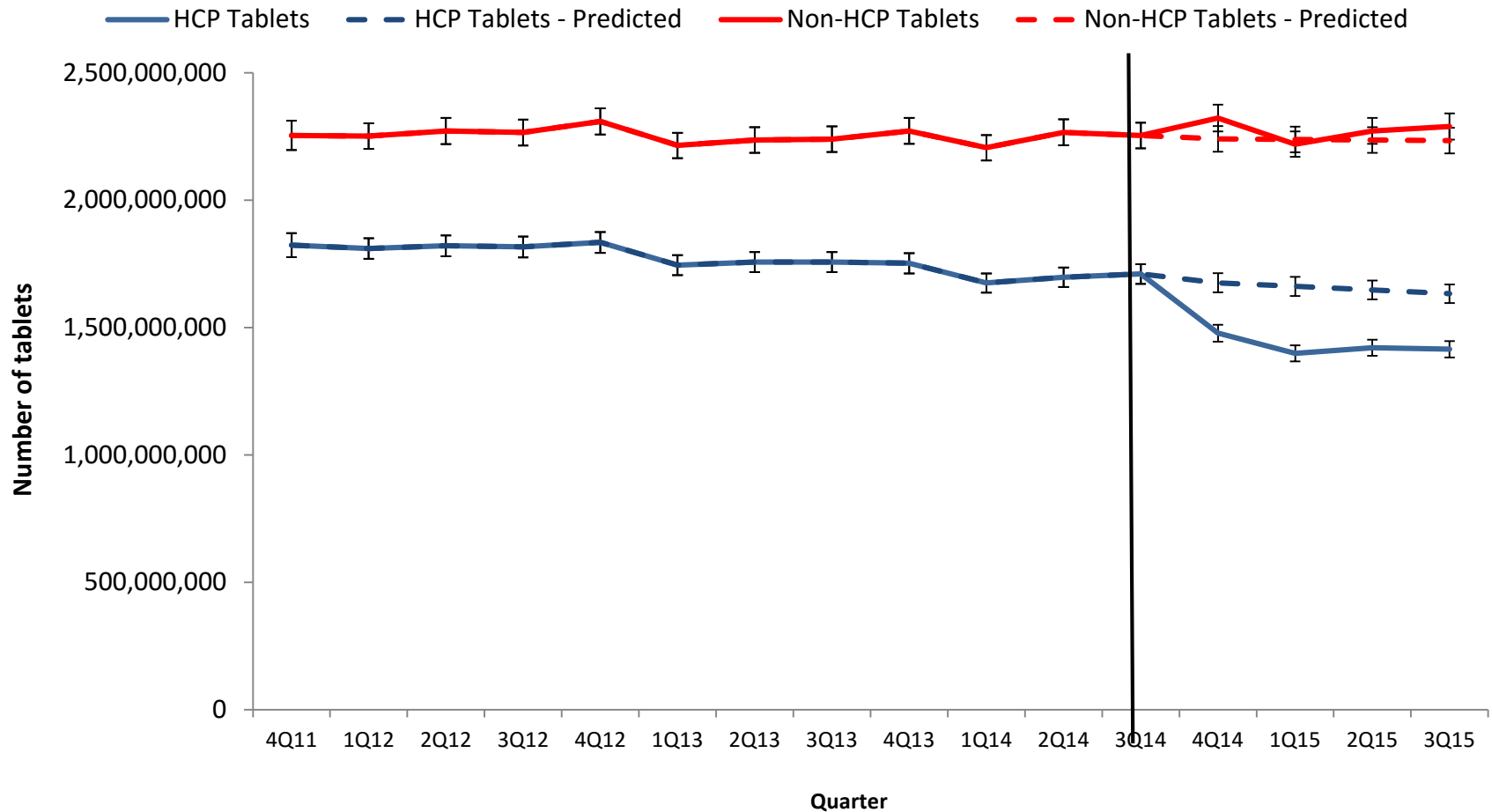
Clinical Characteristics

- Chronic pain
- Substance abuse
- Mental health
- Nonmedical use
- Multiple prescriptions
- Multiple prescribers
- High daily dosage
- Combination of opioids and benzodiazepines

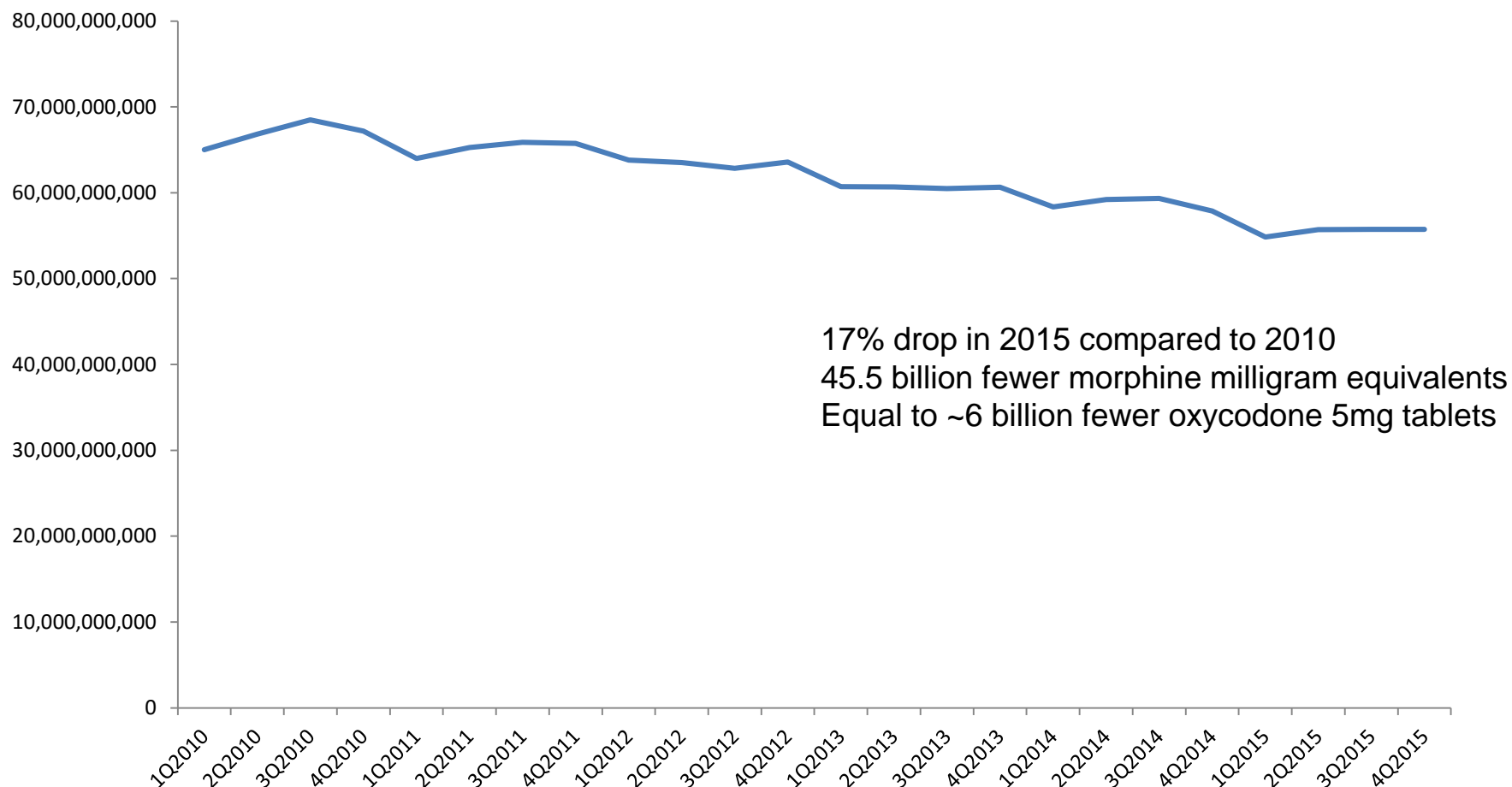
Impact of hydrocodone rescheduling



Impact of hydrocodone rescheduling



Total morphine milligram equivalents dispensed in the U.S., 2010-2015



Improve opioid prescribing

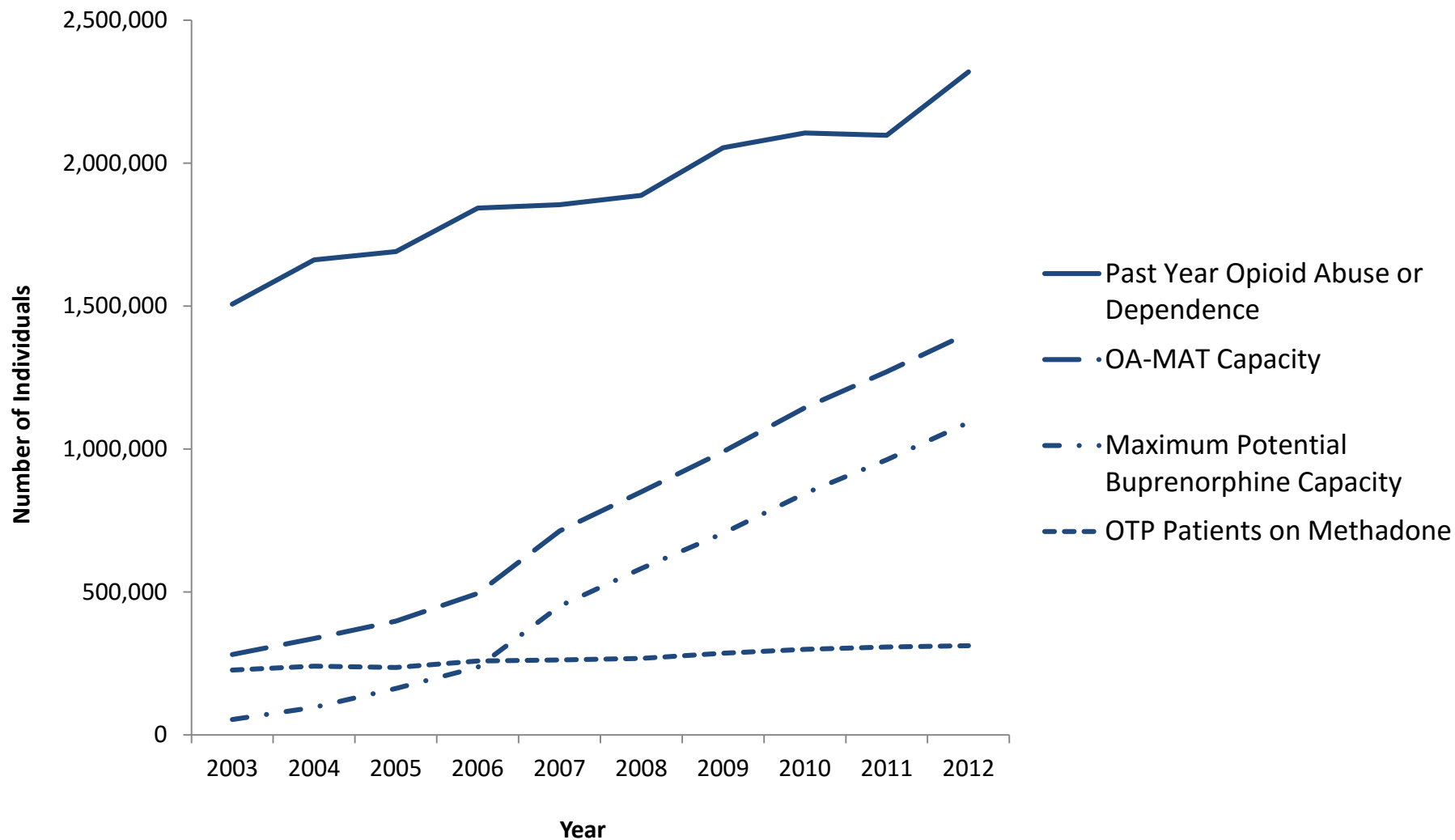
- CDC opioid prescribing guidelines
- CDC Prevention for States funding
- Educational opportunities
 - FDA ER/LA Opioid Analgesic REMS
 - NIDAMED and NIH Centers of Excellence in Pain Education
 - SAMHSA programs – PCSS-O and PCSS-MAT
- EHR/Clinical decision support
- Engagement with health profession community



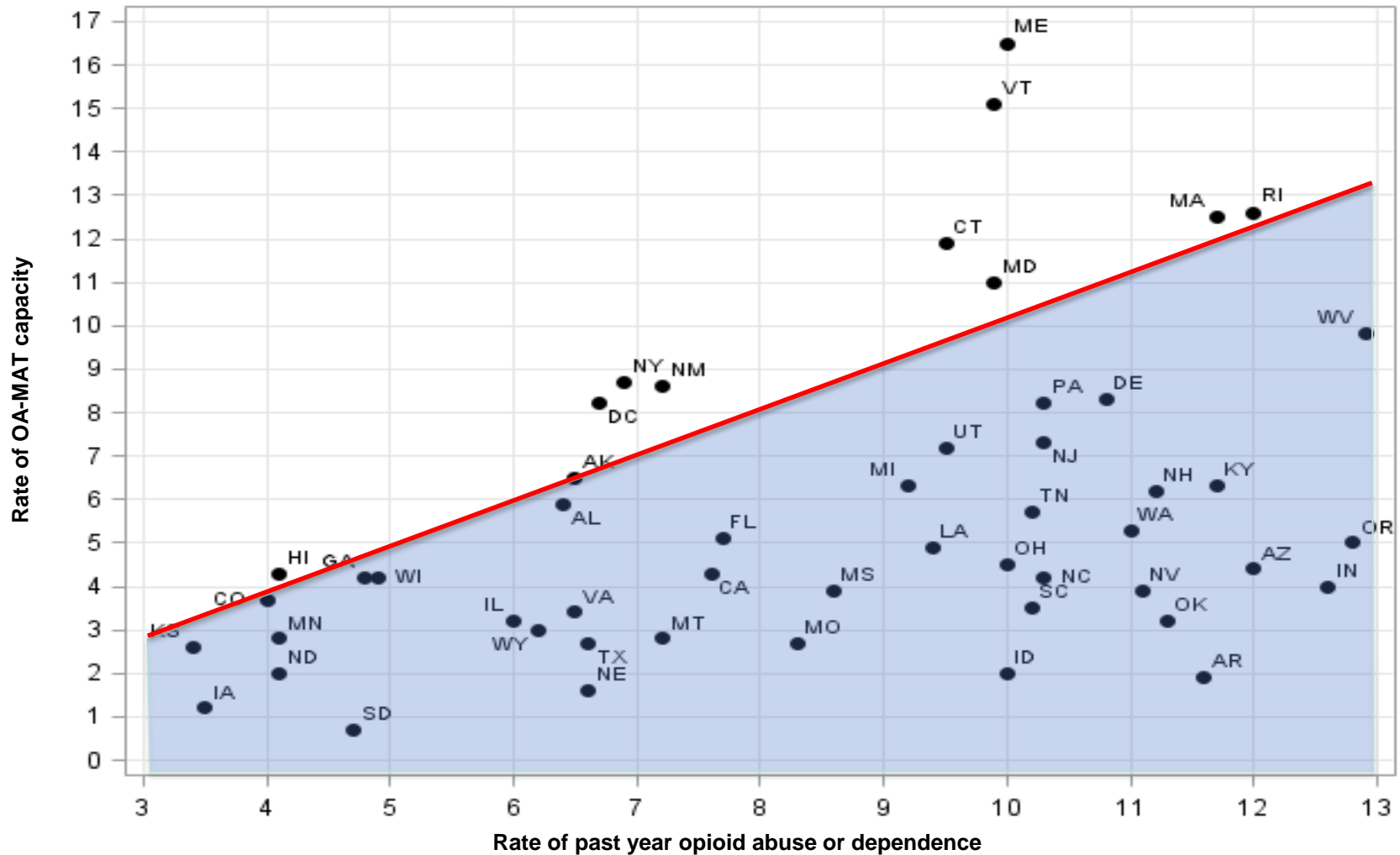


MEDICATION-ASSISTED TREATMENT

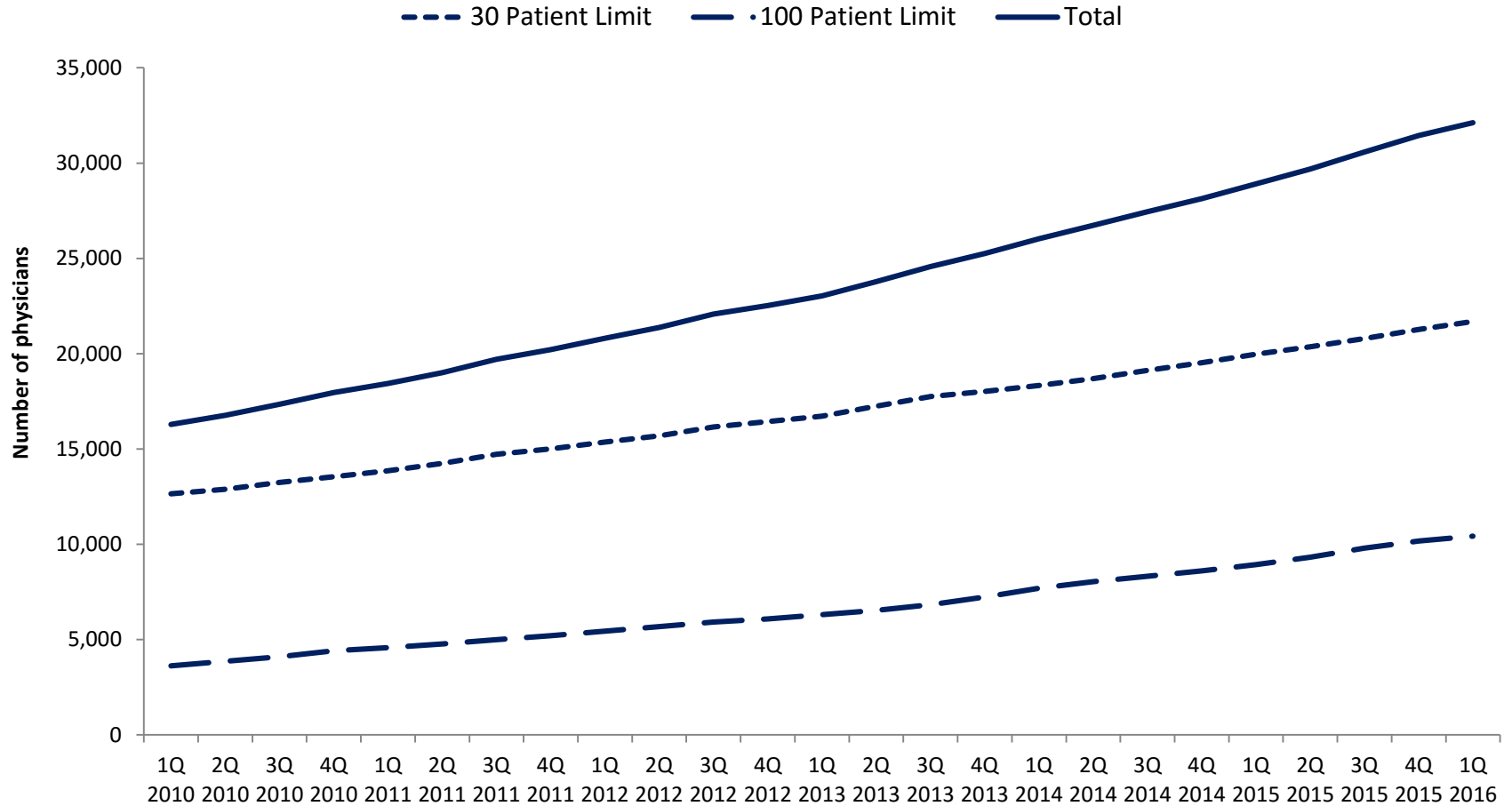
Treatment need for opioid abuse or dependence exceeds capacity for opioid agonist medication assisted treatment (OA-MAT) in the US



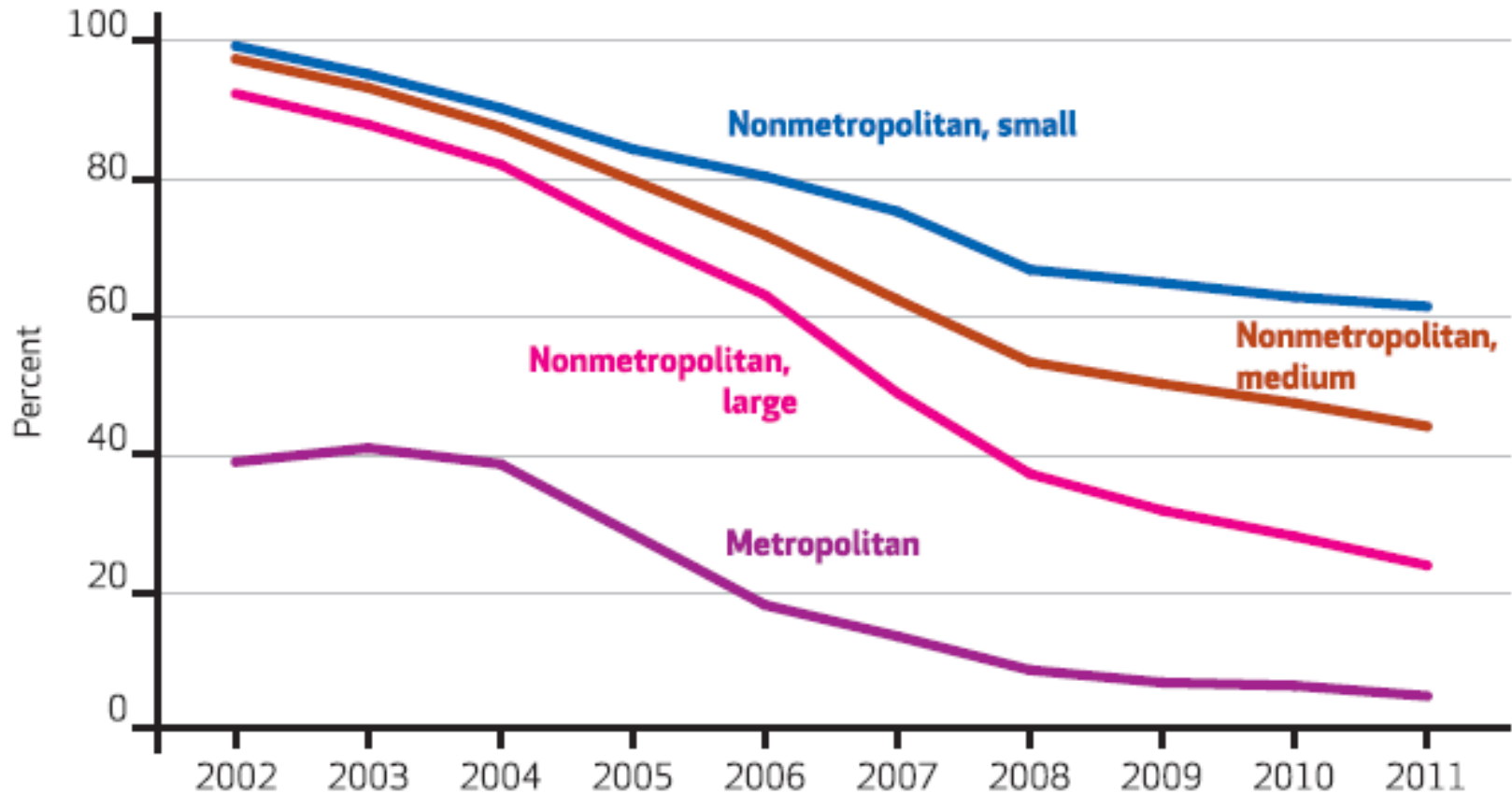
Opioid abuse and dependence exceeds OA-MAT capacity in most states



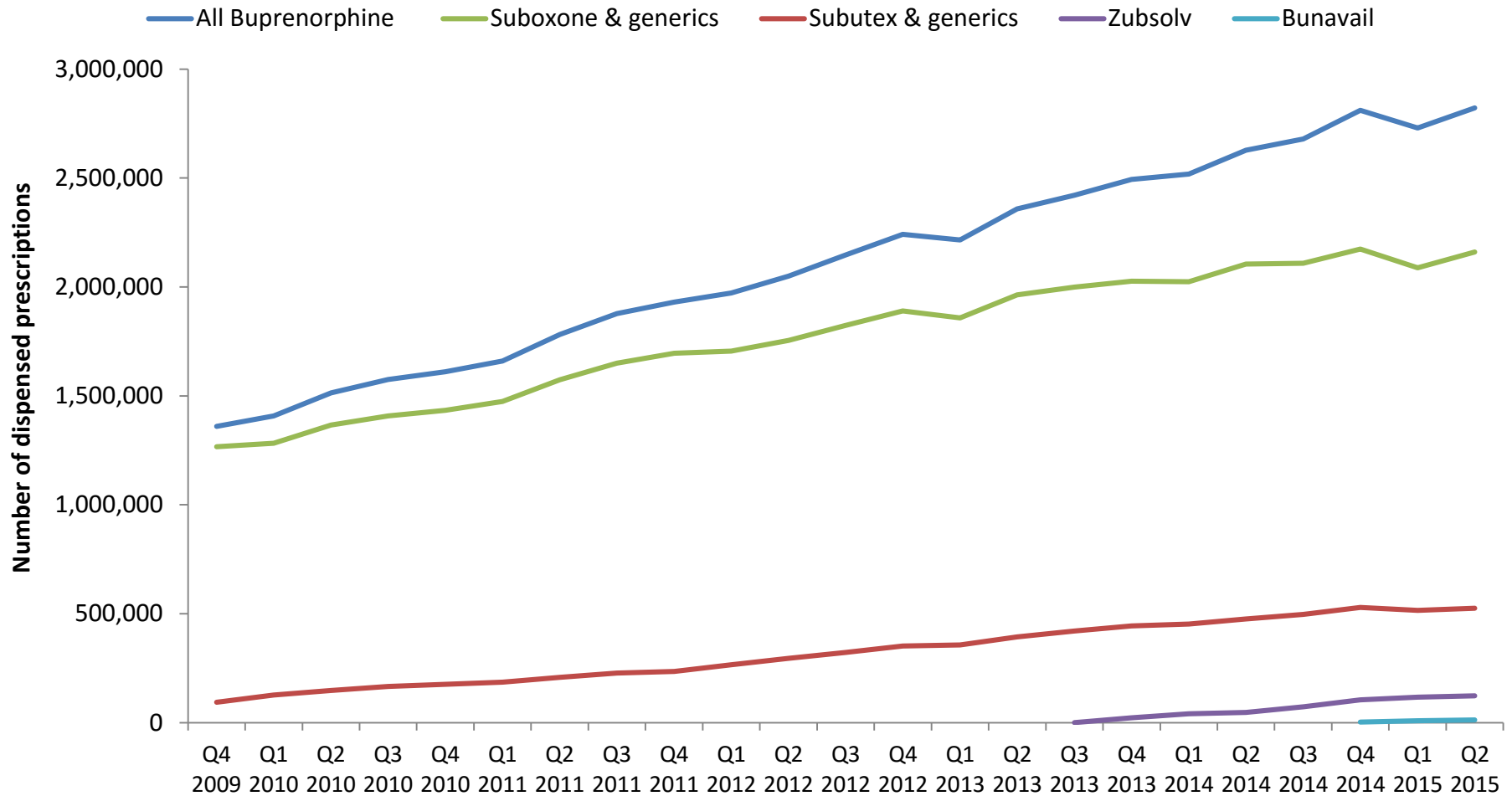
Number of providers with DATA 2000 Waiver, US, 2010-2015



Percentage Of US Population Living In Treatment Shortage Counties

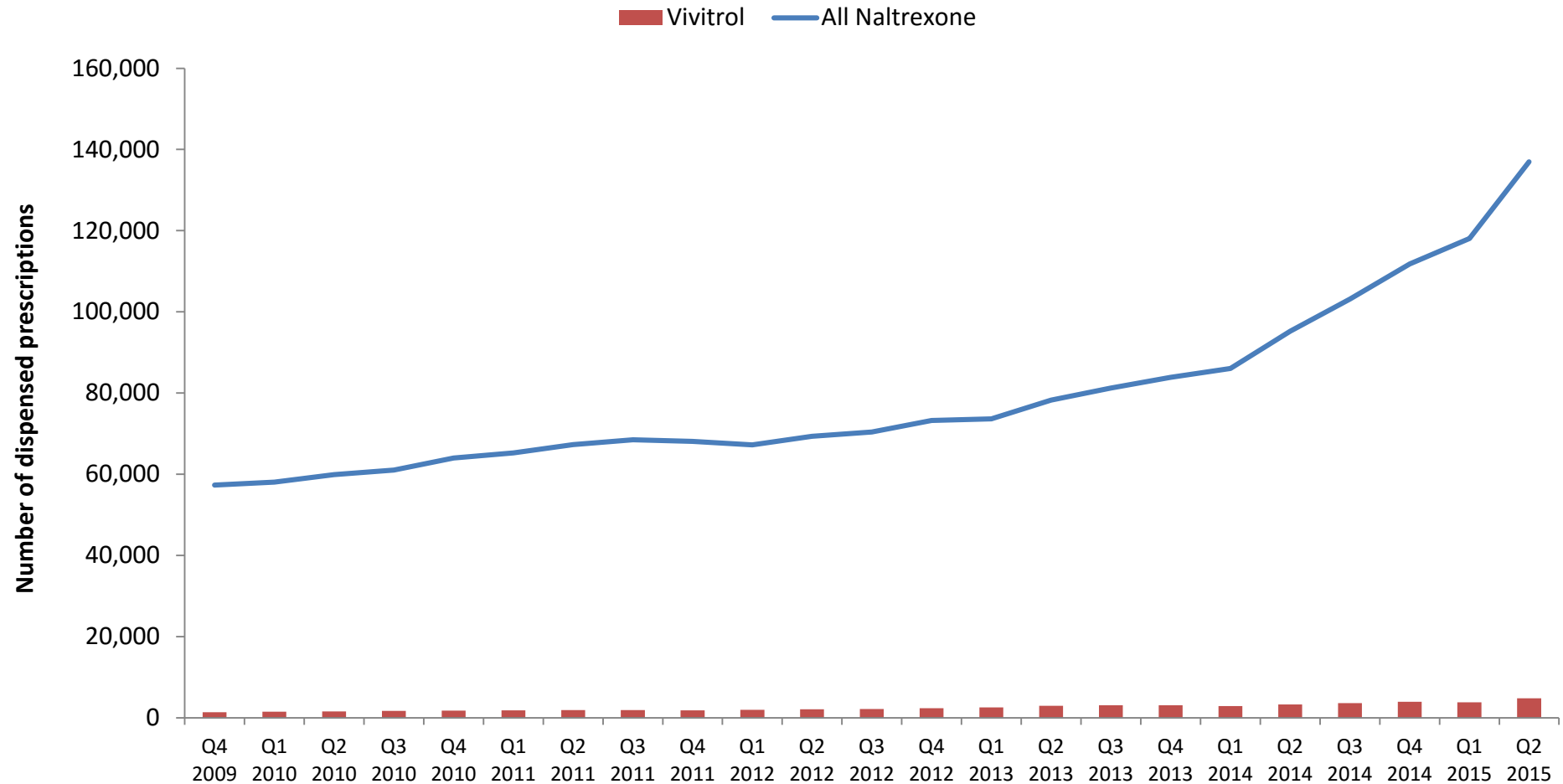


Buprenorphine* prescriptions dispensed from US retail pharmacies, Q42009-Q22015



*Does not include Butrans or Buprenex (or generics)

Naltrexone* prescriptions dispensed from US retail pharmacies[†], Q42009-Q22015



* Naltrexone is also approved for use in alcohol dependence. Thus, not all prescriptions were used for opioid dependence

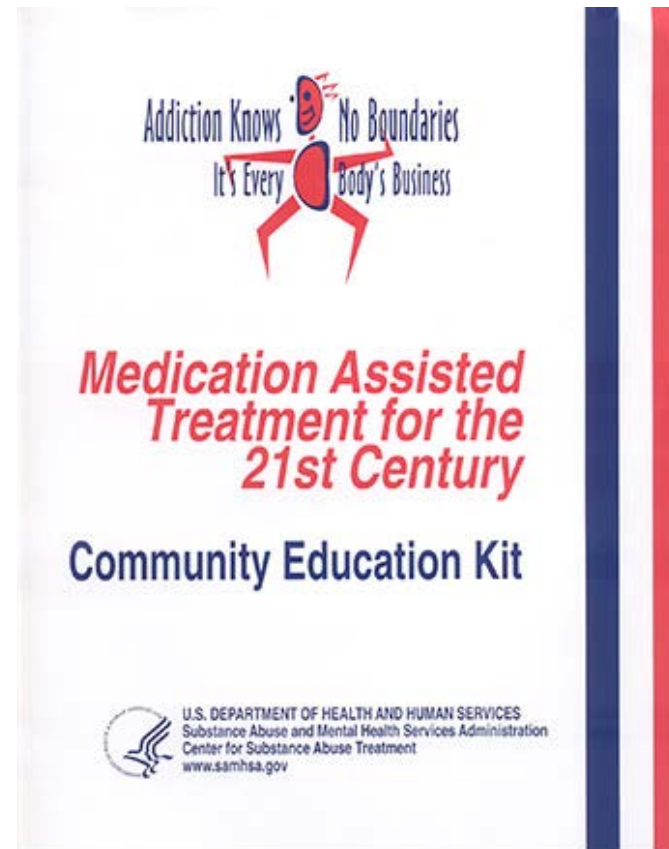
[†]The number of prescriptions dispensed for Vivitrol from specialty pharmacies is approximately 3-4x that from US retail pharmacies.

Source: CM Jones. Prescription Trends for Controlled Prescription Drugs. NIDA Webinar 9/1/2015. Based on IMS Health National Prescription Audit (extracted 8/24/2015).

Retrieved from <http://www.drugabuse.gov/news-events/meetings-events/2015/09/latest-prescription-trends-controlled-prescription-drugs>.

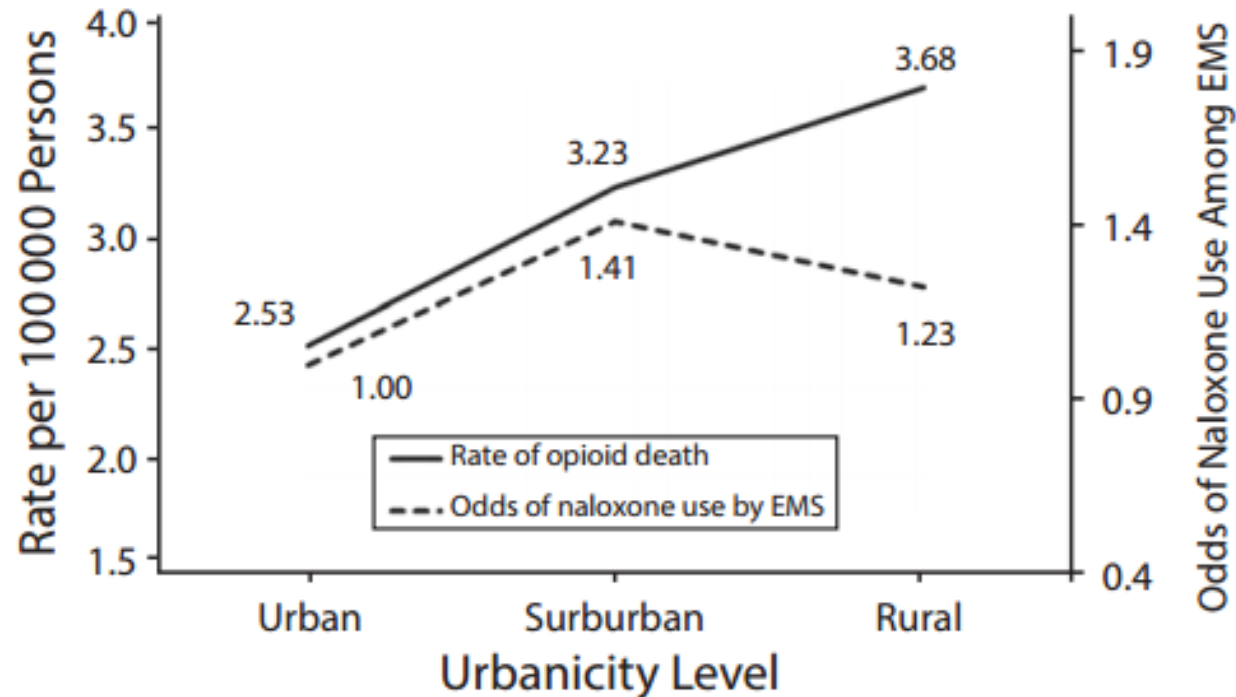
Expand access to and use of MAT

- Buprenorphine rule-making
- SAMHSA grants to states to support uptake of MAT
- SAMHSA-funded SBIRT programs
- HRSA up to \$100 million for MAT in Community Health Centers
- NIDA supported research to optimize MAT delivery
- FY 17 Budget Request



NALOXONE

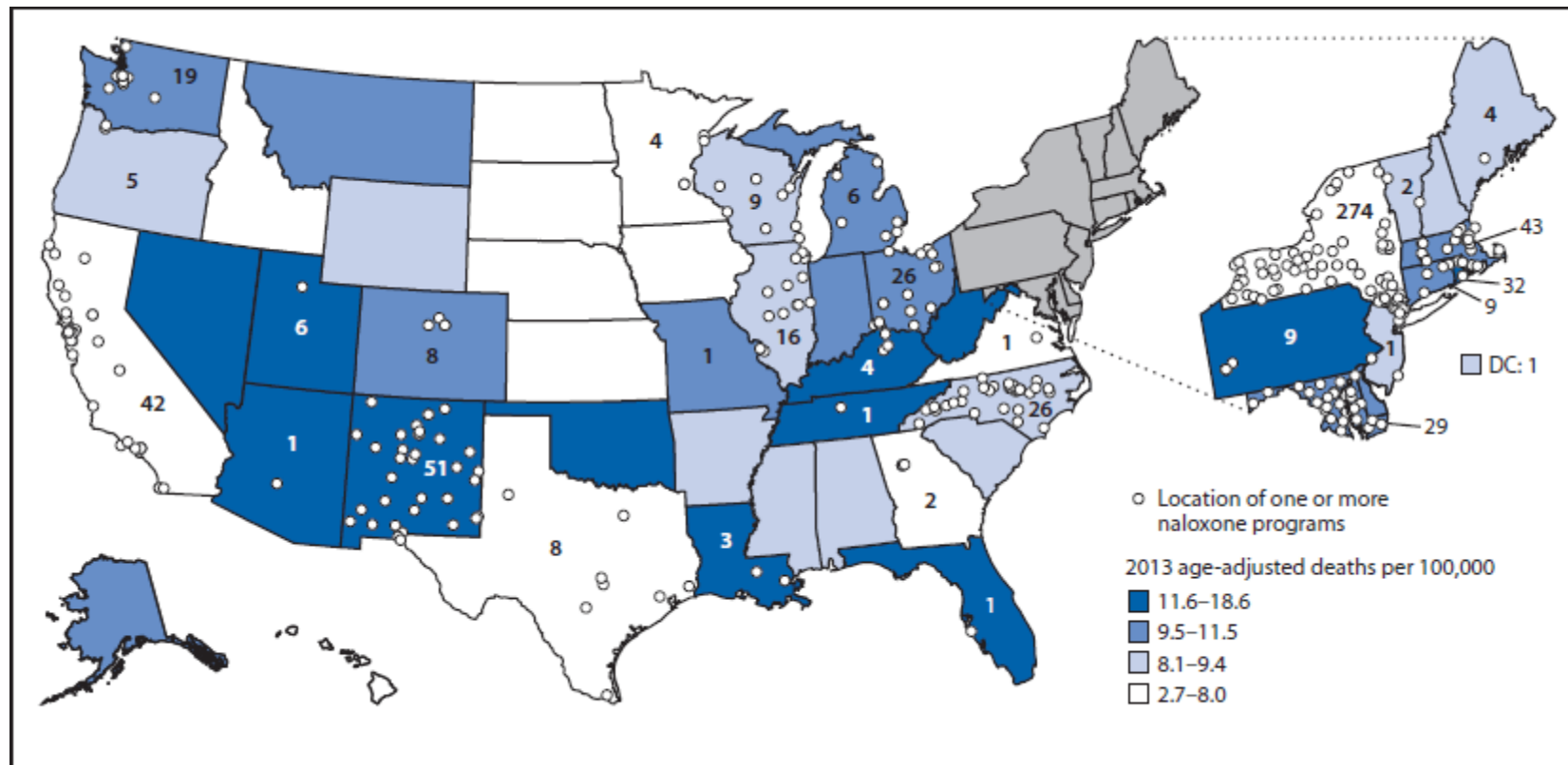
Rural areas less likely to have naloxone administered in an overdose emergency



Note. EMS = emergency medical services.

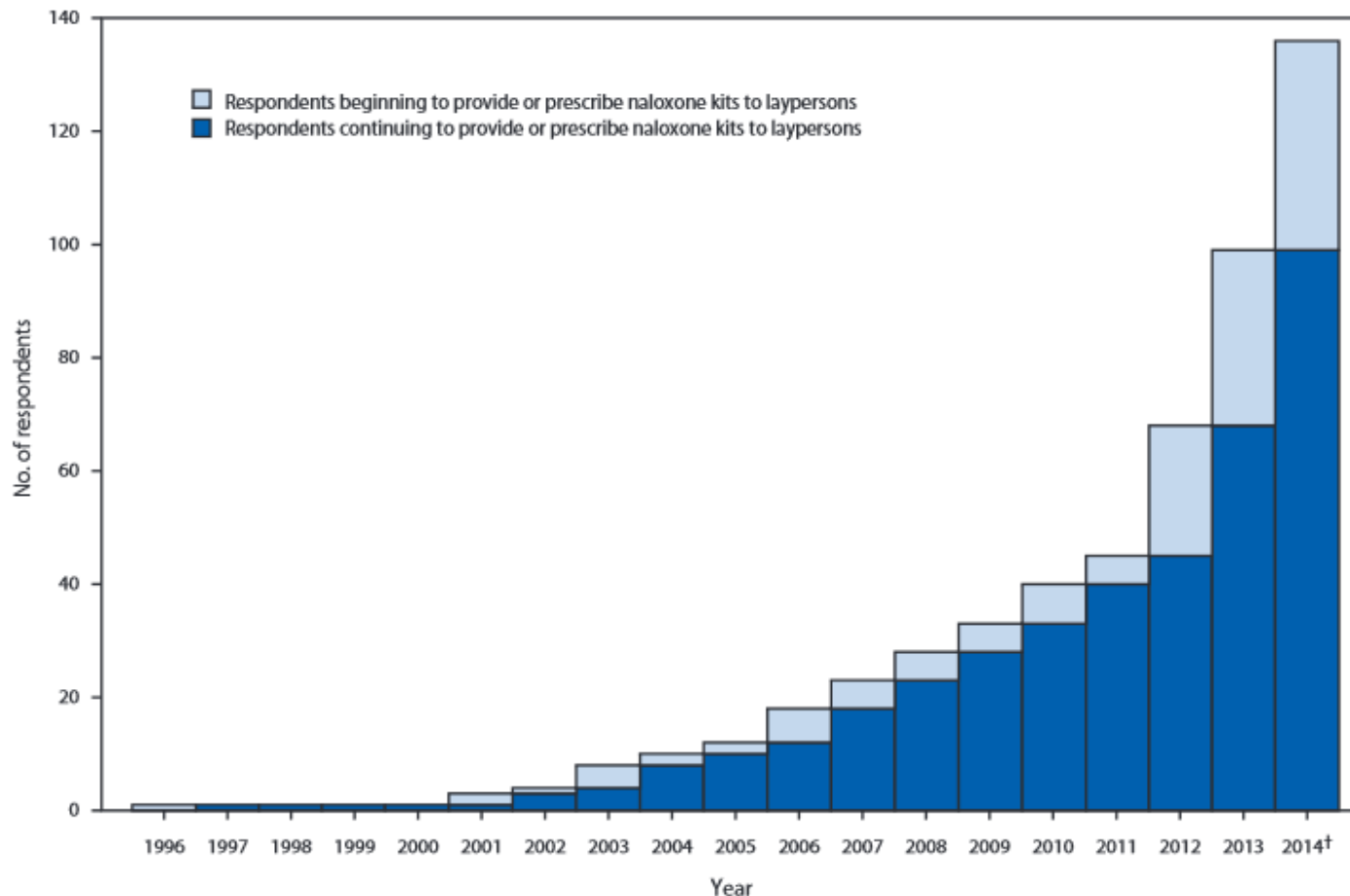
FIGURE 1—Overdose rates and odds of naloxone administration by EMS providers by level of urbanicity: National Emergency Medicine Service Information System, United States, 2012.

Number* and location of local drug overdose prevention programs providing naloxone to laypersons and age-adjusted drug overdose death rates

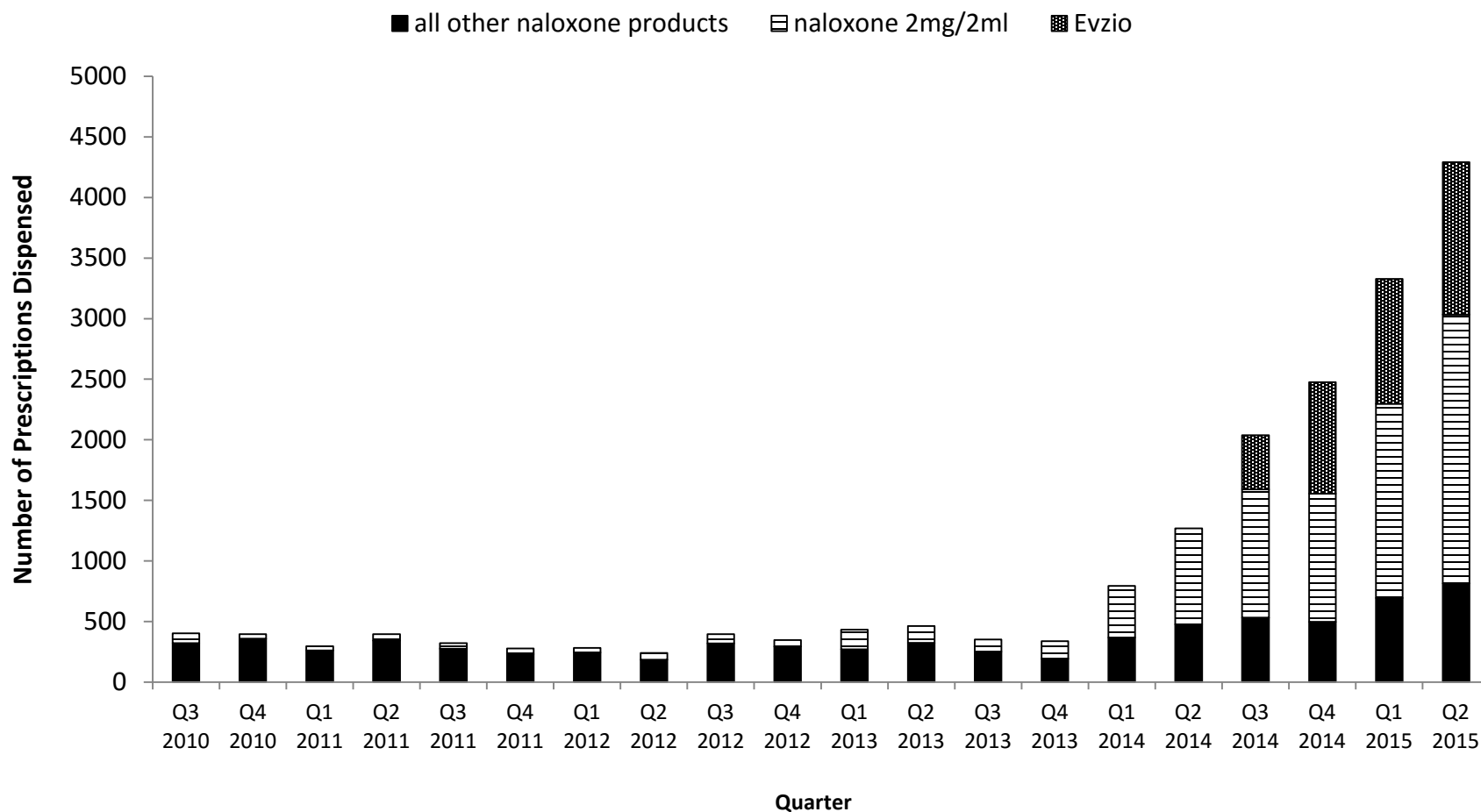


Rapid increase in naloxone distribution in the US, 1996-2014

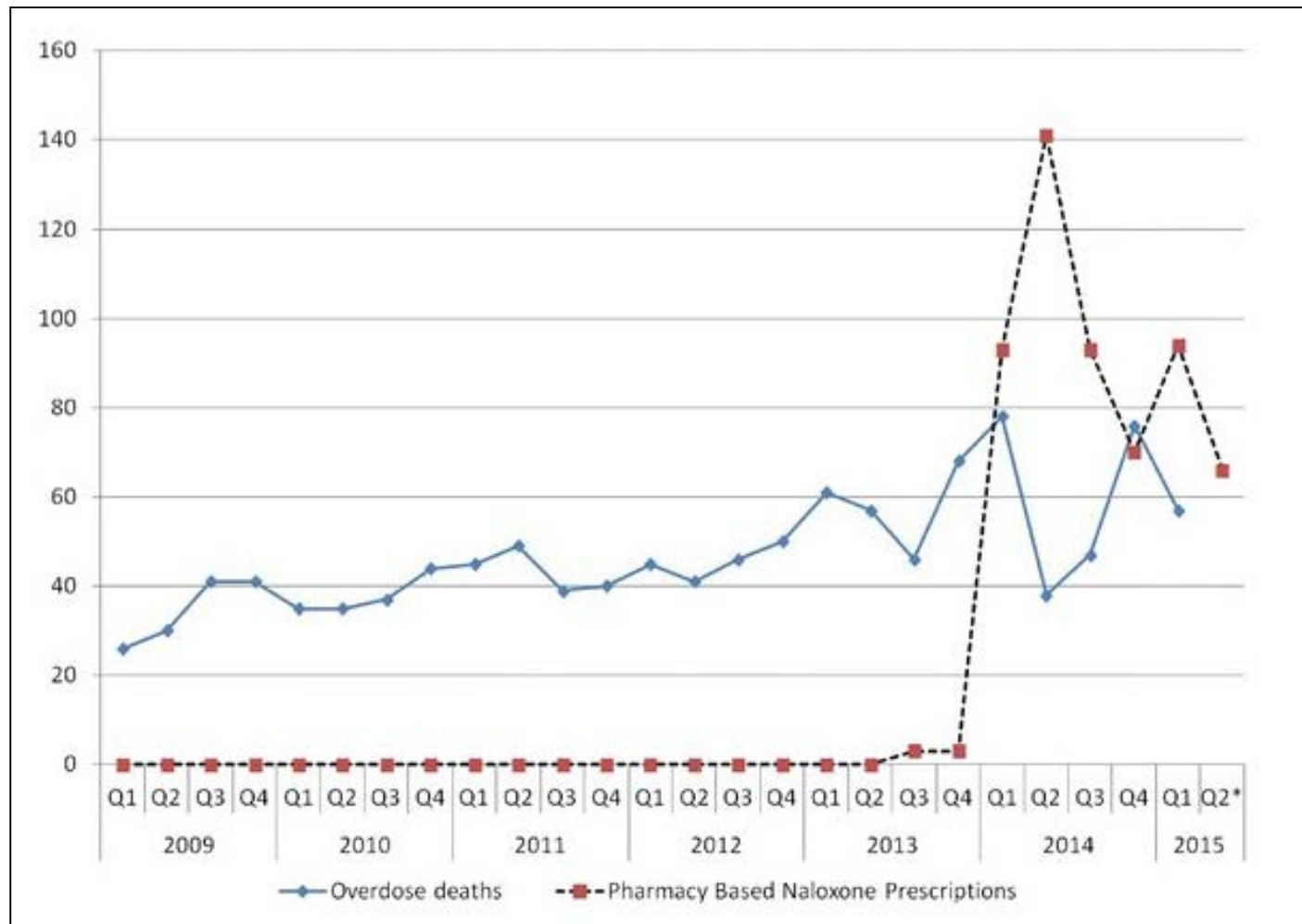
FIGURE 1. Number of survey respondents reporting beginning or continuing to provide naloxone kits to laypersons, by year — United States, 1996–June 2014*†



Pharmacy dispensing of naloxone in the US, 2010-2015



Overdose deaths and pharmacy-based naloxone prescriptions dispensed in Rhode Island



Increase use of naloxone

- FDA and NIDA support to develop new formulations
- SAMHSA overdose toolkit
- July 1-2, 2015 public meeting on naloxone – <http://www.fda.gov/Drugs/NewsEvents/ucm442236.htm>
- Funding for states and communities to purchase, train, and distribute naloxone
 - HRSA funding to 18 rural communities in 2015
 - \$12 million for SAMHSA grants in FY16



SUCCESS



OPPORTUNITY



Washington

- Implemented a multi-faceted approach
 - State-wide chronic pain and ED guidelines
 - Prescription drug monitoring program
 - Medicaid innovations and Patient Review and Coordination program
 - Naloxone law
 - Expansion of MAT
- Decline in opioid overdose death rate since 2008
- Decline in opioid hospitalizations since 2012

Florida

- Multi-faceted approach targeting inappropriate prescribing and use behaviors
 - Pill mill law
 - Prohibit dispensing of controlled substances from MD office
 - PDMP
 - Aggressive action against illegal prescribing
- 27% decline in opioid overdose death rate between 2010 and 2012
- 28.4% decline in benzodiazepine overdose death rate during same time period
- Reductions in deaths paralleled declines in opioid and benzodiazepine prescribing

Oregon

- Declines in prescription opioid overdose deaths that coincided with declines in opioid prescribing after multi-pronged approach
 - Clinical guidelines
 - Provider education
 - PDMP
 - Expansion of MAT
 - Expansion of naloxone

Conclusions

- Trends in Rx opioid and heroin-related morbidity and mortality continue to change
- Significant amount of research to track patterns of abuse and the impact of policy and practice change on prescribing, use, and health outcomes
- Data support a comprehensive approach that addresses the various drivers of the problem and focuses on improving prescribing practices, expanding access to evidence-based treatment for opioid use disorders, and increasing use of naloxone



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Office of the Assistant Secretary for Planning and Evaluation

THANK YOU

QUESTIONS?

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