



North Carolina
State Health Plan
FOR TEACHERS AND STATE EMPLOYEES



Opioid Overuse/Misuse Management Strategy

Board of Trustees Meeting

January 27, 2017

A Division of the Department of State Treasurer

Overview

- The Problem
- Opioid Prevalence
- Consequences of Opioid Misuse/Overuse
- Understanding Prescription Overuse/Misuse within State Health Plan
- Current Plan Resources to Address the Issue
- Plan Strategies for 2017

The Problem

- In 2015, **3,347** Plan members (active, non-Medicare and COBRA) received and filled 12 or more (with an average of 16), 30-day prescriptions of opioids.
- These **3,347** members cost the Plan **\$58 million** in CY 2015.
- **\$23 million** in pharmacy costs and **\$35 million** in medical costs.

These Plan members had a Per Member Per Year (PMPY) cost of **\$17,428** compared to **\$4,958** for average Plan members.

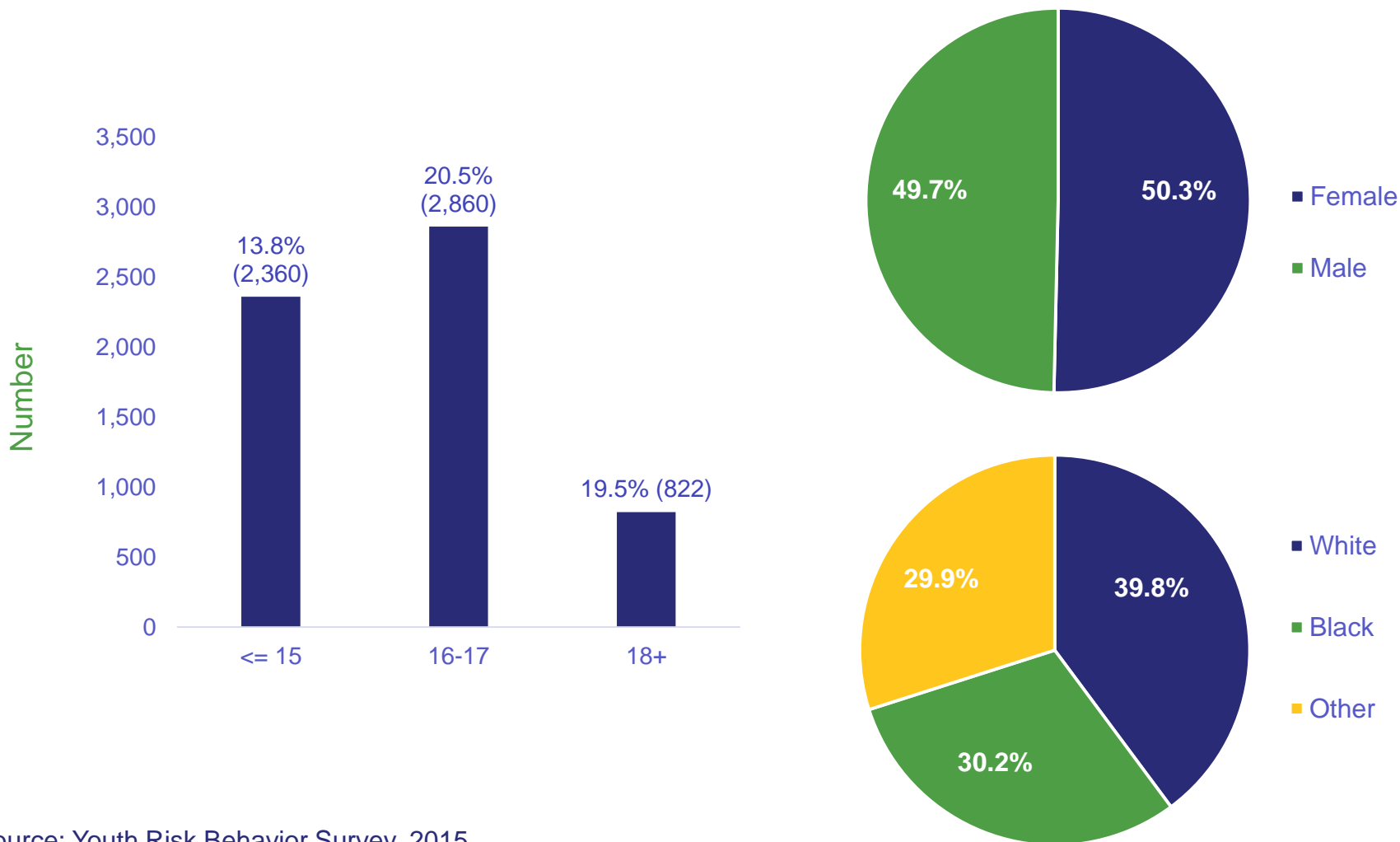
Opioid Overuse/Misuse

- **Opioids are medications used to treat pain in many contexts, from post-surgical relief to severe chronic back pain to end-of-life care.**
 - Two common drugs include: Oxycodone (OxyContin, Percocet) and Hydrocodone (Vicodin)
- **Opioid overuse/misuse has become an epidemic in the United States and in North Carolina.**
- **Problematic patterns of prescription opioid consumption lead to clinically significant impairment or distress and has far-reaching socioeconomic consequences.**
- **Prevalence of prescription/illicit opioid overuse and misuse is estimated to be 4.1% in the United States, which translates to over 10,709,000 citizens over the age of 12 years.**
 - The same survey estimates the prevalence in North Carolina to be 4.3% (349,000)
 - Parts of North Carolina (Wilmington, Hickory, Jacksonville, Fayetteville) show prevalence 2-3 times higher than state and national estimates (7.9% to 11.6%).

Source: Substance Abuse and Mental Health Service Administration (2016). National Survey on Drug Use and Health. Retrieved from <http://www.samhsa.gov/>

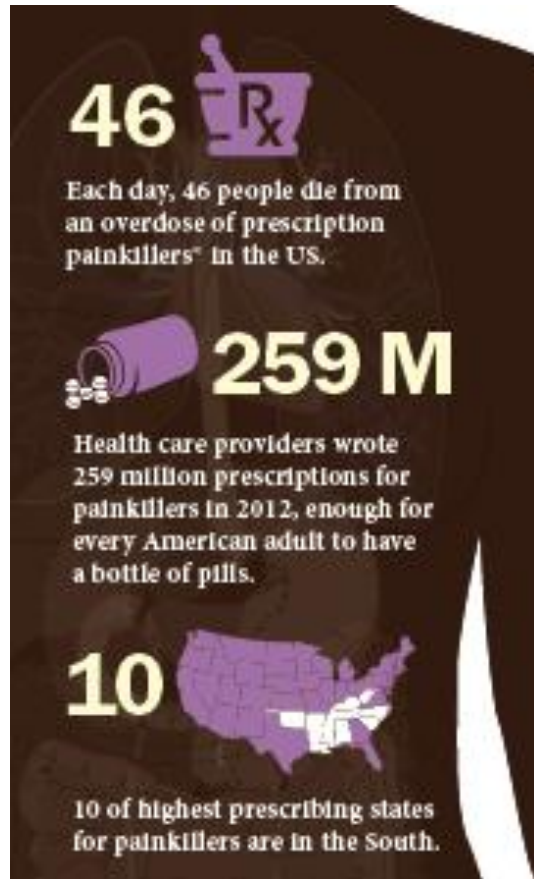
Demographics of Opioid and Prescription Drug Misuse

North Carolina High School Students, 2014-2015



Source: Youth Risk Behavior Survey, 2015

CDC Vital Statistics, July 2014

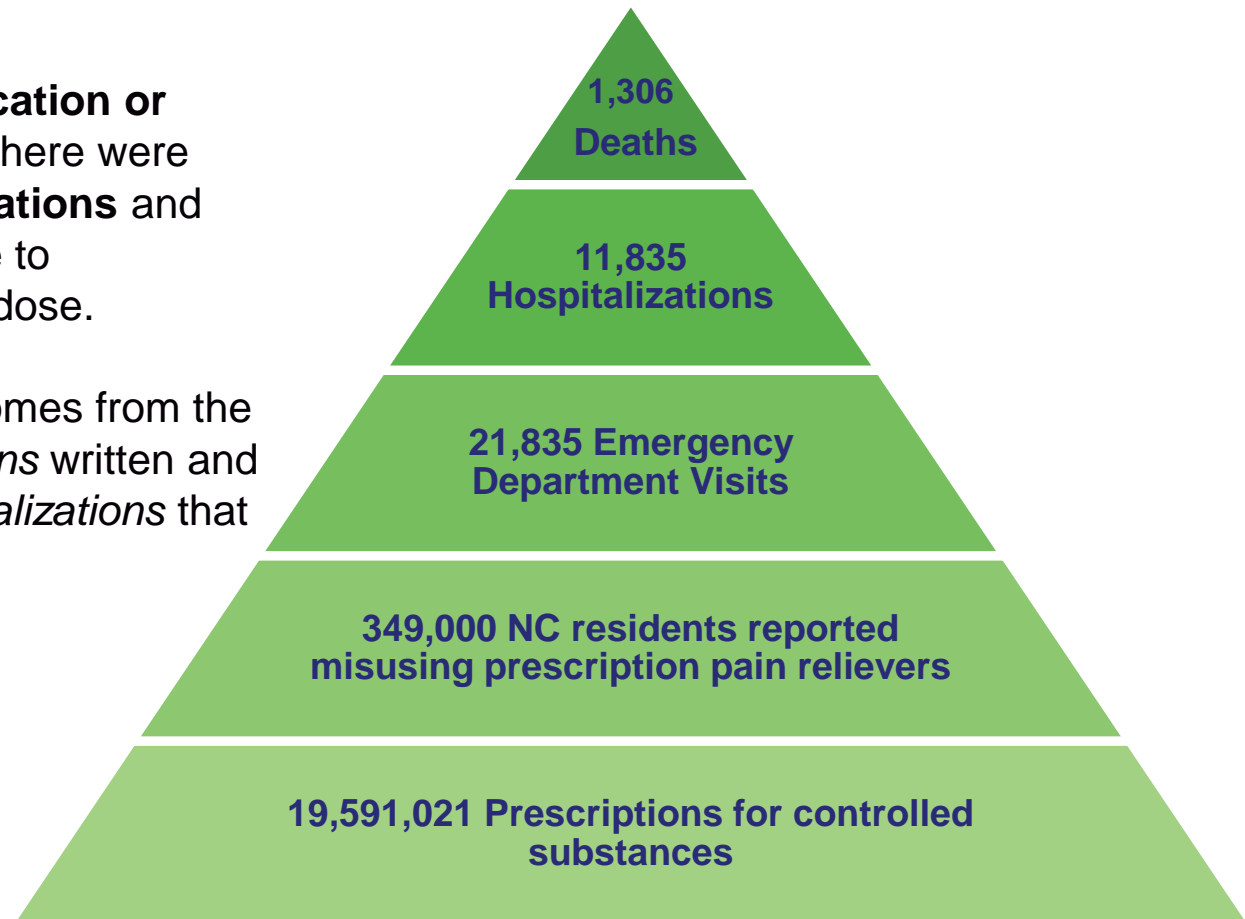


- Each day, 46 people die from an overdose of prescription painkillers in the U.S.
- Health care providers wrote **259 million** prescriptions in 2012—enough for every American to have a bottle of pills.
- 10 of the highest prescribing states are in the South...

North Carolina is one of them.

Medication Overdose Deaths, Hospitalizations and ED Visits NC Residents, 2014

- In 2014, for every **medication or drug overdose death**, there were **more than 9 hospitalizations** and **nearly 17 ED visits** due to medication or drug overdose.
- Direct cost to a payer comes from the *unnecessary prescriptions* written and the *ED visits and hospitalizations* that could be avoided



Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 2014; N.C. State Center for Health Statistics, Vital Statistics- Hospitalizations, 2014; NC DETECT, 2014.NSDUH 2013-2014. CSRS 2014. Analysis: N.C. Injury Epidemiology and Surveillance Unit

Factors Contributing to the Opioid Epidemic

How did opioid overuse/misuse become a problem?

- Assessing and treating pain has been a priority in recent decades
 - In 1989, pain, although subjective, was added as the fifth vital sign
 - Adequate “management of pain” became a component for “satisfaction scores” for providers and facilities
- Pharmaceutical industry’s early message to health care providers suggested opioids were “safe” and “not addictive”
- Belief among users that opioids are “safe” since they are prescribed by a doctor, even when they are not prescribed to them personally

Source: Martin, L., Laderman, M., Hyatt, J. Krueger, J. (2016). Addressing the Opioid Crisis in the United States. *IHI Innovation Report*. Retrieved from ihi.org

Consequences of Opioid Overuse/Misuse

- **Prescription fills and costs:** Rising costs to insurers and increase in therapeutic use of opioids.
 - Total opioid prescriptions in the U.S. rose over 200% between 1992 and 2002, and have continued to rise with hydrocodone and oxycodone posting nearly 400% increases.
 - It has been estimated that the *nonmedical* use of opioid pain relievers costs insurance companies up to \$72.5 billion annually in health care costs.
- **Direct Costs:** Health care costs, law enforcement, court system, emergency service providers, fraud, theft, illegal actions by individuals, responses to injury and rescue calls.
- **Indirect Costs:** Individuals who overuse opioids are often unable to work, depending on state and federal assistance.

Source: Martin, L., Laderman, M., Hyatt, J. Krueger, J. (2016). Addressing the Opioid Crisis in the United States. *IHI Innovation Report.*, 2016
Center for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Mortality File. (2015).

http://www.cdc.gov/nchs/data/health_policy/AADR_drug_poisoning_involving_OA_Heroin_US_2000-2014.pdf.

America's addiction to Opioids: Heroin and prescription drug abuse <https://www.drugabuse.gov/about-nida/legislative-activities/testimony-to-congress/2016/americas-addiction-to-opioids-heroin-prescription-drug-abuse>

Opioid Overuse/Abuse: State Health Plan

State Health Plan Data Analysis: Methodology

The State Health Plan wants to better understand opioid overuse/misuse among members, which led to an analysis of claims data.

Utilizing claims data:

- Medical and pharmacy claims were merged to identify patterns of utilization and diagnosis among members who had ≥ 12 opioid prescriptions over a 12-month period in 2015
 - Members with a cancer diagnosis code or cancer procedural code were excluded.

Using claims has inherent limitations:

- When a claim has been processed, it is with a prescription
- Claims data does not capture individuals who pay cash for prescriptions or those who are acquiring these through illegal means

Burden of Opioid Use Disorders – State Health Plan

0.9% (3,347) of members (active/COBRA/pre-Medicare retirees) were identified as “potential” opioid misusers in 2015.

- The Plan’s opioid “over users” were older (mean=51.2 years)
- On average, members filled 16.8 prescriptions over the course of the year (median prescription= 30-day fill)
- Approximately two-fifths (1,483) of *identified members* had a chronic pain diagnosis
- Approximately 18 percent (648) also had a comorbidity of serious or persistent mental illness (SPMI) diagnosis
- Other common diagnoses included diabetes, hypertension, and depression
- Approximately 14 percent (517) were dually prescribed opioids while taking benzodiazepines in 2015; between 2002 and 2014, there has been an increase of 41% of patients nationally who are on both these medications, with potentially dangerous consequences.
- Main prescribers were Primary Care Providers (Family Practice, Internal Medicine, Ob-Gyns) and dentists.

Opioid Overuse/Misuse – State Health Plan

- In preliminary analysis, the burden does not look high or similar to patterns seen in North Carolina.
 - This is likely due to limitations of the claims data (0.9% vs. 4.3%).
- According to the CDC (2011) only 17.3% of people who misuse opioids are obtaining their prescriptions from a prescribing physician.
- 82.7% obtained their prescriptions from an alternate source such as a friend, relative, or even stolen from others.
- In the absence of a robust mechanism to identify cases, the Plan cannot estimate the number of members who may need or benefit from case management or care coordination services.
- **If state data is extrapolated to the Plan membership, the burden of opioid misuse impacts approximately 24,336 Plan members, with the majority, 15,489 members, over the age of 26 (2,098 between the ages of 12-17 and 6,016 between the ages of 18-25).**

Source: Centers for Disease Prevention and Control. Policy Impact: Prescription Painkiller Overdoes, November 2011.

Express Scripts (ESI) Fraud Waste Abuse (FWA) Referrals, 2016

- **Since March 2016, the Plan received 52 referrals for potential Fraud Waste and Abuse (FWA) from the Plan's previous Pharmacy Benefits Manager, Express Scripts.**
 - **71% (35)** are probable opioid misuse cases.
 - Of those probable misuse cases, 86% (32) were locked in to a single pharmacy and 14% (5) were locked in to a single prescriber.
- **8 cases were referred to the *Population Health Management Vendor* for disease management for coexisting concerns:**
 - Migraines, fibromyalgia, chronic back pain, plantar fasciitis
- **The 35 cases that were probable opioid overuse/misuse *could have* benefited from case management and care coordination services.**

Limitations of Lock-in Programs

Limitations of Provider Lock-In

- Majority of provider lock-ins are with a family medicine practitioner or internist who lacks the training to manage opioid misuse.
- Unable to obtain provider's agreement to be sole controlled-substance provider.
- Some providers dismiss potential FWA patients from their service to decrease their liability of overdose/fatality, leaving the member without a provider.
- Limited referral agencies.

Limitations of Pharmacy Lock-In

- Members can pay cash to avoid limits of a lock-in.
- Pharmacists have the professional ability to “over-ride” warnings.
- Both provider and pharmacy lock-ins deter use but do not address and treat the underlying diagnoses that drive opioid overuse/misuse.
- Lock-in programs have been shown to have unintended consequences.
 - *A North Carolina Medicaid lock-in program found that a lock-in program had the consequence of a four-fold increase in out-of-pocket controlled substance prescription fills*

Source: Roberts, A.W, Farley, J.F, Holmes, G.M, Controlled Substances Lock-in Programs: Examining an unintended Consequence of A Prescription Drug Abuse Policy. Health Affairs October 2016 vol35 no.101884-1892

Current State Health Plan Resources (2017)

Population Health Management (PHM)

- Case management of potential underlying chronic conditions, such as chronic back pain, does not focus on opioid overuse/misuse.

CVS Caremark (2017)

- Detecting and preventing inappropriate use through ongoing identification of potential Fraud Waste and Abuse (FWA), timely intervention and follow-up, prescriber outreach, and offering additional support for complex cases.
- Enhanced safety monitoring to include letters to prescribers and members, pharmacy follow-up, prescriber toolkit and consultations, medication therapy counseling, and comprehensive investigations.
- Developing utilization management program based on morphine equivalent dosing.

Options Available to All Health Plans

1. Limit supply of opioids

- Formulary management; review and revise opioid-related pharmacy benefits (dose, duration and limits/ceiling, prior authorization as appropriate)
- Covering and promoting alternate pain management therapies (PT, Chiropractor, Acupuncture)

2. Promote effective prescription of opioids

- Promote CDC guidelines for effective and efficient prescription
- Encourage use of Controlled Substance Reporting System (CSRS)

3. Raise awareness and educate on risks of opioids

- Mass campaign among Plan membership on risks associated with opioids
- Messaging at first fill on alternate options for pain management
- Reduce stigma and treat it as a chronic illness

4. Identify and manage opioid-dependent members

- Data surveillance
- Provide case management and care coordination for members identified with potential dependency
- Encourage Medication Assisted Treatment (MAT)

5. Coordinate efforts with community agencies and nonprofits

- For example, NC Harm Reduction Coalition

Source: Martin, L., Laderman, M., Hyatt, J. Krueger, J. (2016). Addressing the Opioid Crisis in the United States. *IHI Innovation Report*.

2017 Proposed State Health Plan Actions

- Review formulary with CVS Caremark and place additional restrictions if warranted.
- Implement data surveillance algorithms and predictive analysis to identify potential misuse of opioids. Identify other sources of data (mortality data) as well.
- Communication campaign among all members:
 - Risks, appropriate use, and appropriate storage and disposal of opioids
 - Secondary messaging at opioid prescription fills/refills
- Develop a case management/care coordination program with the Plan's population health management vendor.
- Promote CDC guidelines for effective prescription, including alternate pain management therapies and Controlled Substance Reporting System (CSRS) among providers.
- Participate in NC Prescription Drug Abuse Advisory Committee (PDAAC).

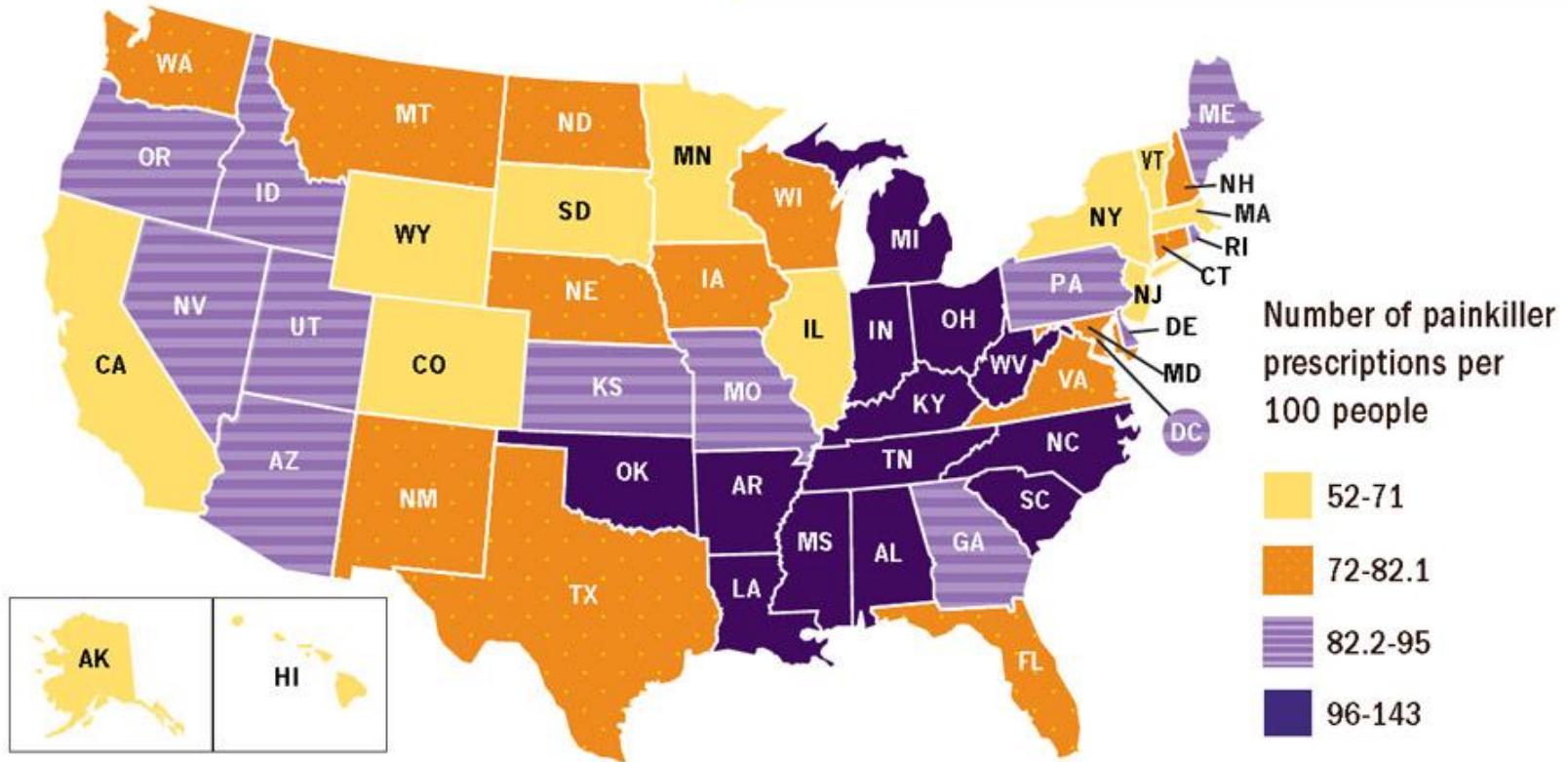
Proposed Opioid Case Management Program

- Develop and deliver a *case management and care coordination* program through the Plan's current vendor, *ActiveHealth Management*.
 - Identify and stratify members into risk categories for targeted outreach and engagement.
 - Provide qualified professional health care staff that hold a current North Carolina license and have behavioral health license.
 - Provide screening, evaluation, and risk assessment to identify, stratify, and develop a member specific care plan.
 - Provide necessary member-specific interventions including, but not limited to, health education, treatment options, pain management, community resource introduction and disease self-management and empowerment.
 - Collaborate, communicate and integrate care services as a multidisciplinary team member of the medical home with other Plan vendors (CVS, Beacon Health), and most importantly the members' Primary Care Providers.
 - Provide data to the Plan that demonstrates member satisfaction and clinical impacts of the program.
- These services can be provided at an additional cost of \$.035 PMPM, which will be approximately \$19,145.00 per month for an approximate annual cost of \$229,740.

Appendix: Opioid Overuse and Misuse Patterns and Consequences in U.S. and North Carolina

Prescription Patterns for Opioids

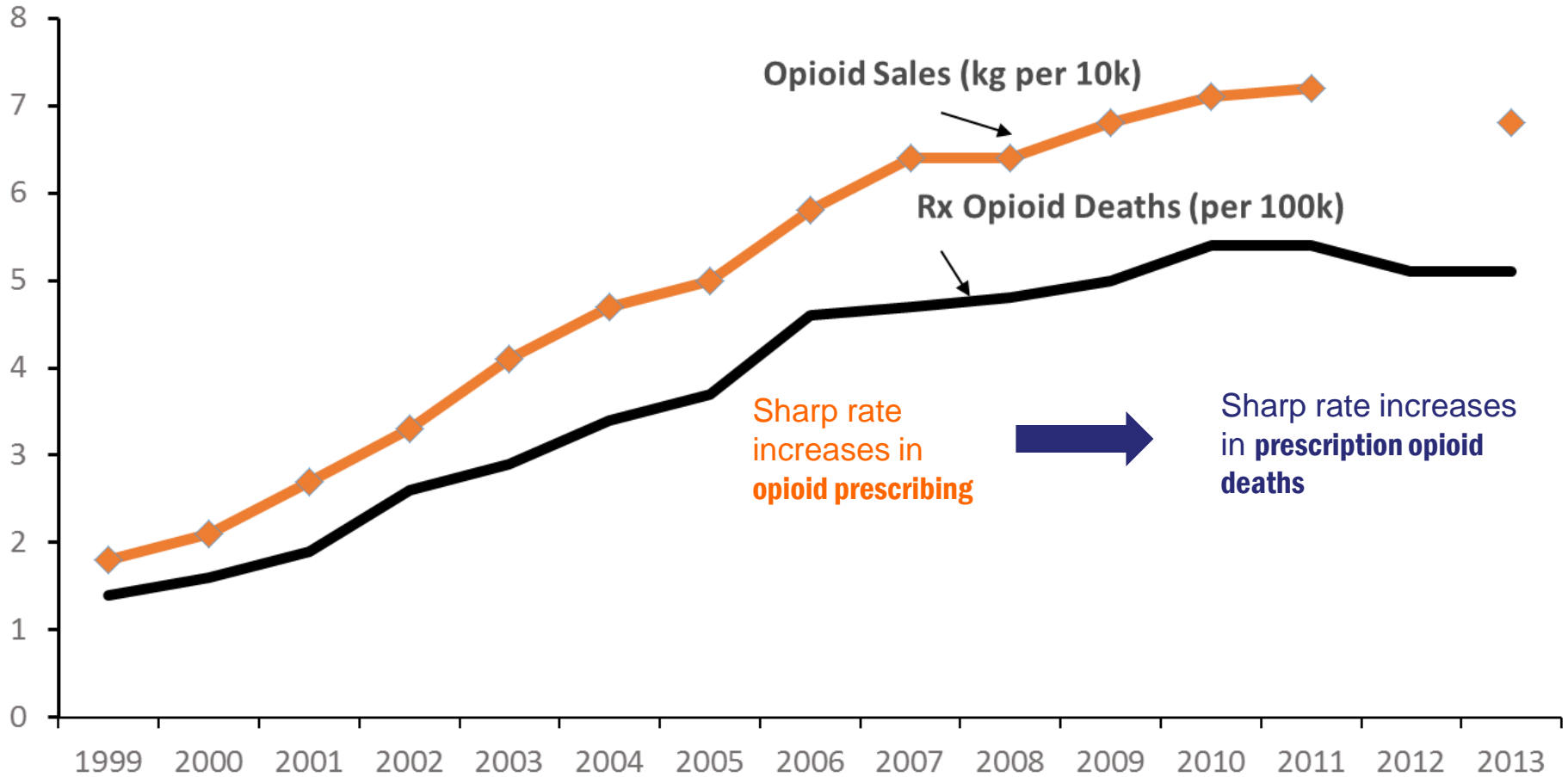
Some states have more painkiller prescriptions per person than others.



SOURCE: IMS, National Prescription Audit (NPA™), 2012.

Correlation Between Prescribing and Death

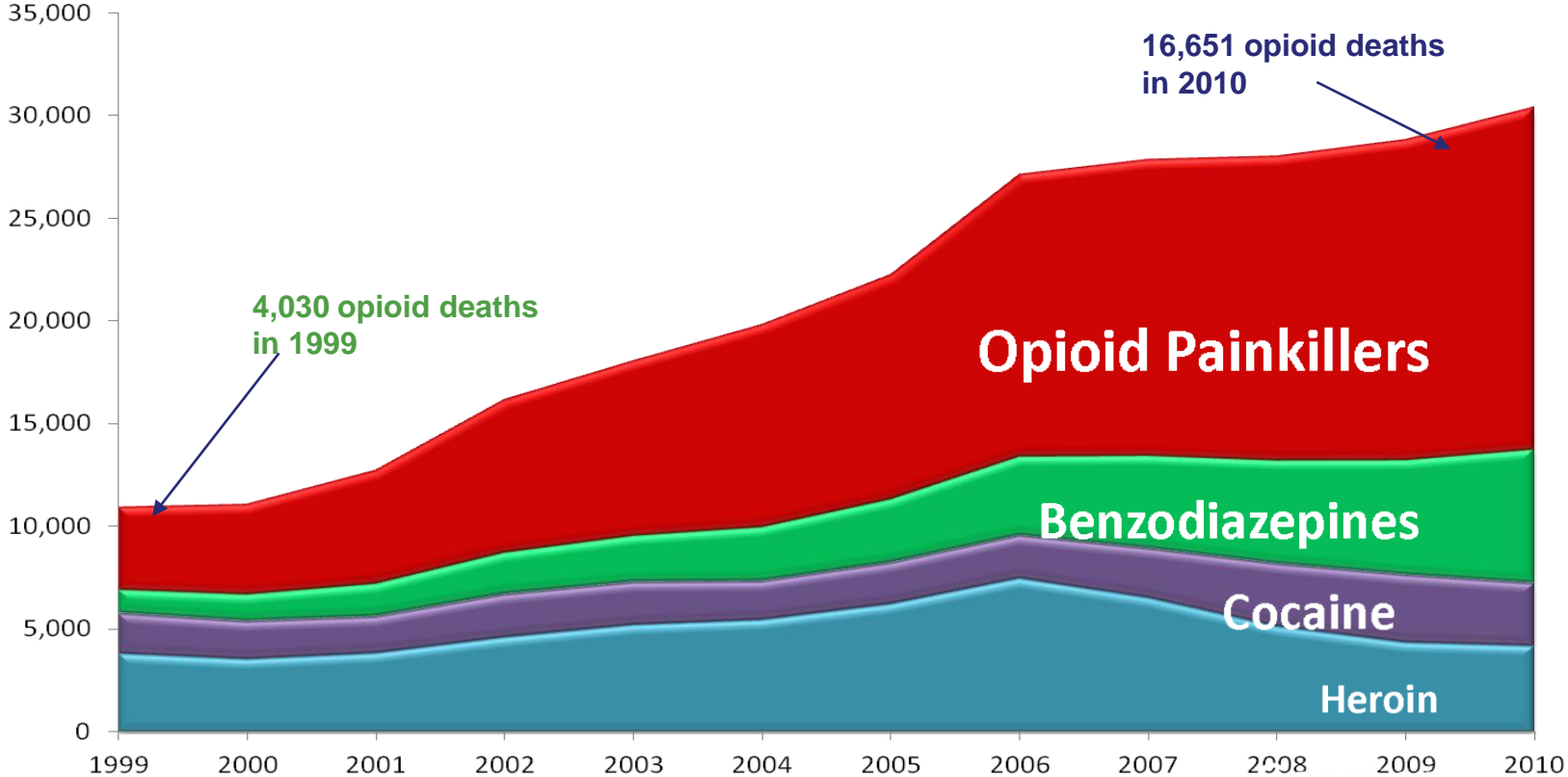
As rates of prescribing increased, rates of opioid related deaths also increased.



Source: CDC, 2015

Prescription Drug Overdose

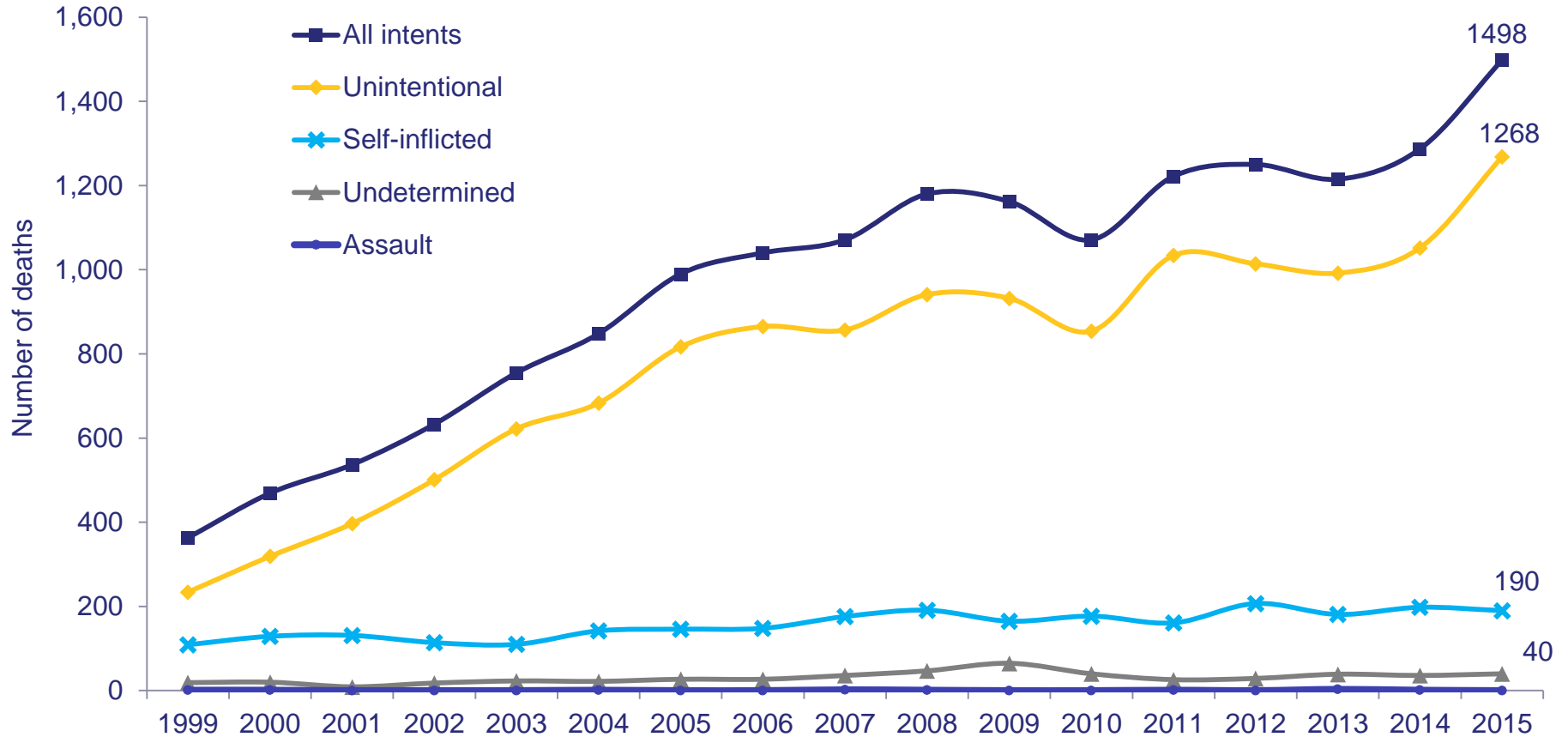
Opioid overdoses have driven the surge in overdose related deaths



Source: CDC Public Health Week, Baldwin, Emory University, April 2014

Medication of Drug Overdose Death by Intent

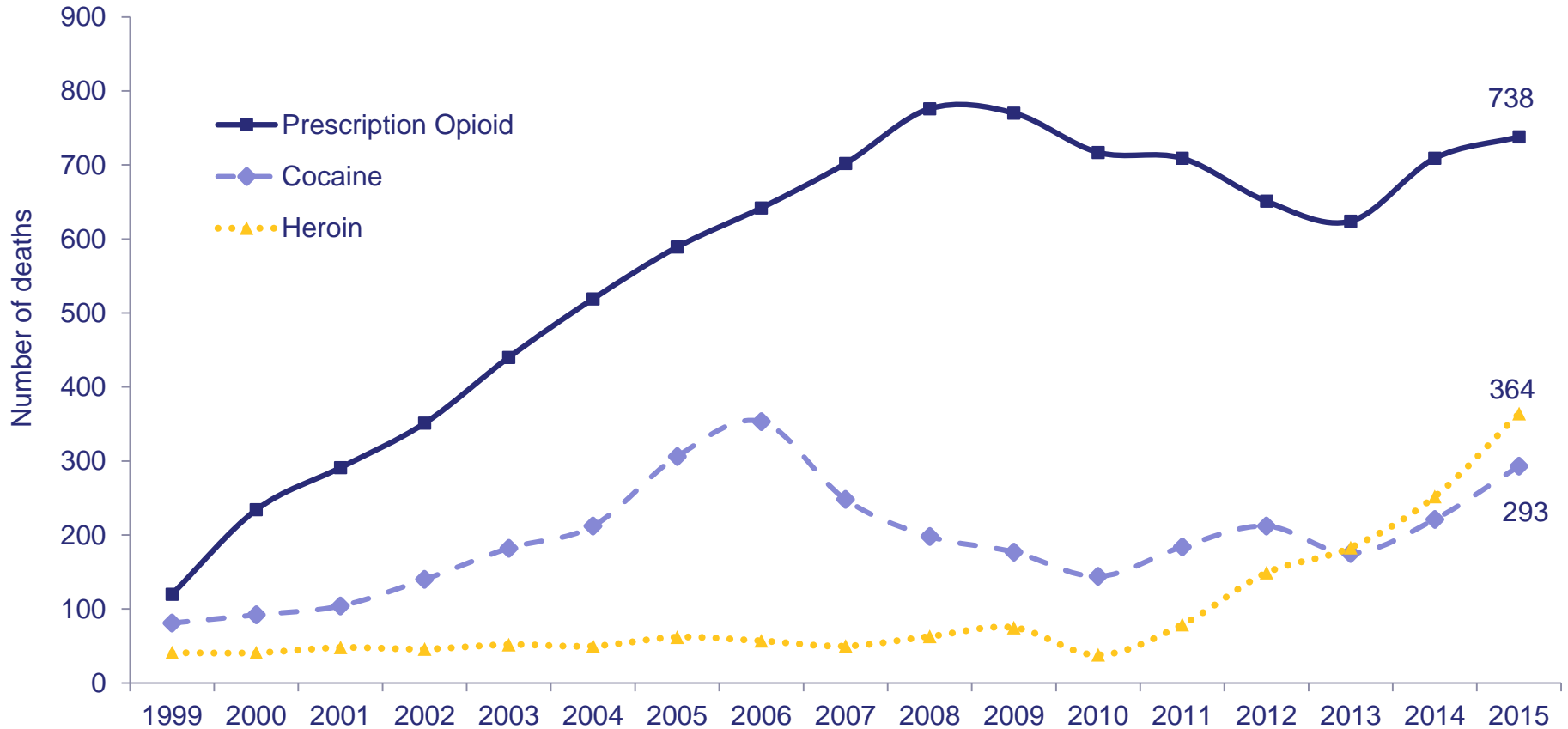
NC Residents, 1999-2015



Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2014
 Analysis by Injury Epidemiology and Surveillance Unit
 Medication or drug overdose: X40-X44, X60-X64, Y10-Y14, X85

Substances Contributing to Drug Overdose Deaths

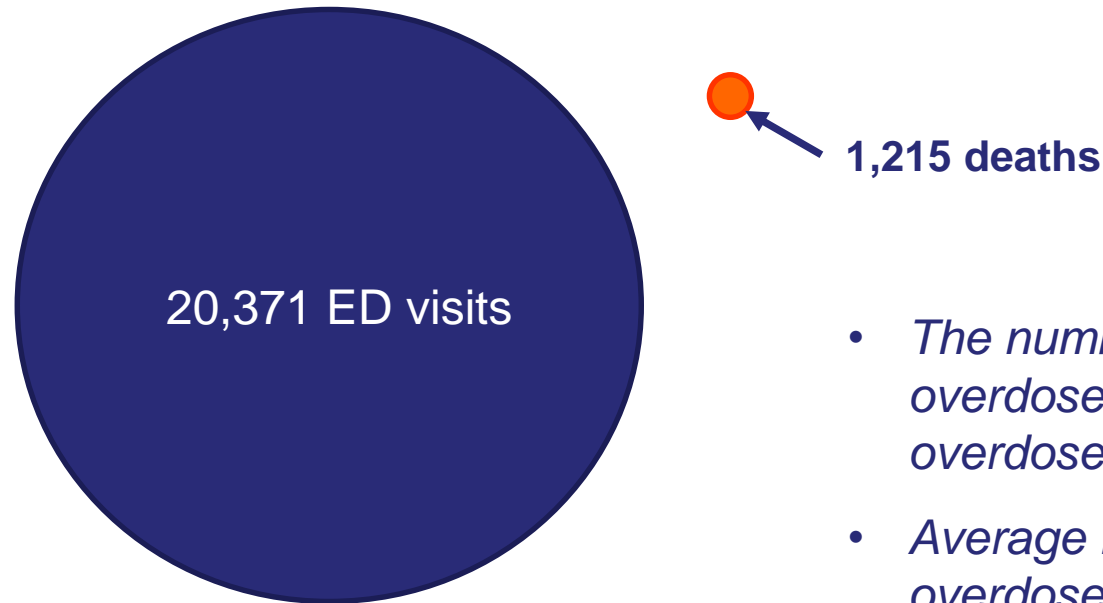
NC Residents, 1999-2015



Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2014

Analysis by Injury Epidemiology and Surveillance Unit

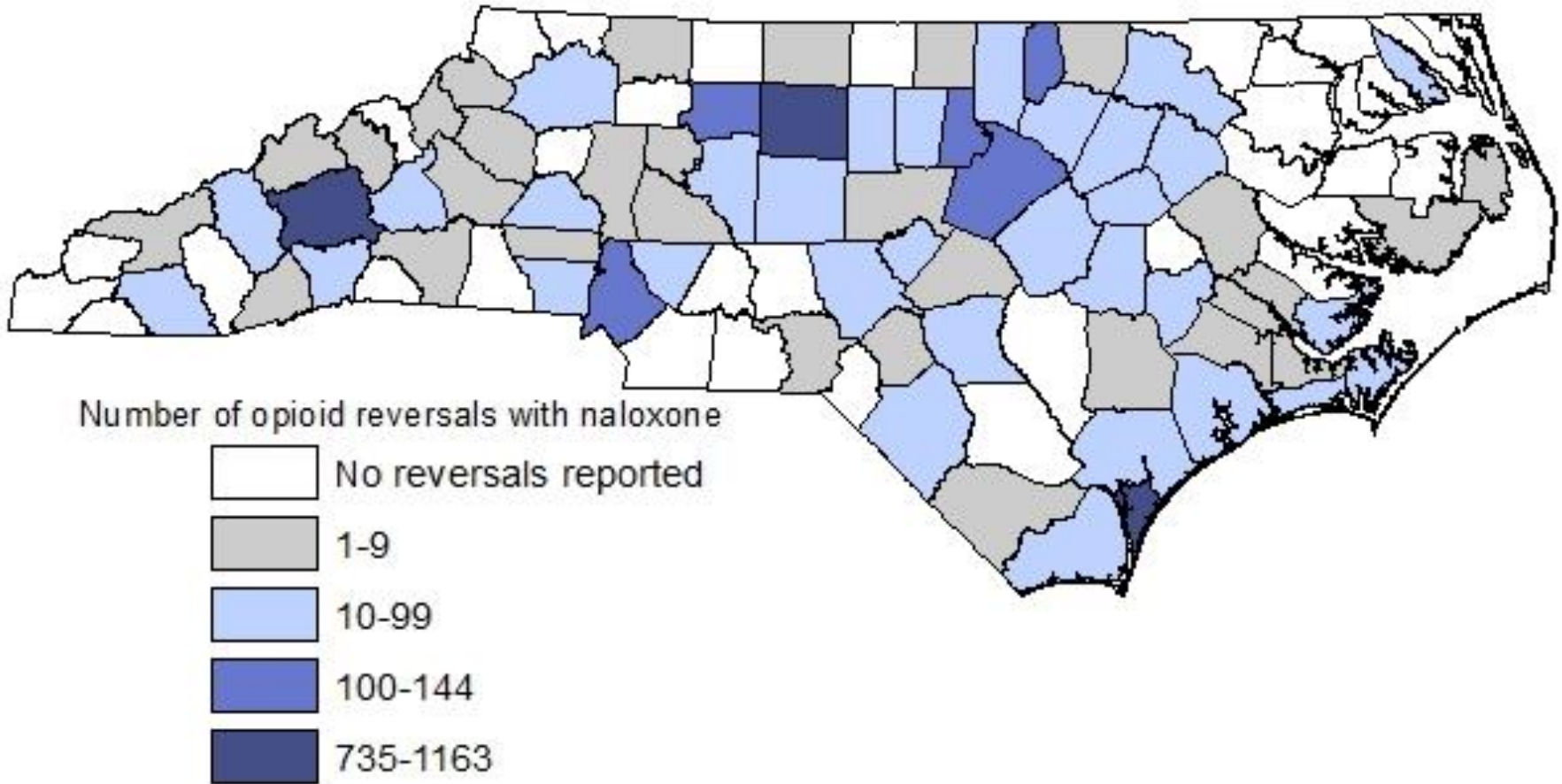
Deaths vs. ED Visits for Drug Overdose, NC 2015



- *The number of ED visits for overdose dwarfs the number of overdose deaths*
- *Average NC county has about one overdose death per month but just under one overdose ED visit per day*

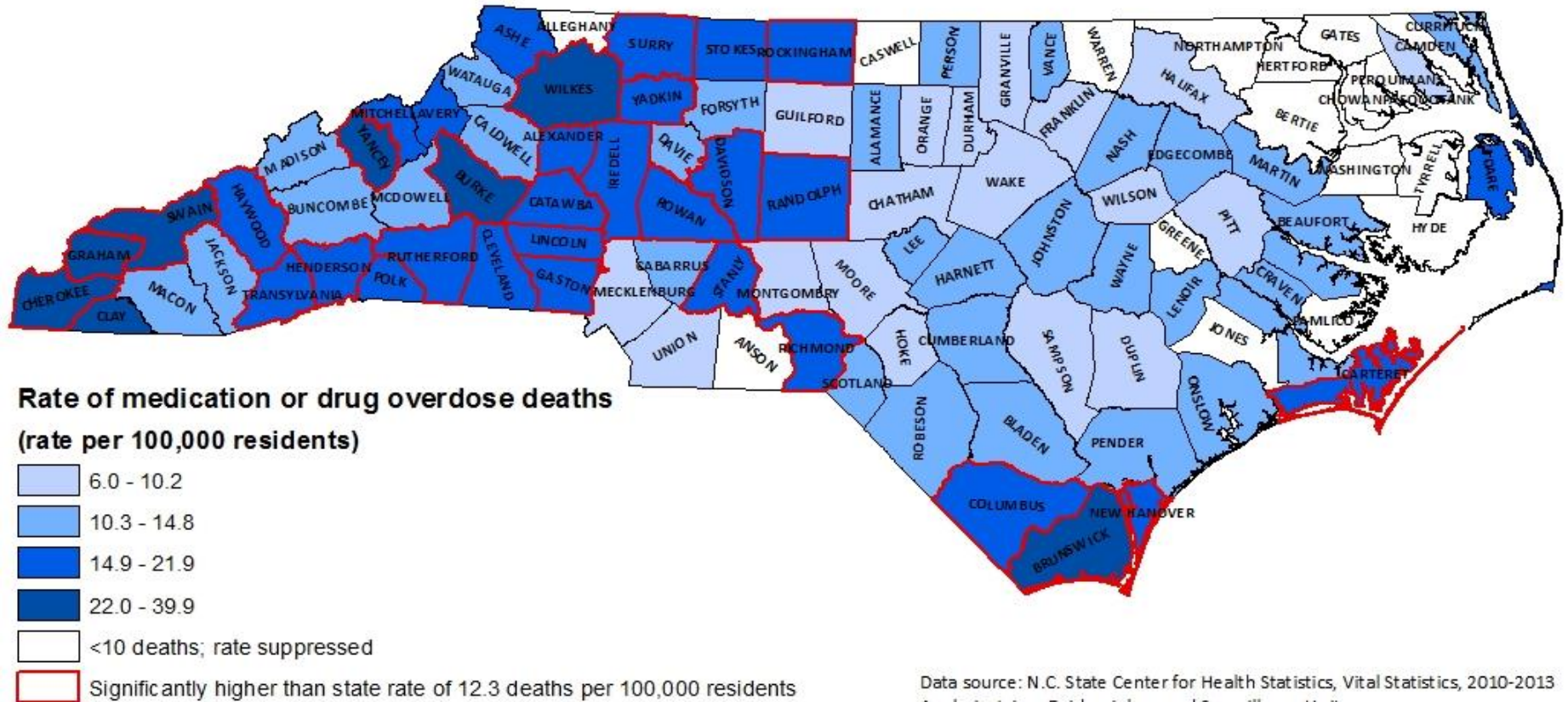
Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 2015; NC DETECT, 2015. Analysis: N.C. Injury Epidemiology and Surveillance Unit

Prescription Opioid Overuse/Abuse Patterns: North Carolina



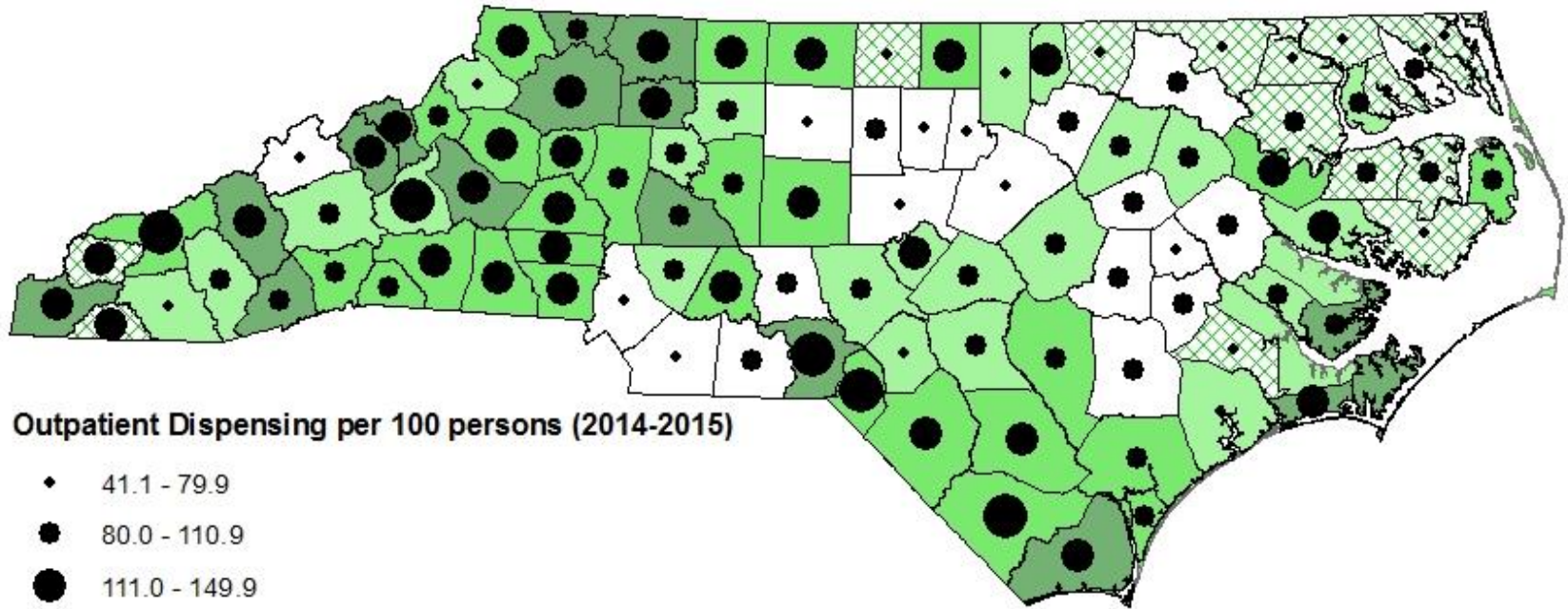
Rate of Drug Overdose Deaths by County

NC Residents, 2010-2013



Data source: N.C. State Center for Health Statistics, Vital Statistics, 2010-2013
 Analysis: Injury Epidemiology and Surveillance Unit
 Medication or drug overdose: X40-X44, X60-X64, Y10-Y14, X85

Unintentional Opioid Overdose Death Rate and Outpatient Prescriptions Dispensed for Opioid Rates



Outpatient Dispensing per 100 persons (2014-2015)

- ◆ 41.1 - 79.9
- 80.0 - 110.9
- 111.0 - 149.9
- 150.0 +

Overdose Rates per 100,000 persons (2011-2015)

- 0 - 4
- 5 - 7
- 8 - 11
- 12+
- ▨ Rate not calculated <5 deaths

Average mortality rate: 6.4 per 100,000 persons

Average dispensing rate: 89.4 per 100 persons

*Data: Mortality - State Center for Health Statistics, NC Division of Public Health, 2011-2015
 Population - National Center for Health Statistics, 2011-2015
 Opioid Dispensing - Controlled Substance Reporting System, 2014-2015