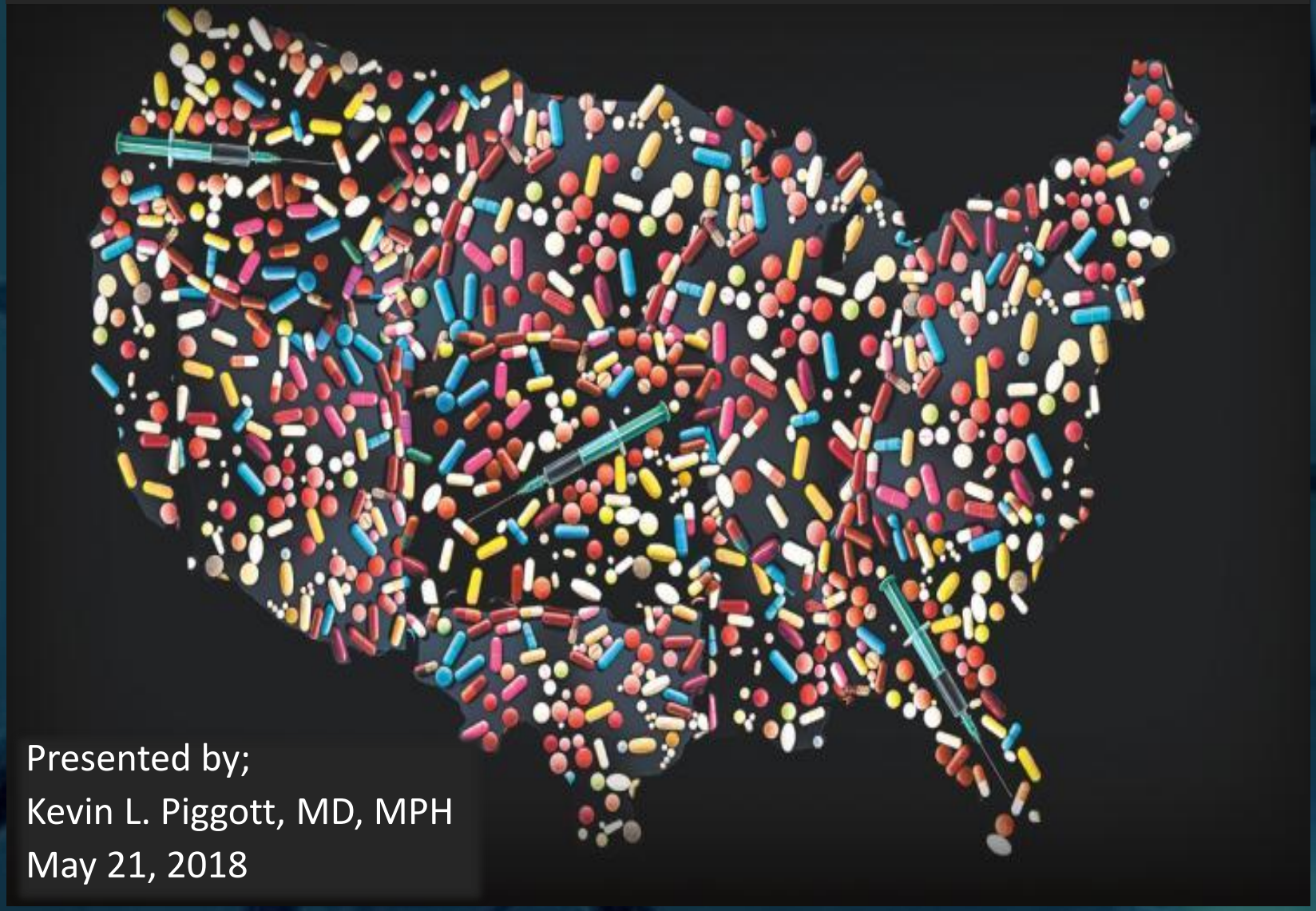
ROOM project

Addressing the Opioid Epidemic in the U.P.



Presented by;
Kevin L. Piggott, MD, MPH
May 21, 2018

REDUCING OPIOID OVERDOSE IN MARQUETTE COUNTY (ROOM)

- Funding provided by the CDC to the Michigan Department of Health and Human Services (MDHHS), Prescription Drug Overdose Prevention Initiative.
- Marquette County Health Department (MCHD) is one of 3 pilot sites, including;
  - Alpena
  - Macomb County

REDUCING OPIOID OVERDOSE IN MARQUETTE COUNTY (ROOM)

1. Surveillance System – active collection and analysis of data from;
   - EMS/1st responders and Law enforcement
     - Naloxone administration
   - Emergency departments
     - All overdoses and opiate & benzodiazepine overdoses
       - Age
       - Gender
       - Zip code of residence
   - Medical Examiner
     - Deaths attributed to overdoses
   - Michigan Automated Prescription System

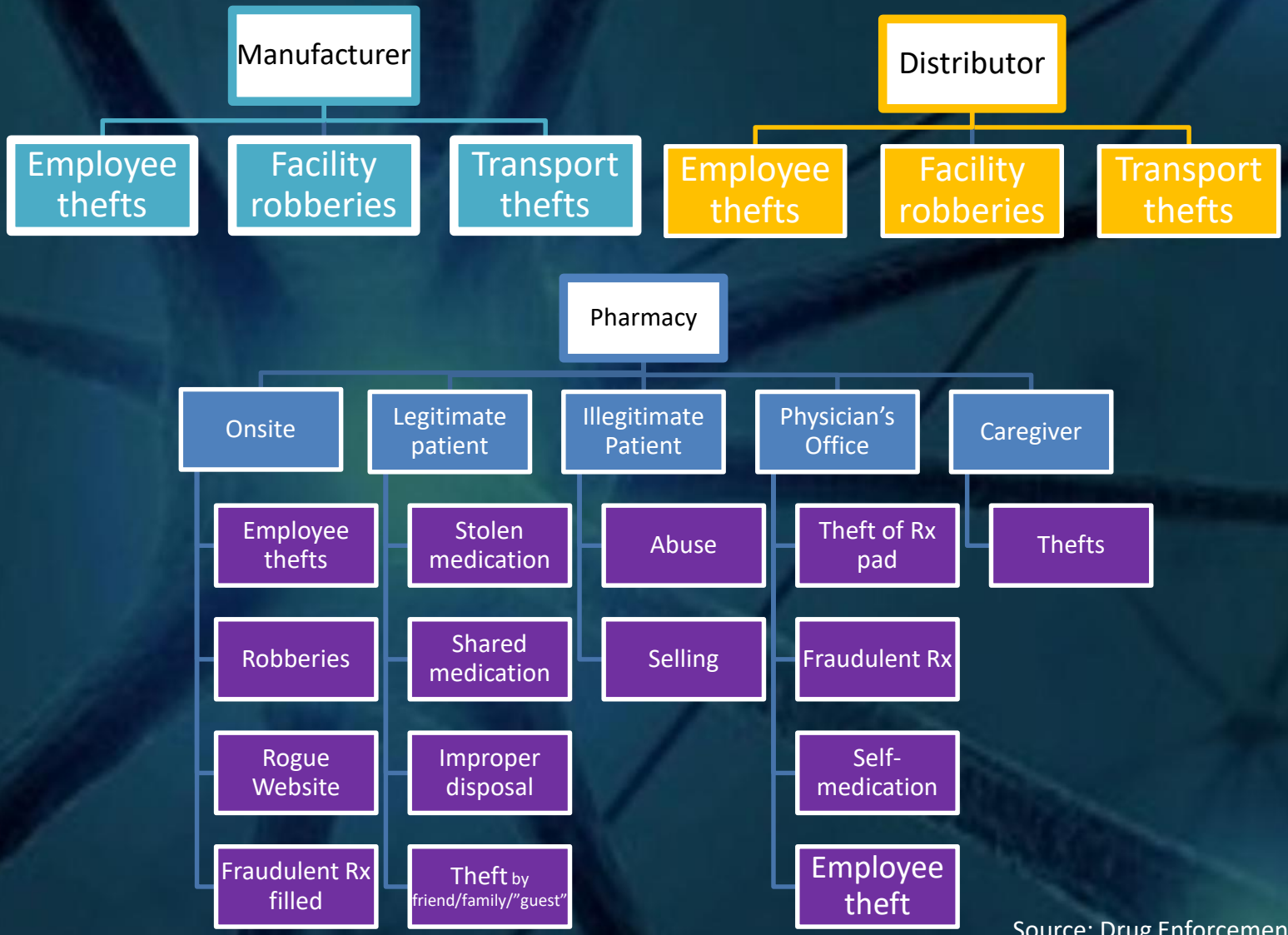
REDUCING OPIOID OVERDOSE IN MARQUETTE COUNTY (ROOM)

2. Prescriber/Dispenser Education (MD, DO, NP, PA, DDS, DVM, RPh, PharmD)
   - Epidemiology of opioid crisis at national, state, local level
   - CDC guidelines on opioid prescribing in chronic pain
   - New Michigan state laws
   - Michigan Automated Prescription System (MAPS)
     - Data and analysis
     - How to register and utilize MAPS/NarxCare

REDUCING OPIOID OVERDOSE IN MARQUETTE COUNTY (ROOM)

3. Community Education
   - Basic epidemiology of the opioid crisis
   - Understanding the risks associated with taking opioid medications
   - Expectations regarding pain management
   - Michigan state laws and how it will affect patients

Methods of Drug Diversion



Source: Drug Enforcement Agency

Background Epidemiology

- 11% of Americans experience daily (chronic) pain

  Nahin RL. Estimates of pain prevalence and severity in adults: United States, 2012. J Pain 2015;16:769–80

- ~20% of patients presenting to physician offices with non cancer pain symptoms or pain-related diagnoses (including acute and chronic pain) receive an opioid prescription

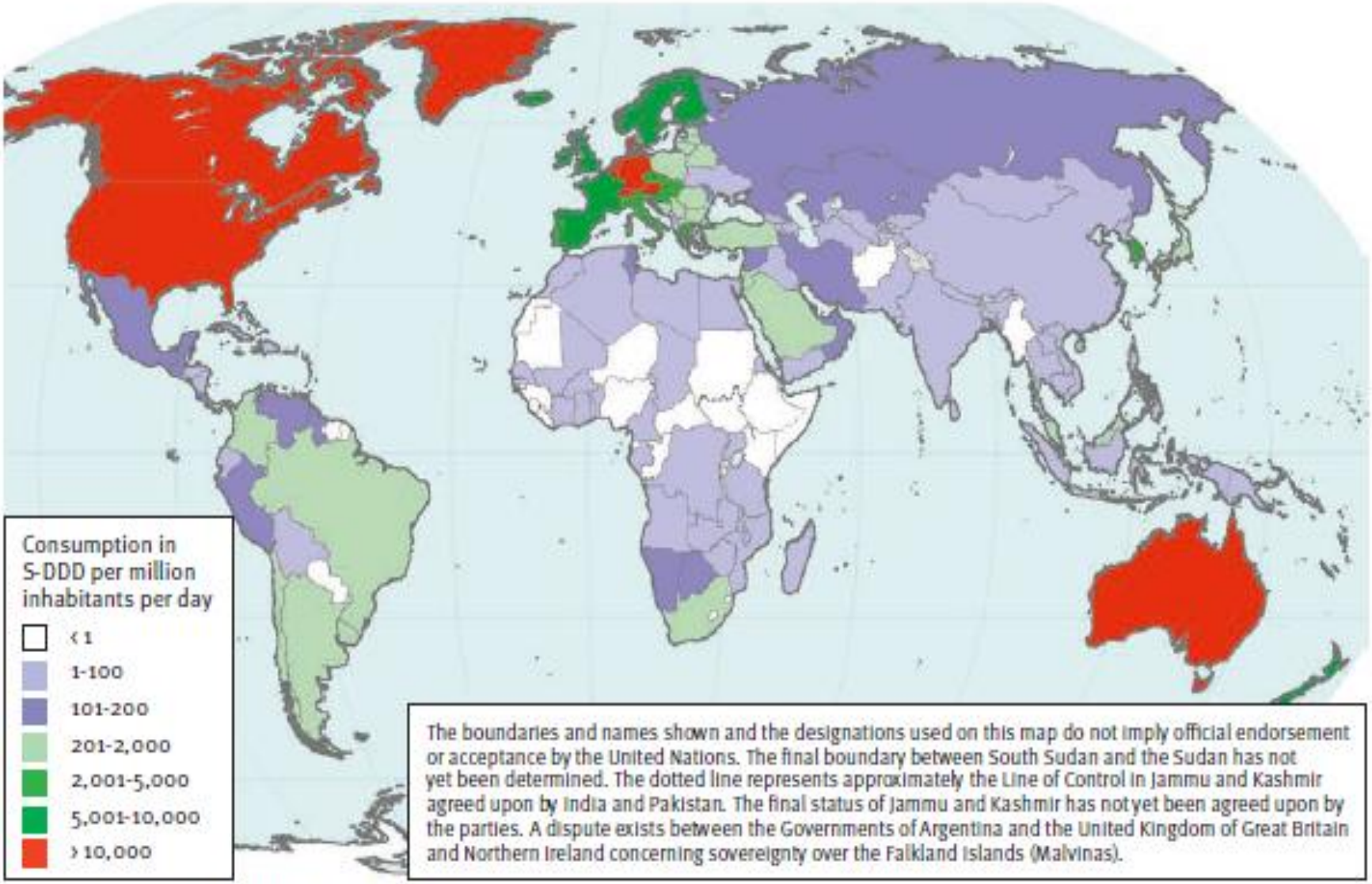
  Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1):1–49. DOI: http://dx.doi.org/10.15585/mmwr.rr6501e1

Background Epidemiology

- ~259 million opioid prescriptions were written in the U.S. at its peak in 2012
  - Enough for one prescription per **adult**
  - By 2016 this had decreased to ~215 million
- Persons in the United States consume opioid pain relievers (OPR) at a greater rate than any other nation.
  - They consume twice as much per capita as the second ranking nation, Canada

International Narcotics Control Board. Report of the International Narcotics Control Board on the availability of internationally controlled drugs: enduring adequate access for medical and scientific purposes. Vienna, Austria: International Narcotics Control Board; 2010. Available at http://www.incb.org/documents/Publications/AnnualReports/AR2010/Supplement-AR10_availability_English.pdf

Map 4. Consumption of opioids for pain management, 2011-2013

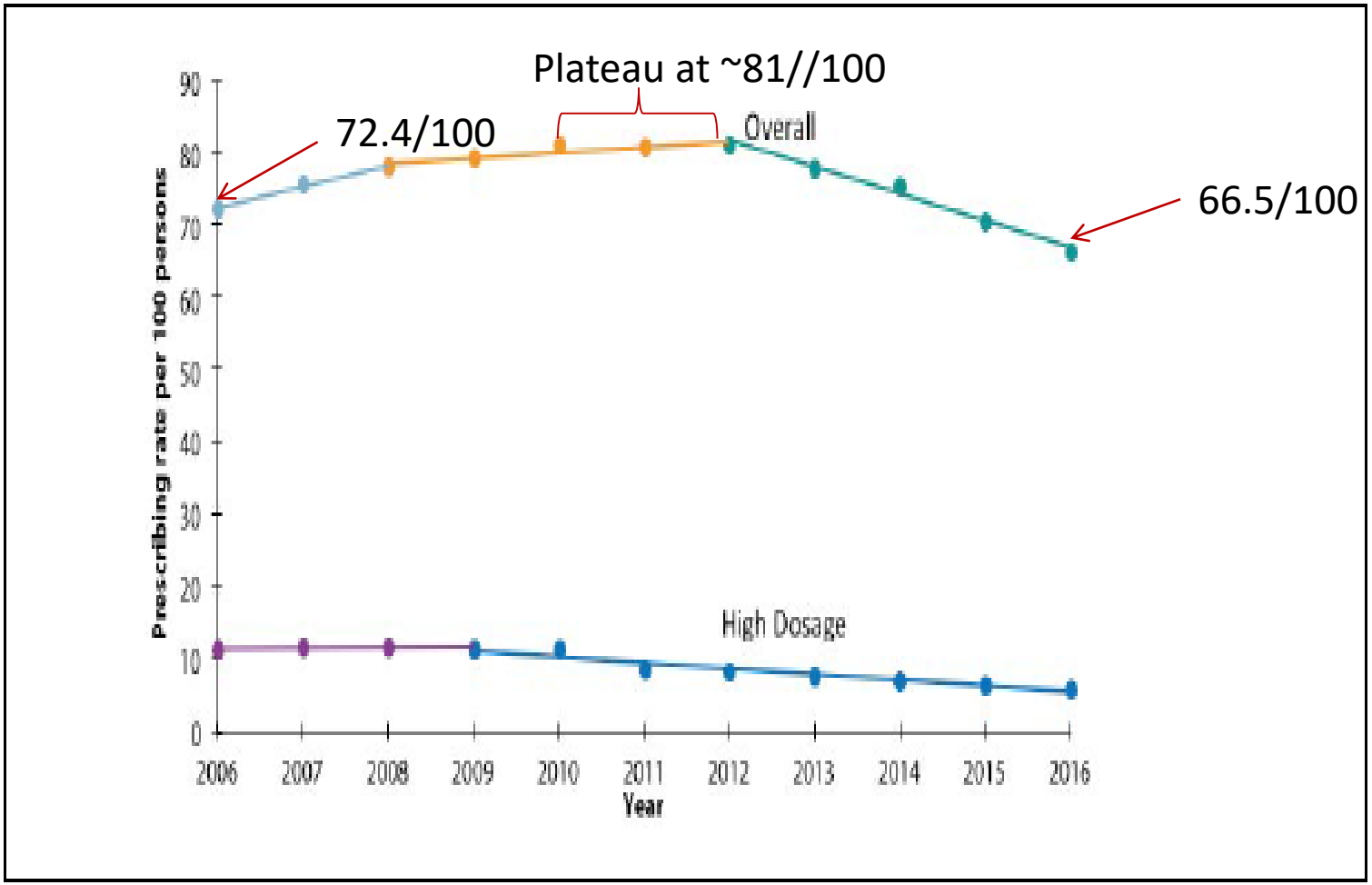


The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The final boundary between South Sudan and the Sudan has not yet been determined. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Source: International Narcotics Control Board.

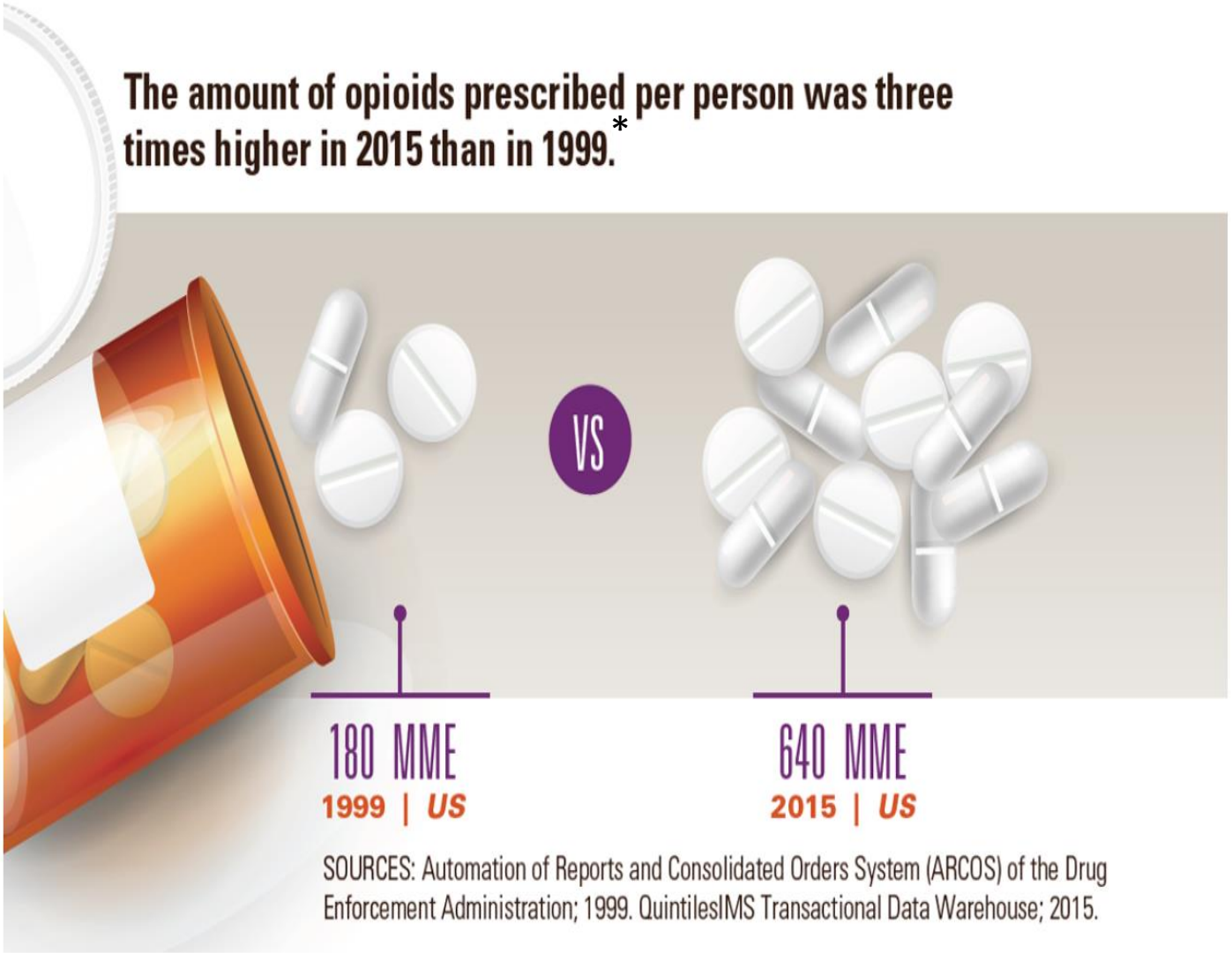
Note: Opioids defined as codeine, dextropropoxyphene, dihydrocodeine, fentanyl, hydrocodone, hydromorphone, ketobemidone, morphine, oxycodone, pethidine, tilidine and trimeperidine.

Annual U.S. Opioid Prescribing Rates



Source: QuintilesIMS® Transactional Data Warehouse.

High-dose prescriptions were defined as opioid prescriptions resulting in a daily dosage of ≥ 90 MME.

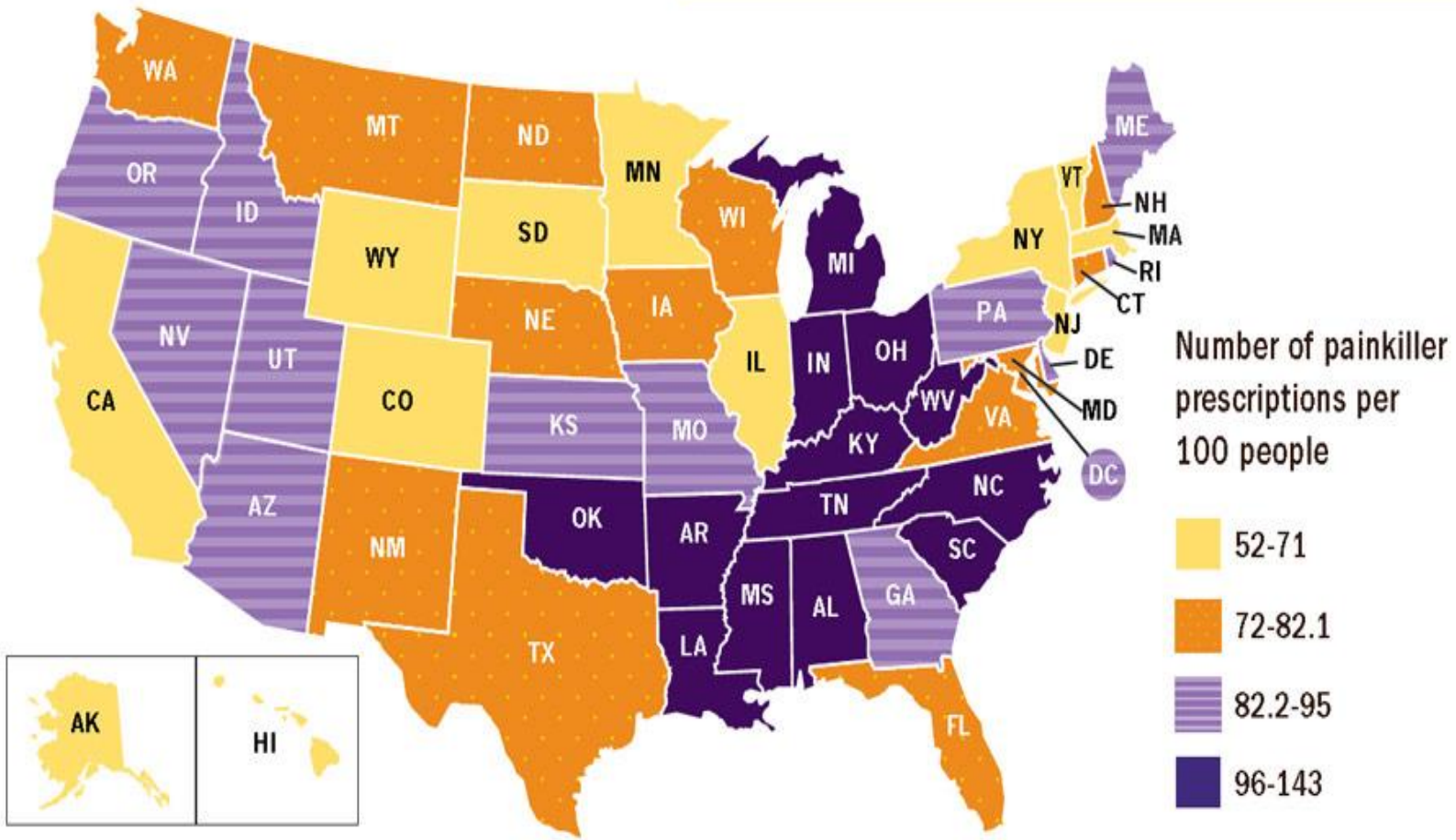


* As determined by Morphine Milligram Equivalents (MME)

Background Epidemiology

- Primary care providers
  - Account for 50% of opioid pain medications dispensed nationally
  - opioid prescribing rates increasing more for family practice, general practice, and internal medicine compared with other specialties

Some states have more painkiller prescriptions per person than others.



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

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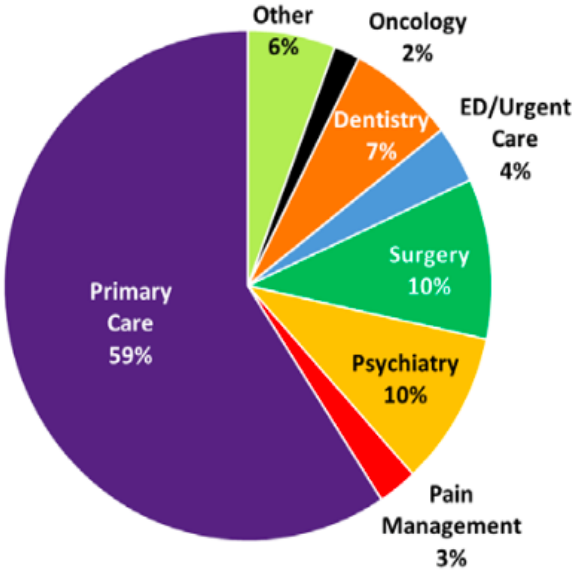
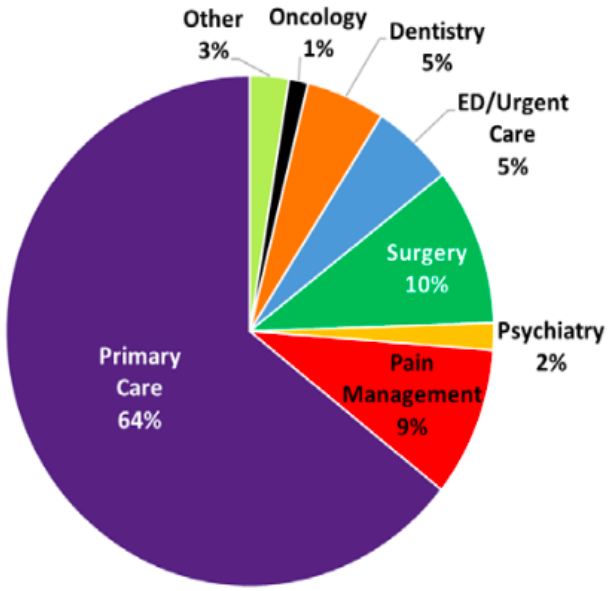
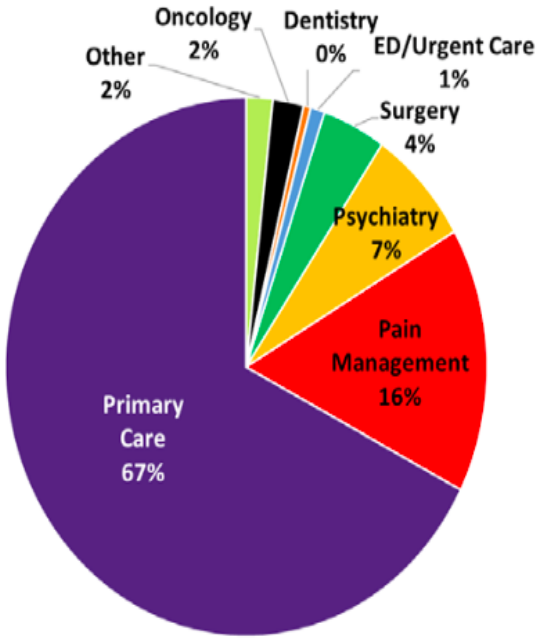


Number of Prescribers by Specialty



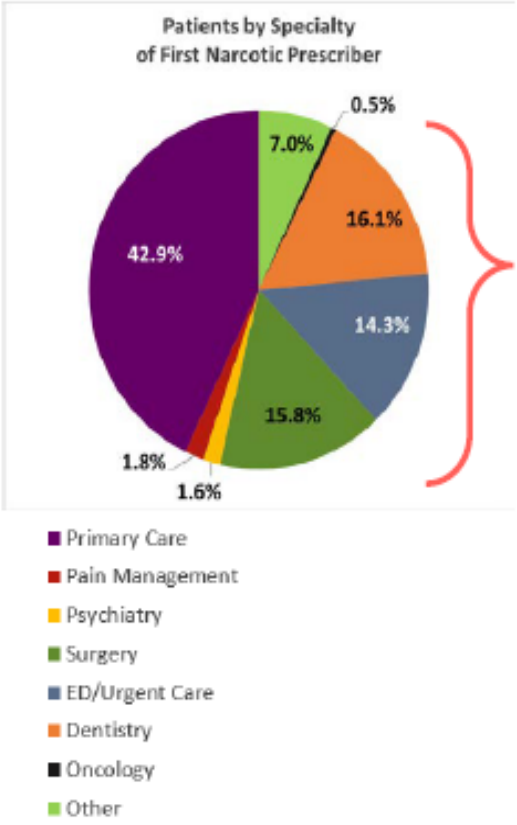
Number of Narcotic Prescriptions by Prescriber Specialty



Aggregate MME of Prescription Fills by Prescriber Specialty

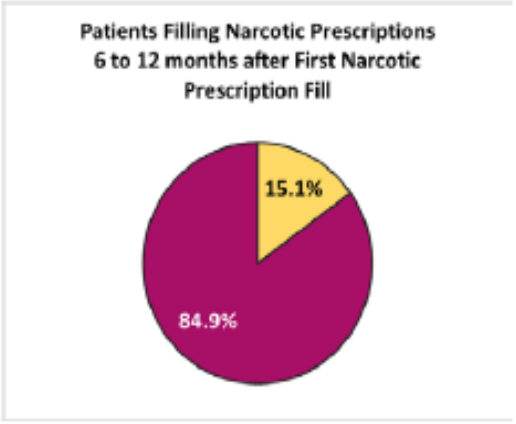
Source: Michigan PDMP Data 2013-2015 and Michigan 2013-2015 drug-related deaths linked to PDMP

First narcotic prescription is defined as the first prescription written in 2014 or later for patients who had no fills in 2013 or prior (N=3,586,184 patients)

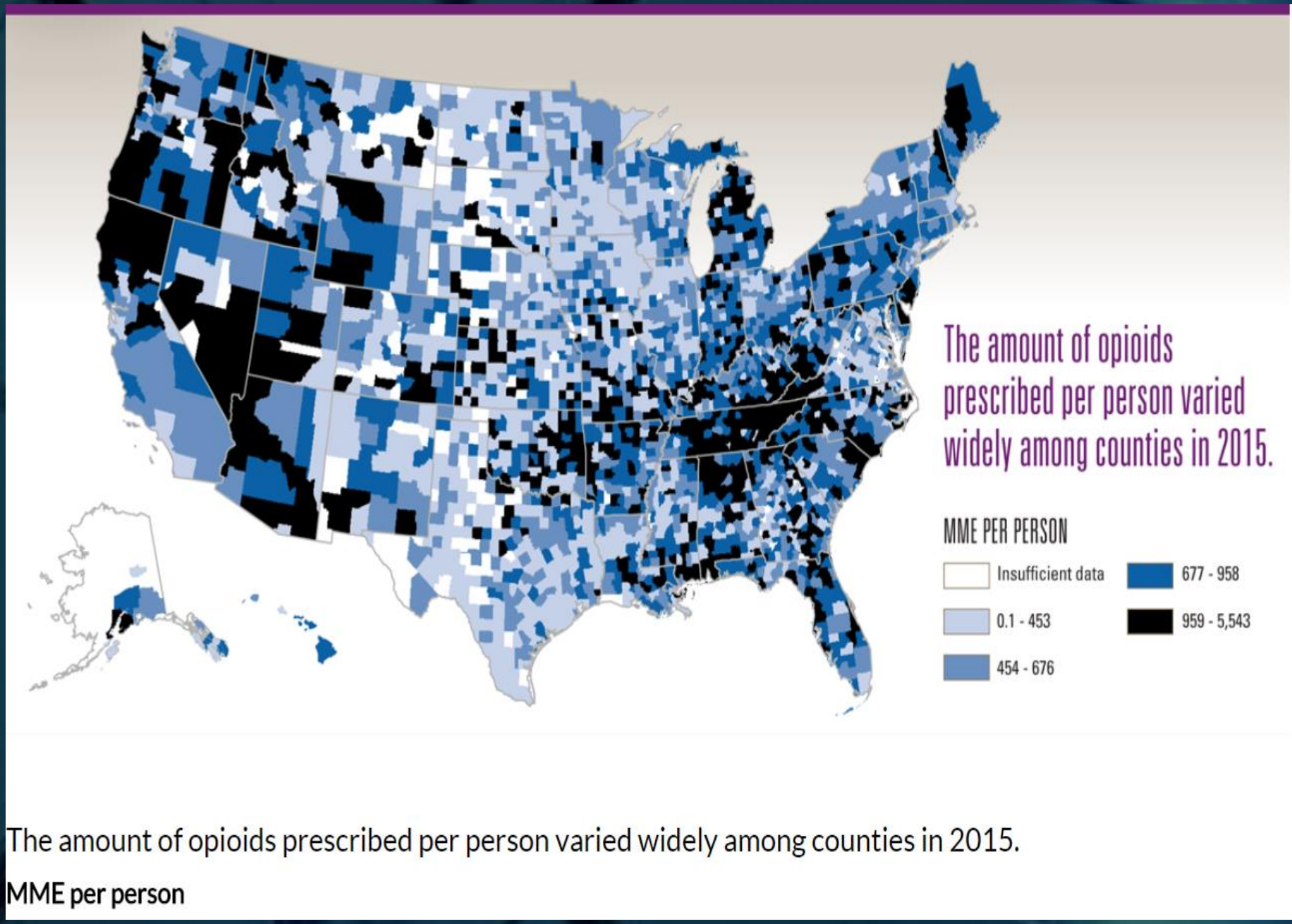


A large percentage of patients' first narcotic prescription are written in Surgery (15.8%), ED/Urgent Care (14.3%), and Dentistry (16.1%), though these specialties make up 10.2%, 3.6%, and 7.0% of prescribers, respectively

15.1% of patients are still filling narcotic prescriptions 6 months to 1 year after their first narcotic fill



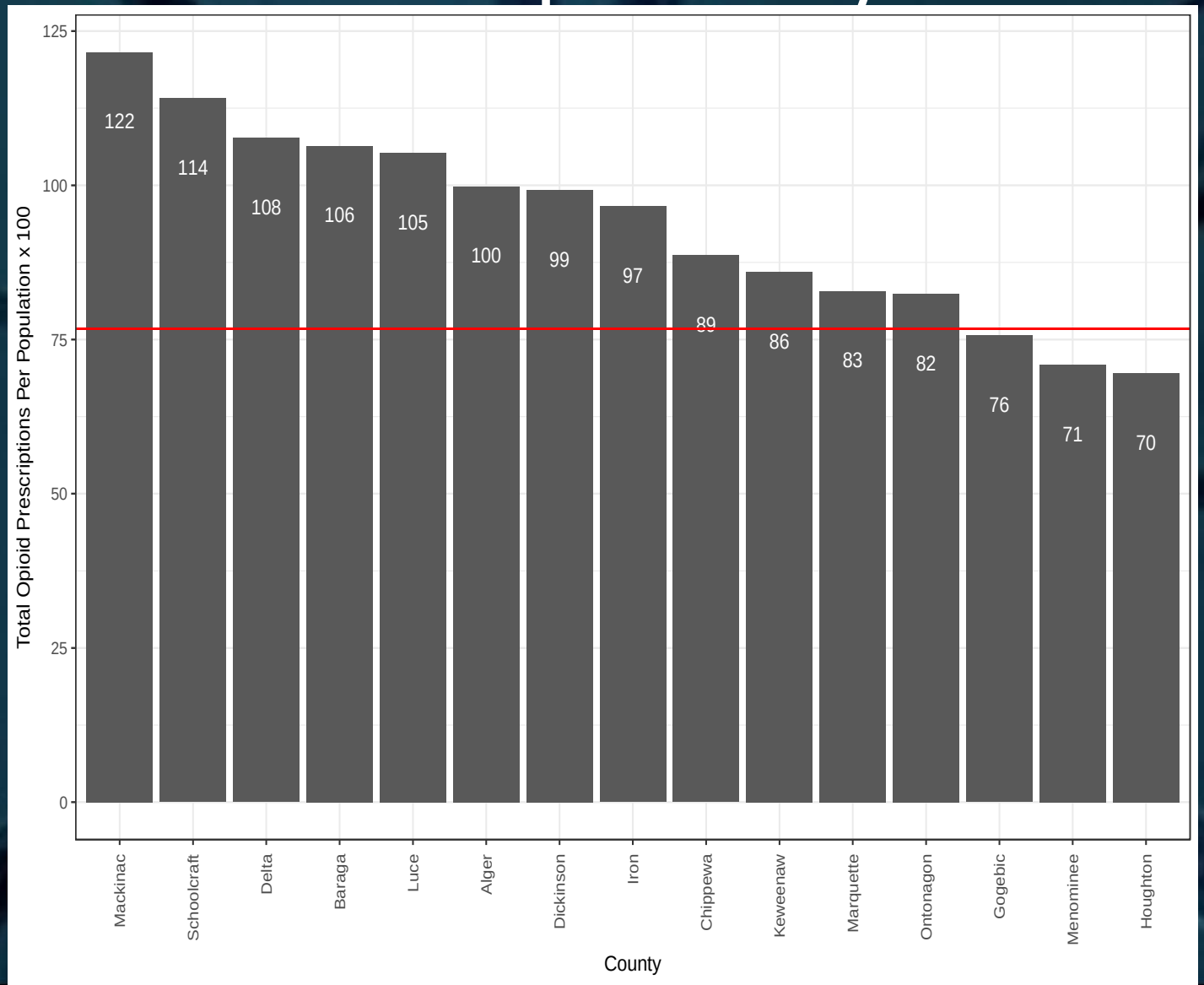
Source: Michigan PDMP Oct. 23, 2012-Oct. 23, 2017, supplemented by NPPES NPI file
Excludes prescribers missing primary specialty classification, Other specialty includes specialties not classified elsewhere; Excludes patients whose first narcotics fill was in 2016, because 1 year of follow-up data not available. Incident narcotic prescriptions were written in 2014 or later; criteria used due to insufficient prescription data prior to 2013.



The amount of opioids prescribed per person varied widely among counties in 2015.

MME per person

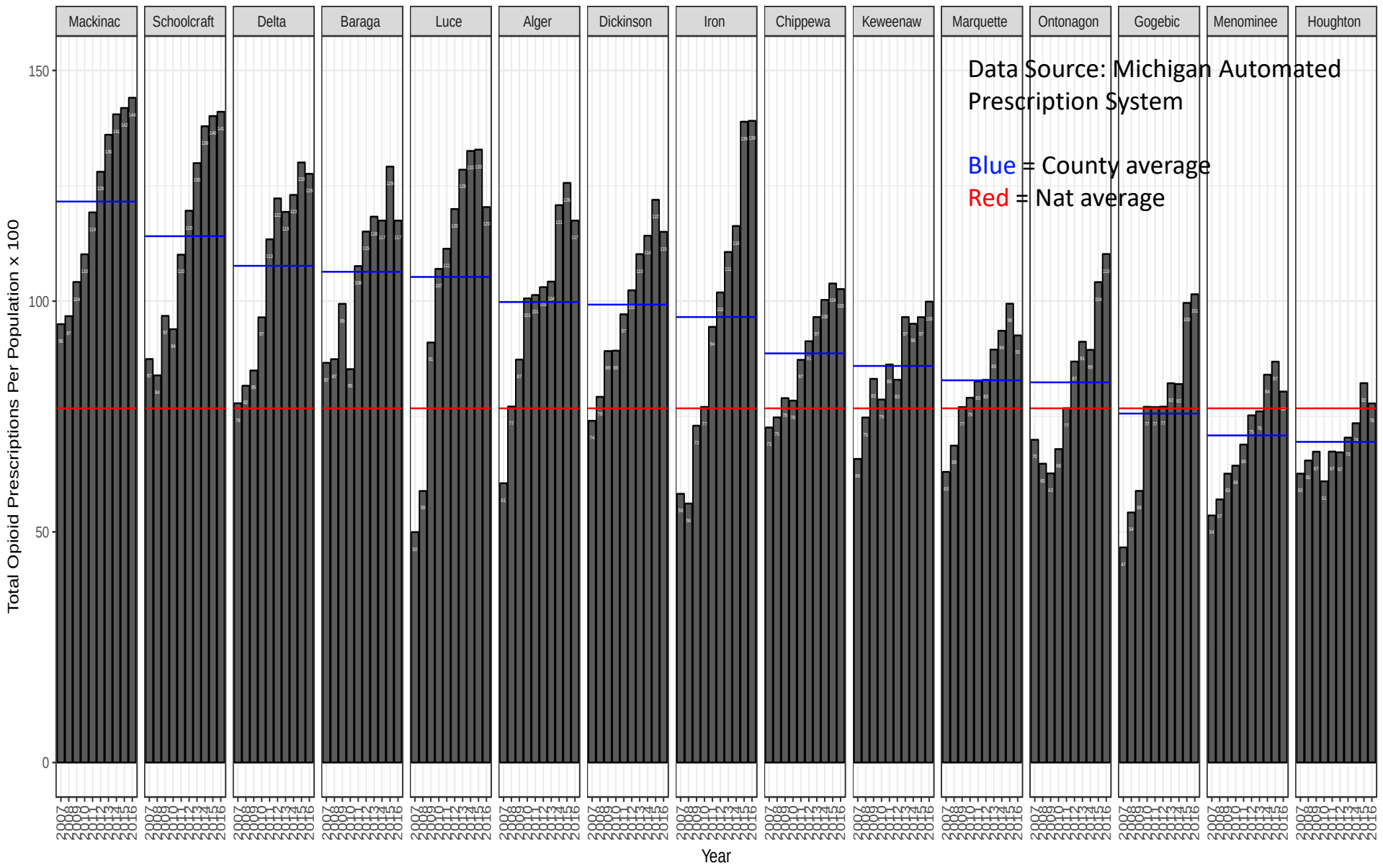
U.P. Counties; 2007-2016 avg. opioid Rx/100



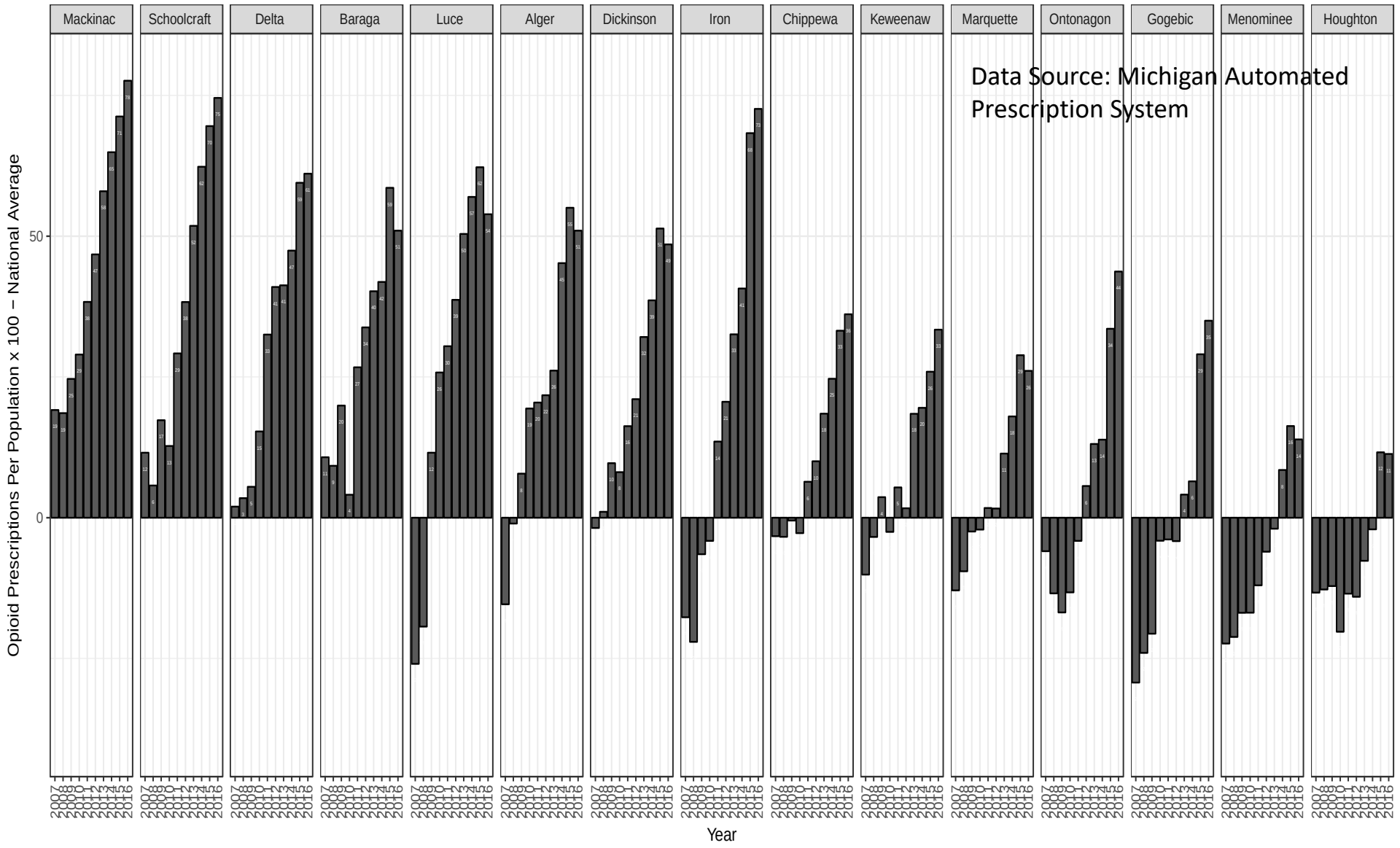
Red=national average across 2007-2016

Data Source: Michigan Automated Prescription System

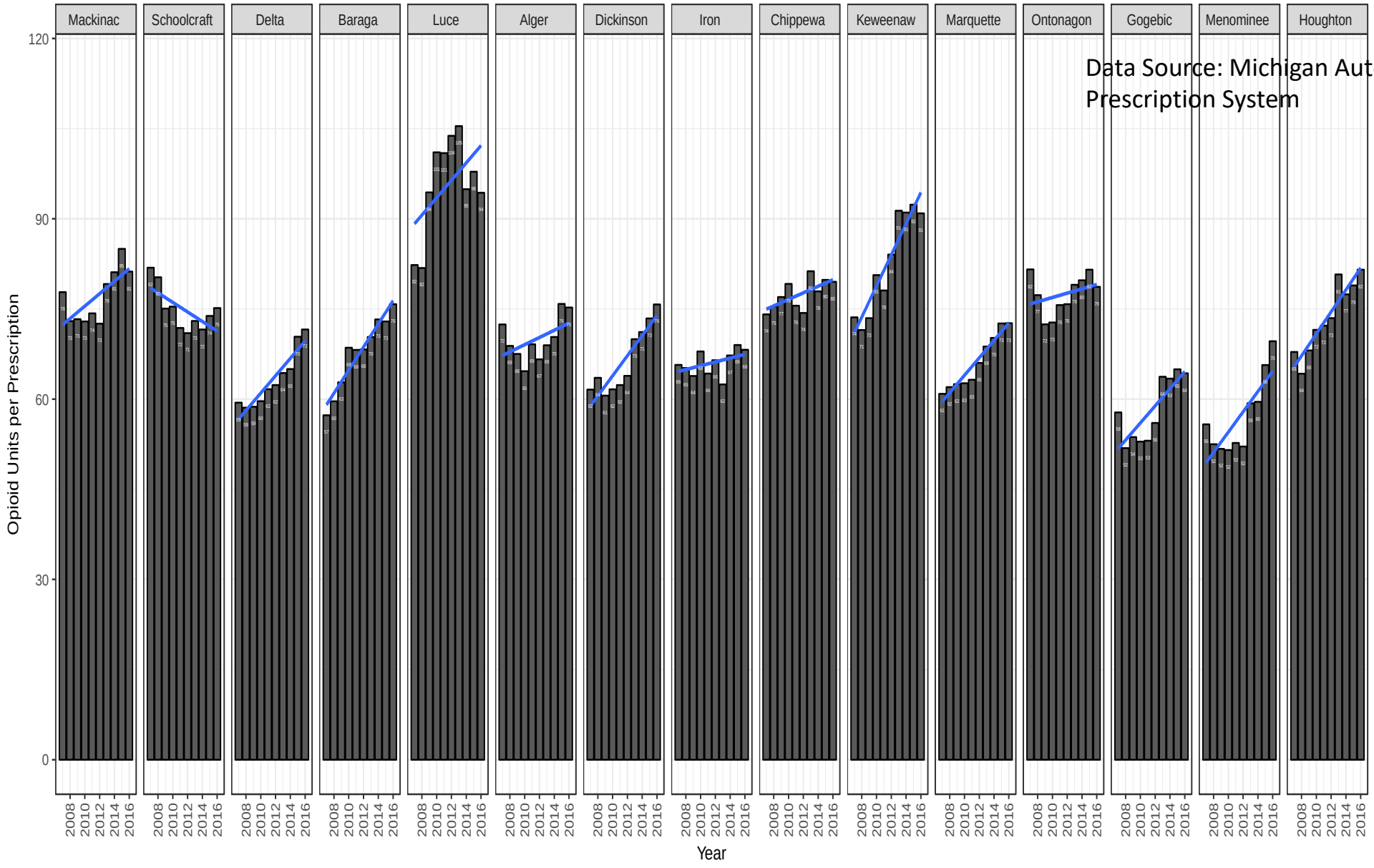
UP Counties - Total Opioid Rx's/100



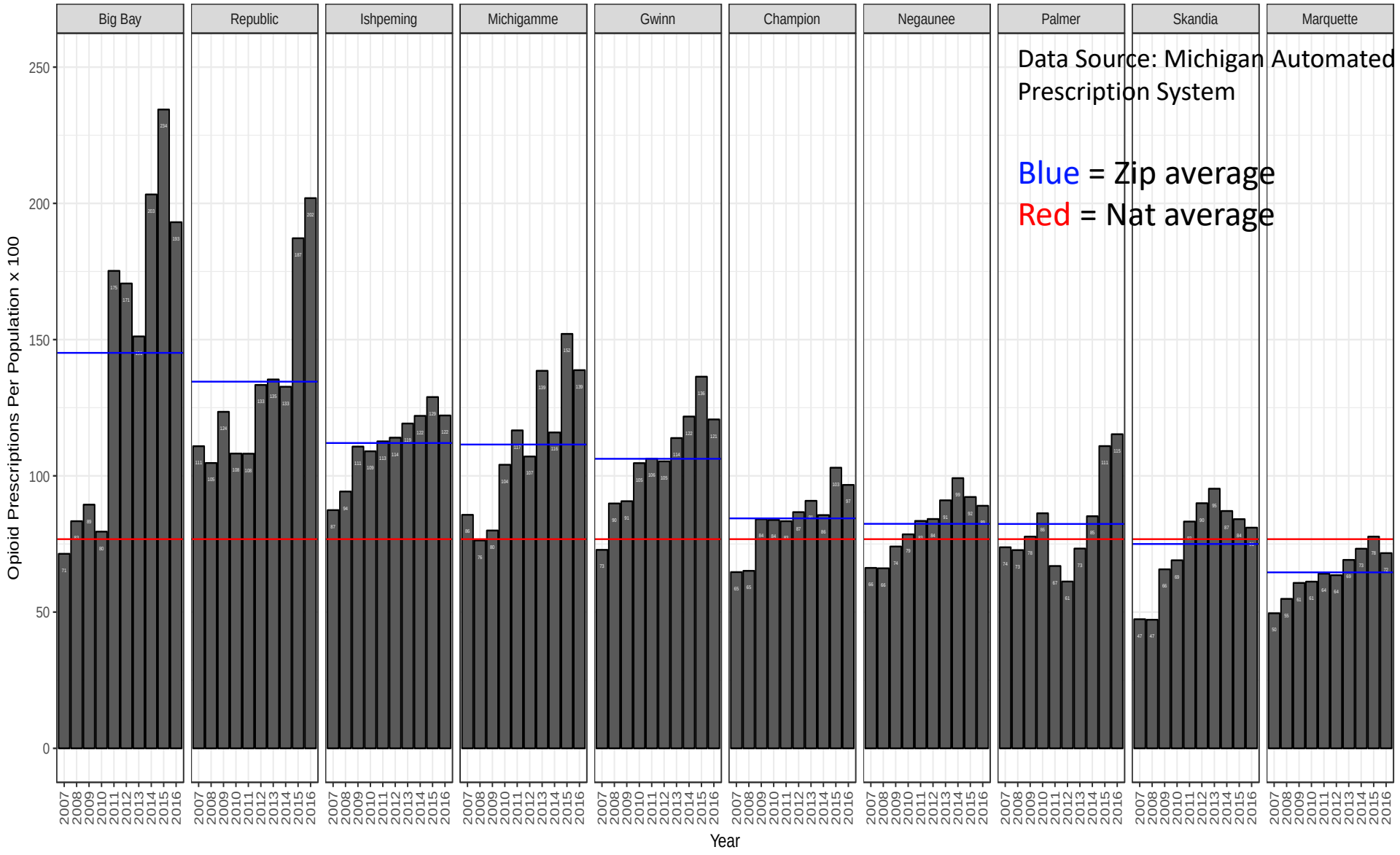
UP Counties; Opioid Rx/100 population - national average



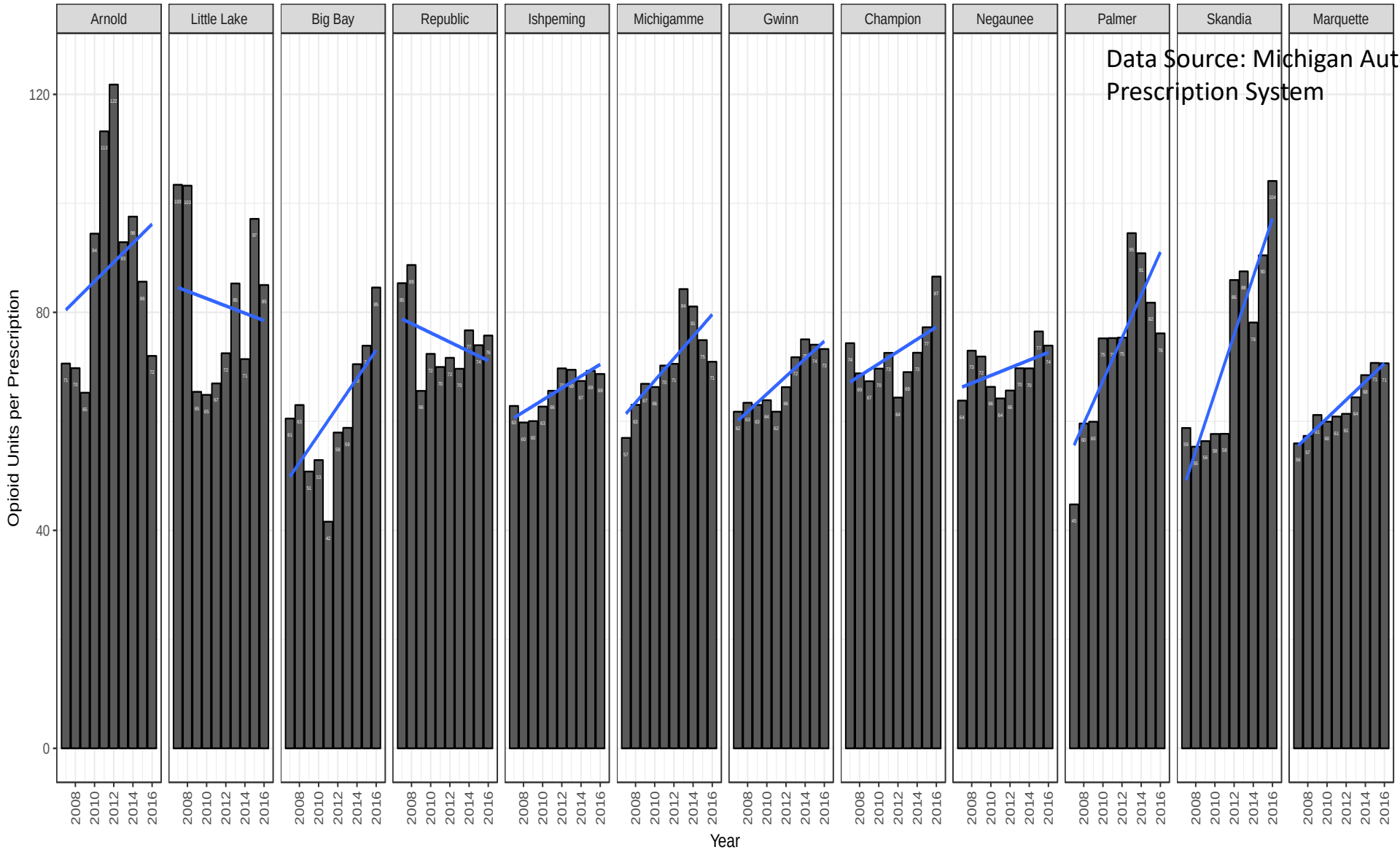
U.P. Counties – avg. units/Rx



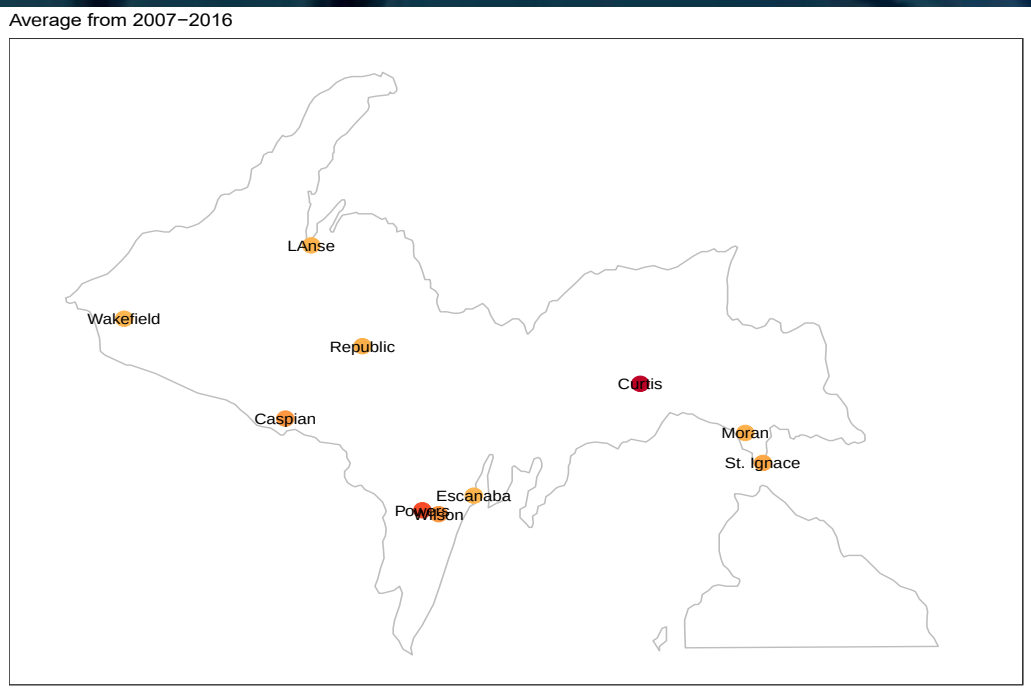
Marquette County Zip Codes; Opioid Rx/100 pop.

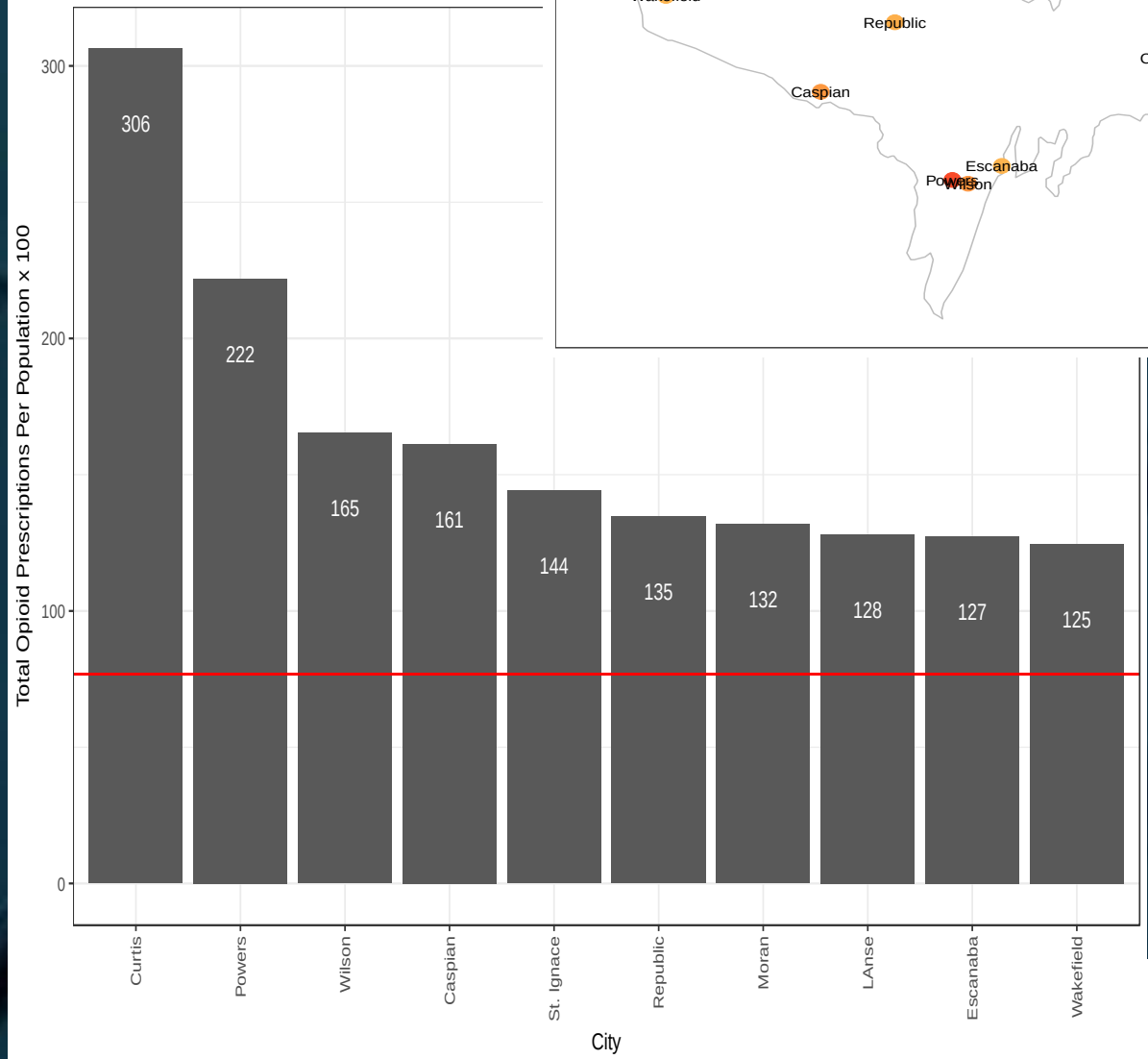


Marquette County Zip Codes; Units/Rx

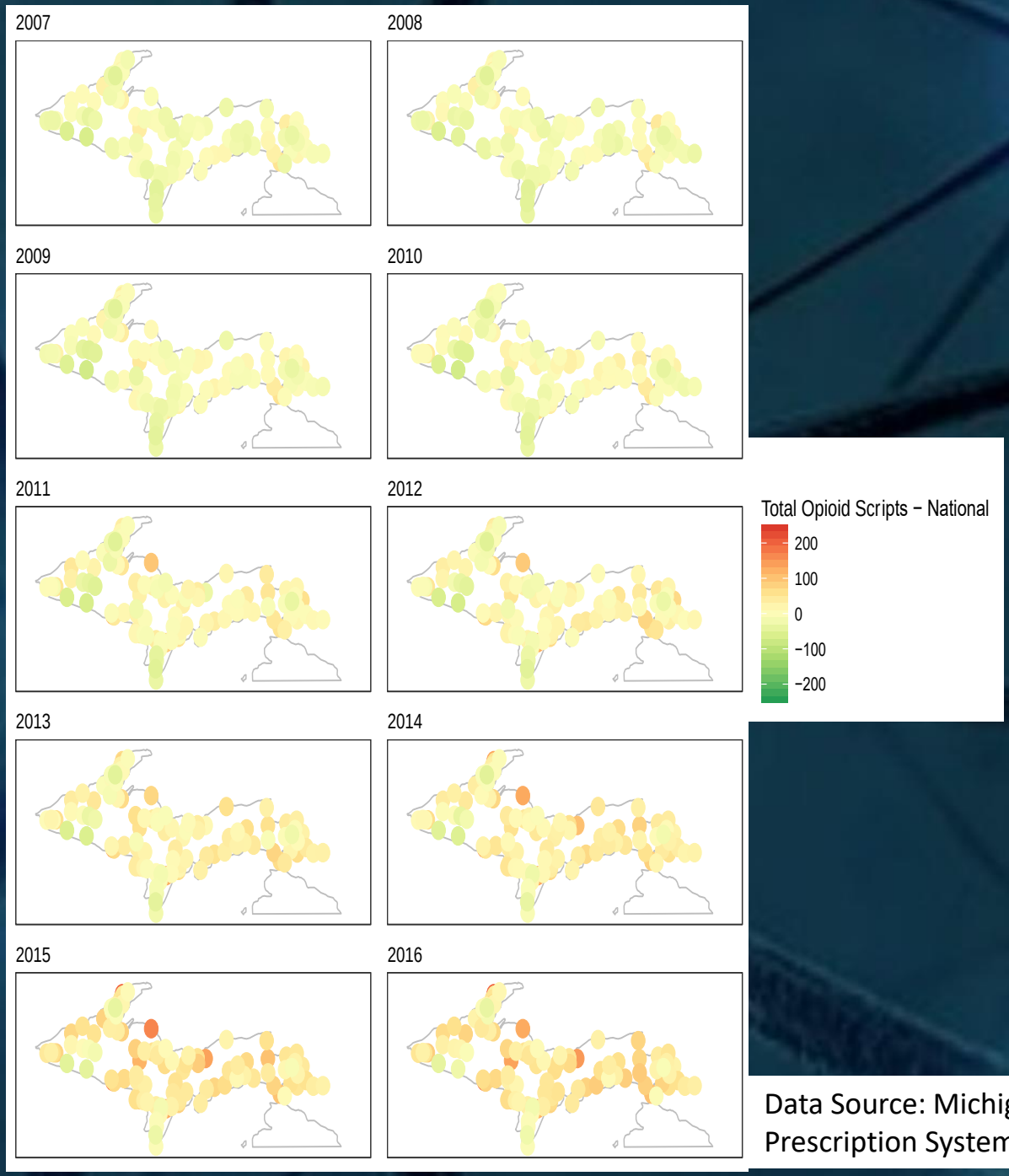


Top 10 UP zip codes by largest prescriptions per 100 pop





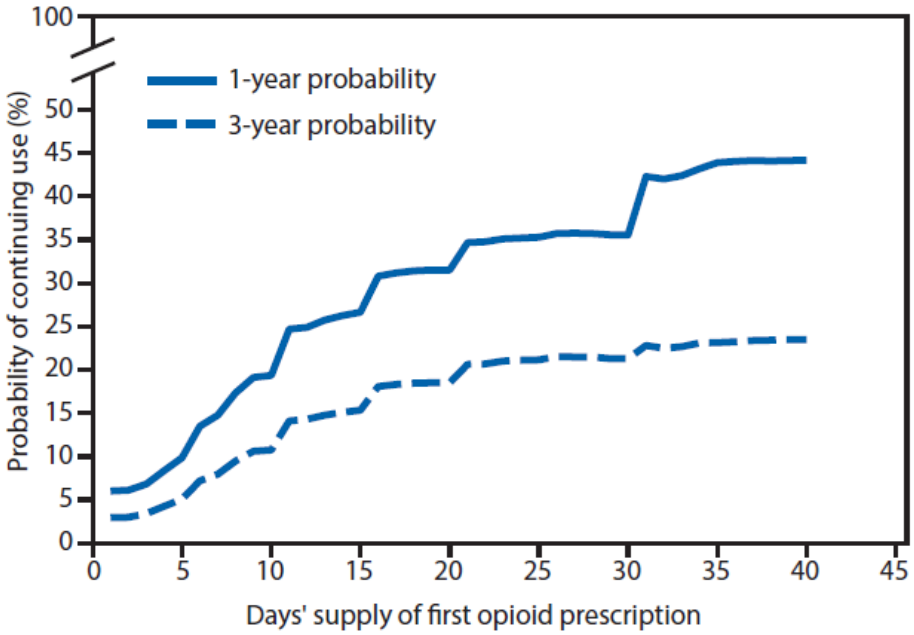
Data Source: Michigan Automated Prescription System



Data Source: Michigan Automated Prescription System

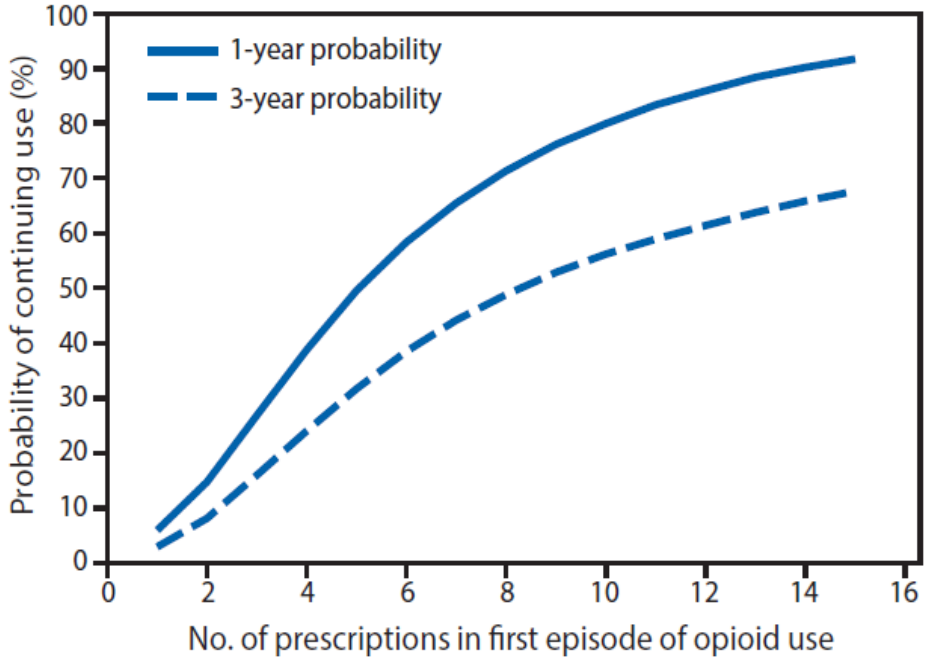
Risk for Continued Opioid Use Goes Up with Days Supply and Number of Prescriptions in the First Episode of Care

FIGURE 1. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of days' supply* of the first opioid prescription — United States, 2006–2015



* Days' supply of the first prescription is expressed in days (1–40) in 1-day increments. If a patient had multiple prescriptions on the first day, the prescription with the longest days' supply was considered the first prescription.

FIGURE 2. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of prescriptions* in the first episode of opioid use — United States, 2006–2015



* Number of prescriptions is expressed as 1–15, in increments of one prescription.

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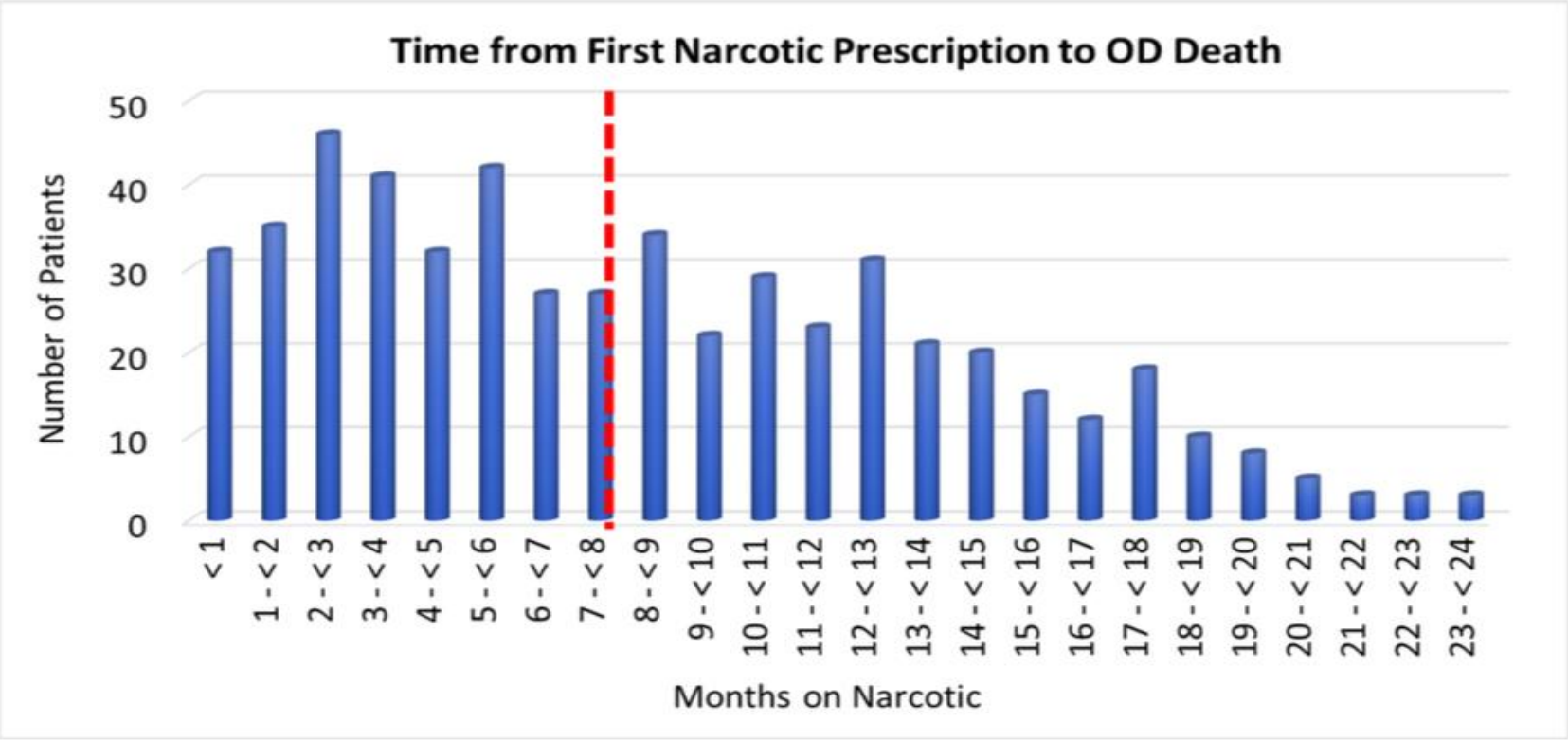
Among patients whose first narcotic prescriptions were written between 2014 and 2015, those who died of a drug overdose were prescribed narcotics for only 8 months prior to death, on average



Risk

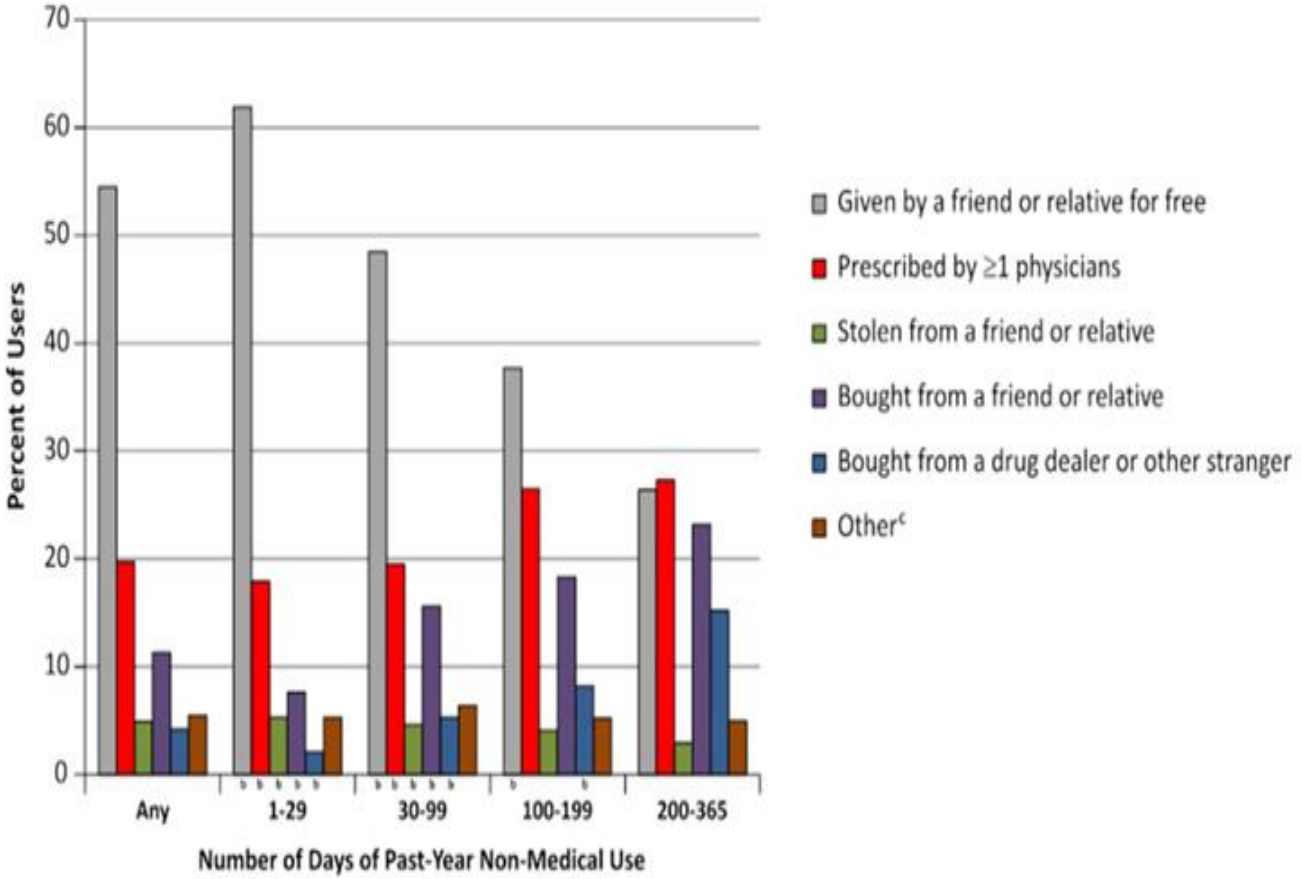
- ½ to ¾ of IV drug users report misusing a prescription opioid first

NIDA Research Report, February 2014 Pollini RA et al *Substance Abuse Rehabil 2(1) :173*

- But, most people prescribed an opioid do not become addicted
  - 1/500 with no prior substance use disorder
  - 15/500 in the general population

Fishbain et al, Pain Medicine 2008; Edlund et al, J Drug and Alcohol Dependence, 2010

Sources of Prescription Painkillers Among Past-Year Non-Medical Users[a]



[a] Obtained from the US National Survey on Drug Use and Health, 2008 through 2011.[3]
[b] Estimate is statistically significantly different from that for highest-frequency users (200-365 days) ($P < .05$).
[c] Includes written fake prescriptions and those opioids stolen from a physician's office, clinic, hospital, or pharmacy; purchases on the Internet; and obtained some other way.

SOURCE: Jones C, Paulozzi L, Mack K. Sources of prescription opioid pain relievers by frequency of past-year nonmedical use: United States, 2008–2011. JAMA Int Med 2014; 174(5):802-803.

Jones, Paulozzi, et al. JAMA Int Med 2014

Background Epidemiology

- ~2 million people ≥ 12 yo met criteria for a substance use disorder involving prescription opioids in 2014

Zero Pain Is Not the Goal

Thomas H. Lee, MD, MSc

JAMA®
The Journal of the American Medical Association

What should health care be trying to accomplish? This question becomes increasingly important as research advances, the population ages, and financial pressures intensify. Simple measures for which 100% is the target cannot define performance for the complex work of health care. Quality does not mean the elimination of death or perfect compliance with guidelines. Efficiency does not mean the elimination of all spending or even 100% elimination of all wasteful spending. And compassion for patients does not mean the elimination of all pain.

Author Audio Interview at jama.com

Related article page 1624

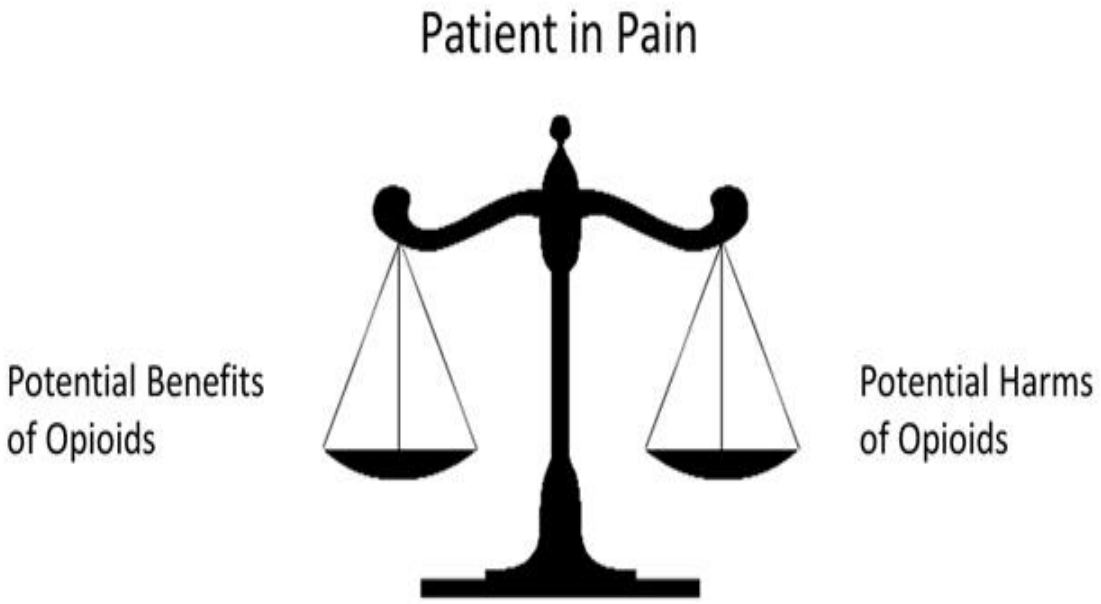
There is, quite simply, no "getting it right" when it comes to pain. It is both undertreated and overtreated. It is ubiquitous, subjective, and sometimes feigned. Its experience is influenced by culture and varies among individuals, and its diagnosis easily distorted by bias. No wonder, then, that clinicians are concerned about being evaluated on their effectiveness in relieving patients' pain, and policy makers are concerned about overuse of opioids contributing to narcotics addiction.

most to patients and the larger question of what health care should be trying to accomplish.

A simple and useful framework for thinking about health care in general and pain in particular can be drawn from Sinek's famous 2009 TED talk, "How Great Leaders Inspire Action,"[2] which has been viewed more than 25 million times. In it, Sinek explores how leaders and organizations "can inspire cooperation, trust, and change"—reasonable goals for health care leaders and for individual clinicians.

Sinek recommends that leaders begin by asking the question, "Why?" What is the organization's fundamental purpose? Why do they even exist? He offers the example of Apple's goal of challenging the status quo by helping people to "Think different." After thinking about why, organizations can turn to the question of "how" (eg, design devices that are beautiful, intuitive, and easy to use). Then and only then should they turn to the question of "what" (eg, sell computers, music players, and cellular phones). Sinek argues that conventional organizations often move in the opposite order: they focus on what, worry some about how, and often never get to why. Greatness comes from starting with why.

Where do we go from here?



There is no evidence of benefit with long term use of opioids for chronic pain but much evidence of harm. “No evidence of benefit” is not the same as “evidence of no benefit”