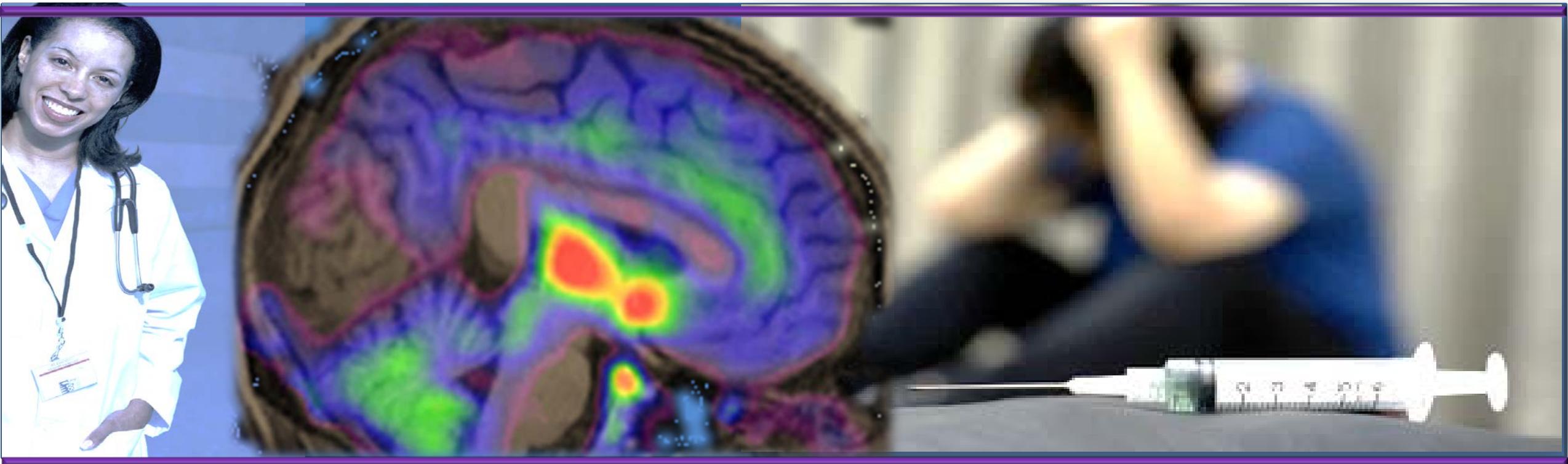


ADDICTION MEDICINE: The Urgent Need for Trained Physicians



Nora D. Volkow, M.D.
Director

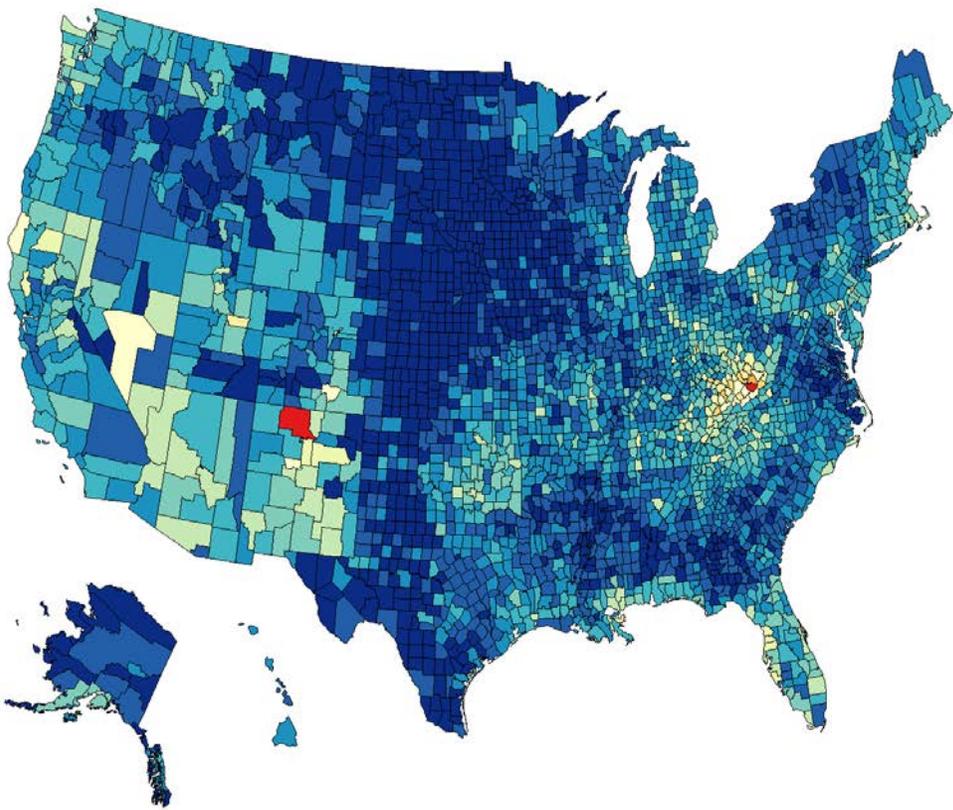


National Institute
on Drug Abuse

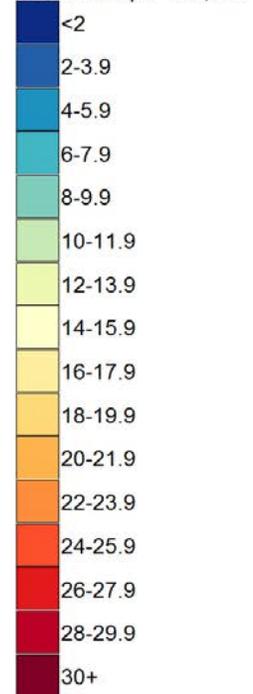
 @NIDAnews

Overdose Death Rates

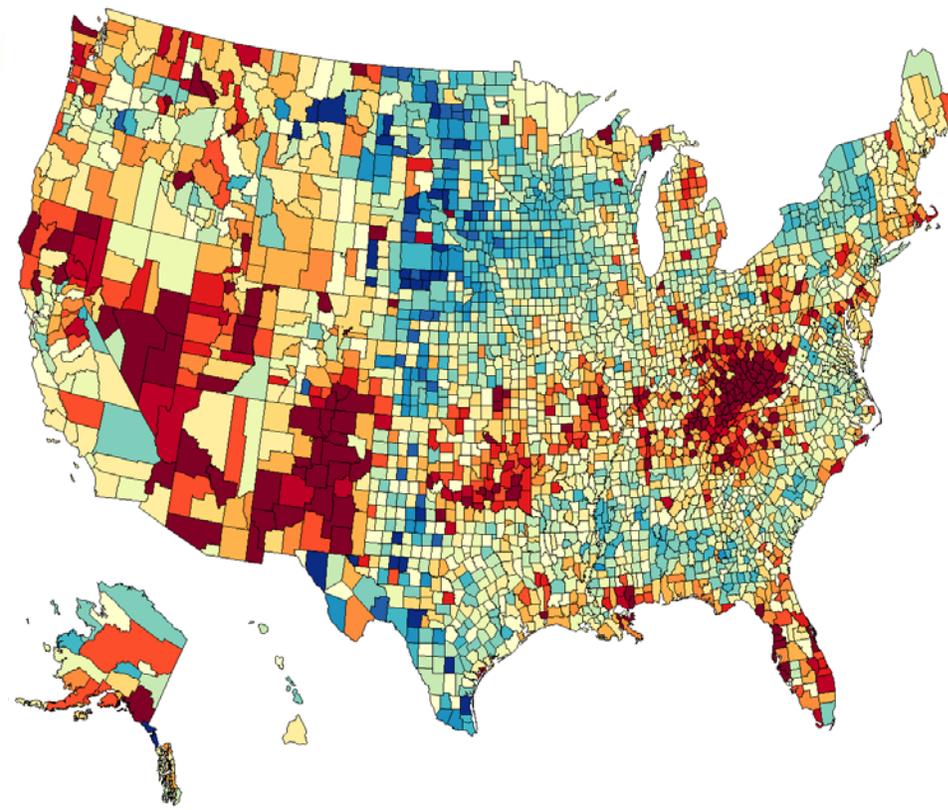
1999



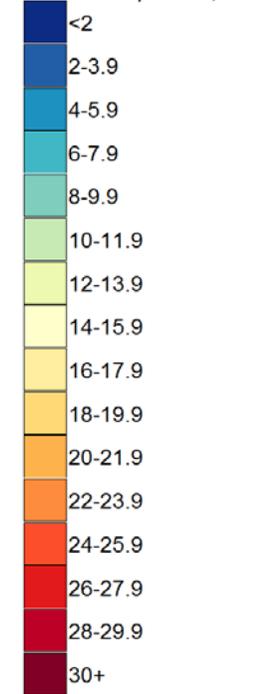
Estimated Age-Adjusted
Death Rate per 100,000



2016

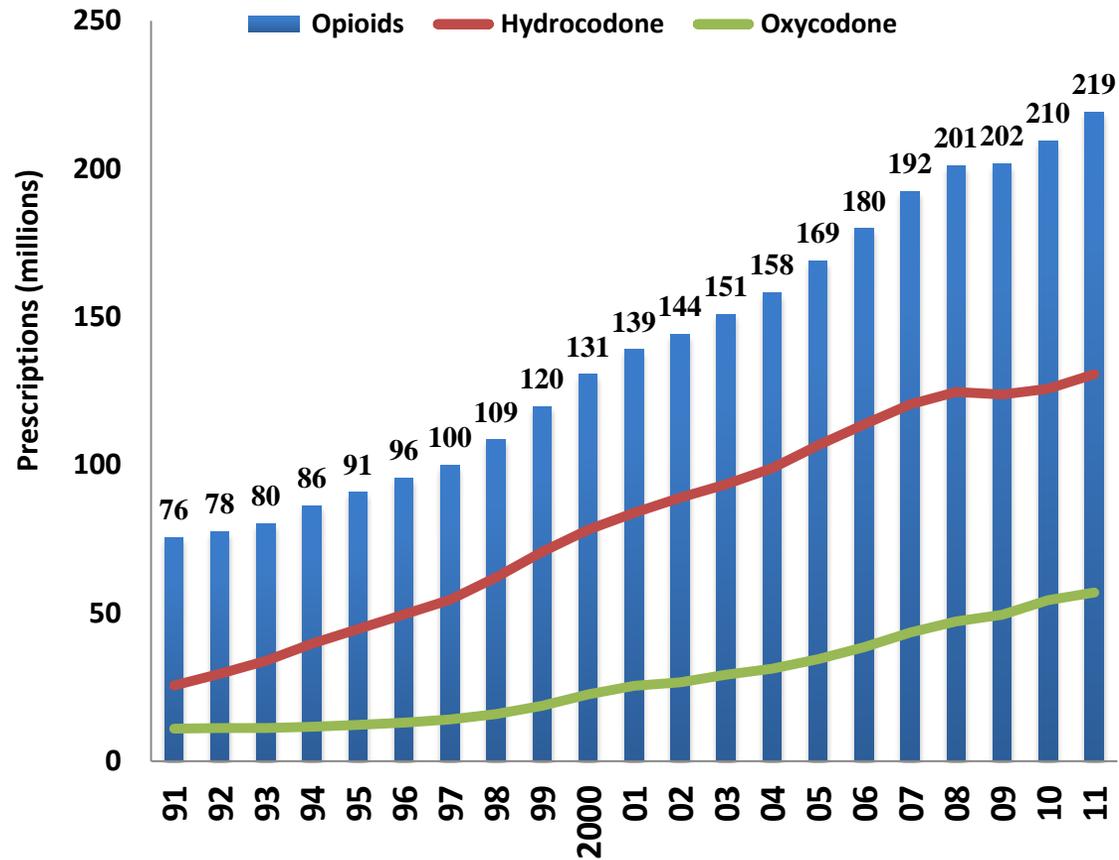


Estimated Age-Adjusted
Death Rate per 100,000



Source: <https://www.cdc.gov/nchs/data-visualization/drug-poisoning-mortality/index.htm>

Opioid Prescriptions 1991-2011



IMS's Source Prescription Audit (SPA) & Vector One®: National (VONA)

Opioid morphine milligram equivalents (MME) dispensed fell by over 15% from 2010-2015

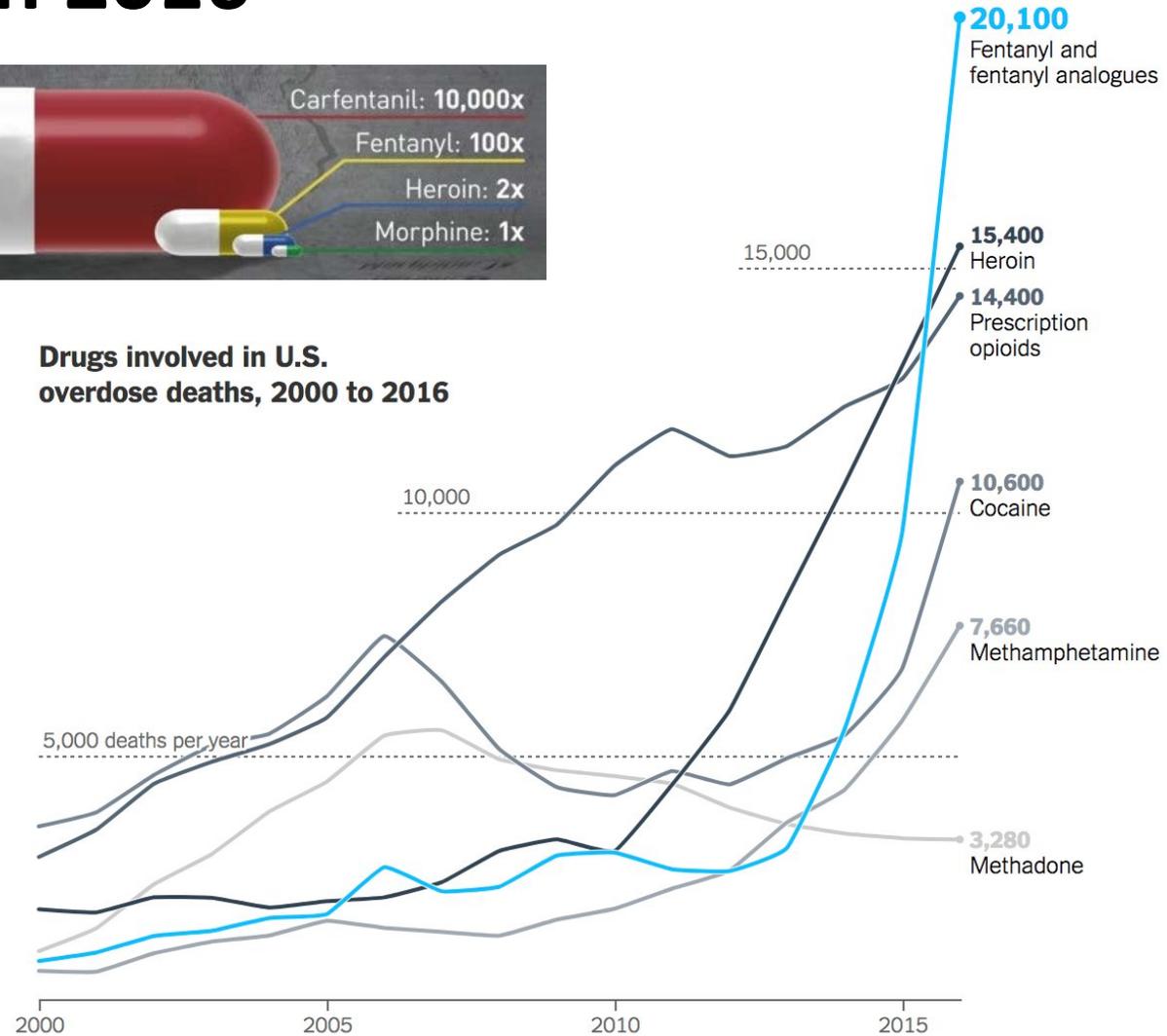


Source: IMS Health, U.S. Outpatient Retail Setting

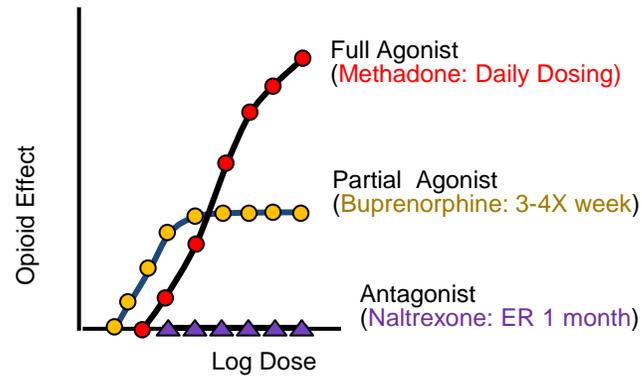
Fentanyl-Related Deaths Surpassed Heroin or Rx Opioids in 2016



Drugs involved in U.S. overdose deaths, 2000 to 2016



Medication Assisted Treatment (MAT)



DECREASES:

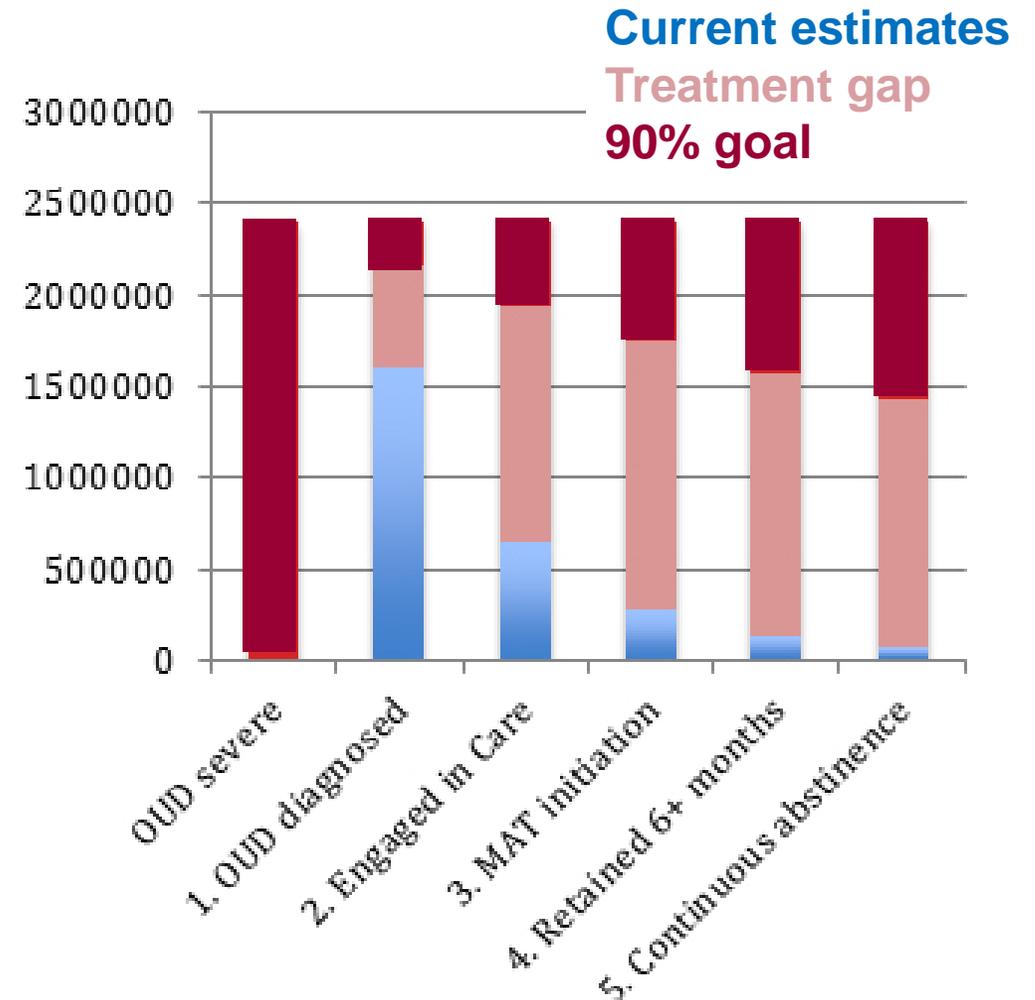
- Opioid use
- Opioid-related overdose deaths
- Criminal activity
- Infectious disease transmission

INCREASES

- Social functioning
- Retention in treatment

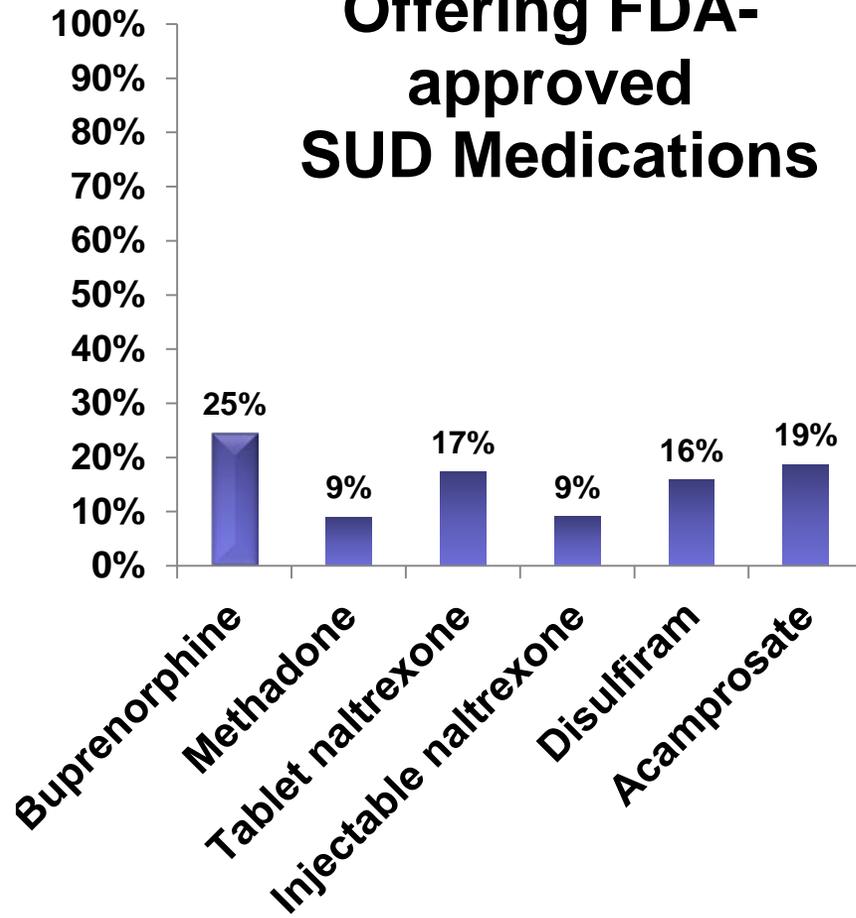
But MAT is highly underutilized!
Relapse rates are very high!

OUD Cascade of Care in USA



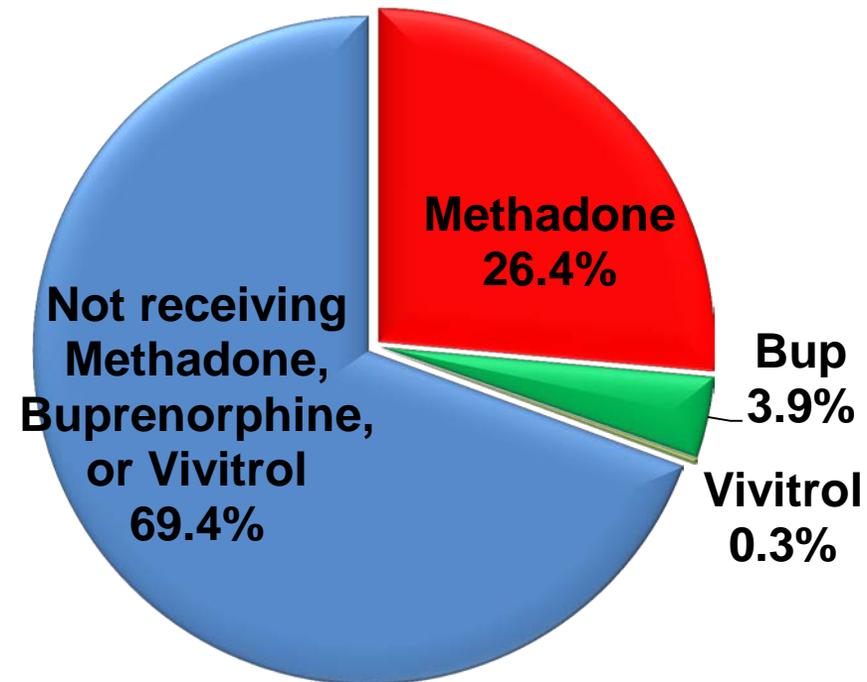
Improving Implementation of MAT

% Treatment Programs Offering FDA-approved SUD Medications



Knudsen et al., J Addict Med 2011.

% OTP patients receiving methadone, buprenorphine, or vivitrol

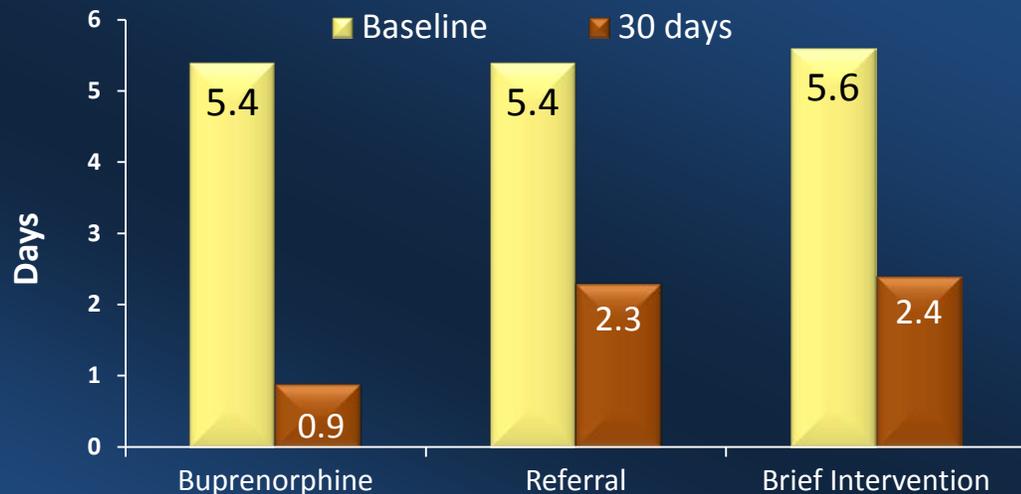


2012 N-SSATS Data, SAMHSA

Improving Treatments for Addiction: Implementing Medication-Assisted Treatment

- Emergency department-initiated buprenorphine
 - Reduced self-reported, illicit opioid use
 - Increased engagement in addiction treatment; decreased use of inpatient addiction treatment services

Self-Reported Illicit Opioid Use in the Past 7 Days



D'Onofrio G et al., JAMA April 28, 2015.



JAMA

Original Investigation

April 28, 2015 Volume 313

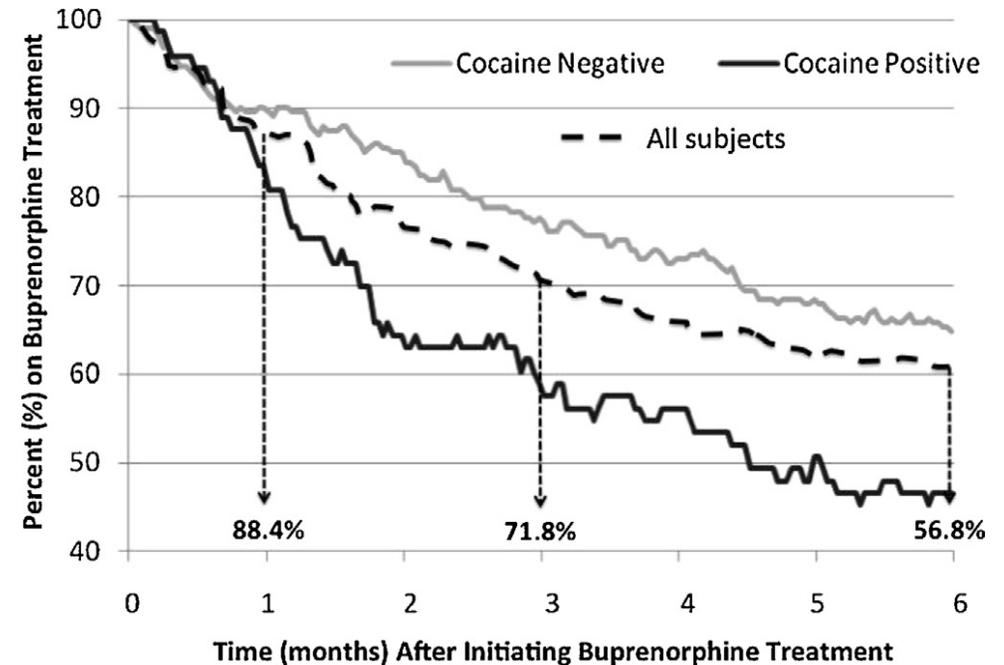
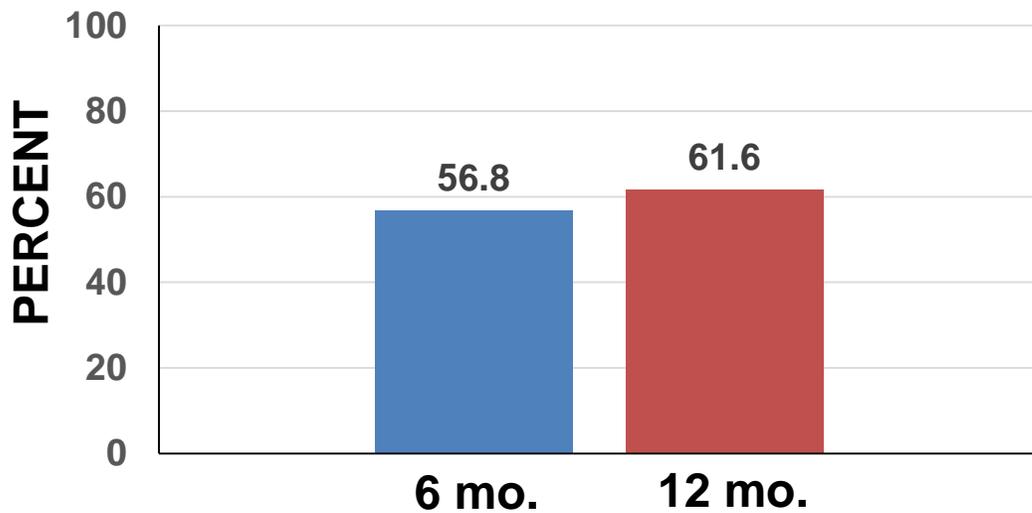
**Emergency Department-Initiated Buprenorphine/Naloxone
Treatment for Opioid Dependence
A Randomized Clinical Trial**

Gail D'Onofrio, MD, MS; Patrick G. O'Connor, MD, MPH; Michael V. Pantalon, PhD; Marek C. Chawarski, PhD;
Susan H. Busch, PhD; Patricia H. Owens, MS; Steven L. Bernstein, MD; David A. Fiellin, MD

Integrating Buprenorphine Treatment Into Federally Qualified Health Centers (FQHC):

Integrating BT in a large FQHC network increased **retention rates to levels similar to those reported by clinical trials**

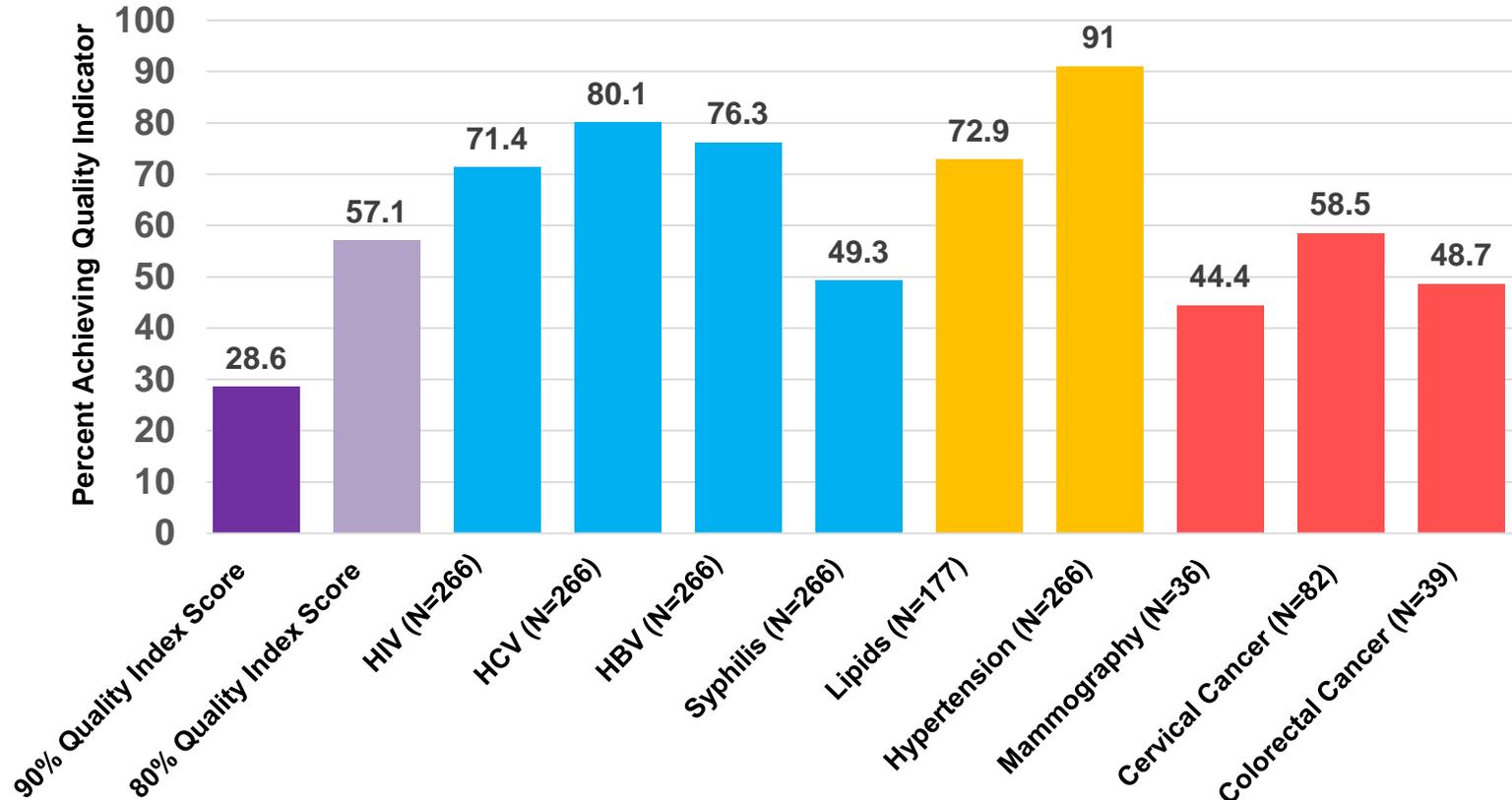
Retention on BT



Prescription of psychiatric medication and on-site substance abuse counseling improved retention whereas cocaine use decreased it

Buprenorphine Treatment (BT) Retention Improves Recommended Preventive Primary Care Screenings When Integrated into FQHC

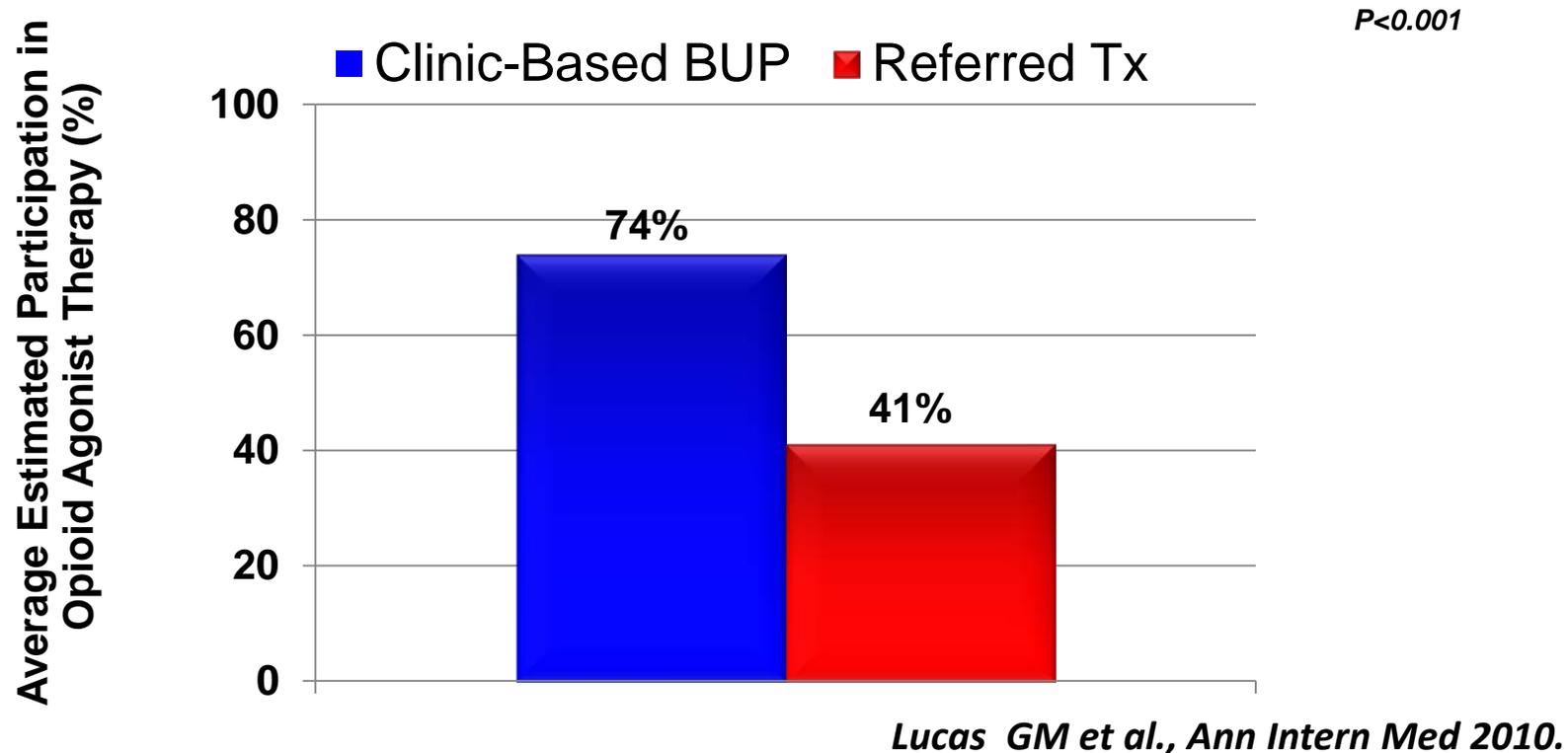
Proportion of subjects entering BT that received screening for primary care quality indicators



Integrating BMT into primary care settings could also improve co-morbid disease diagnosis and management of chronic diseases

Improving Treatments for Addiction in Health Care Settings: Infectious Disease Clinics

Infectious Clinic's-Based Buprenorphine of Opioid-Dependent HIV+ Patients vs Tx Referral



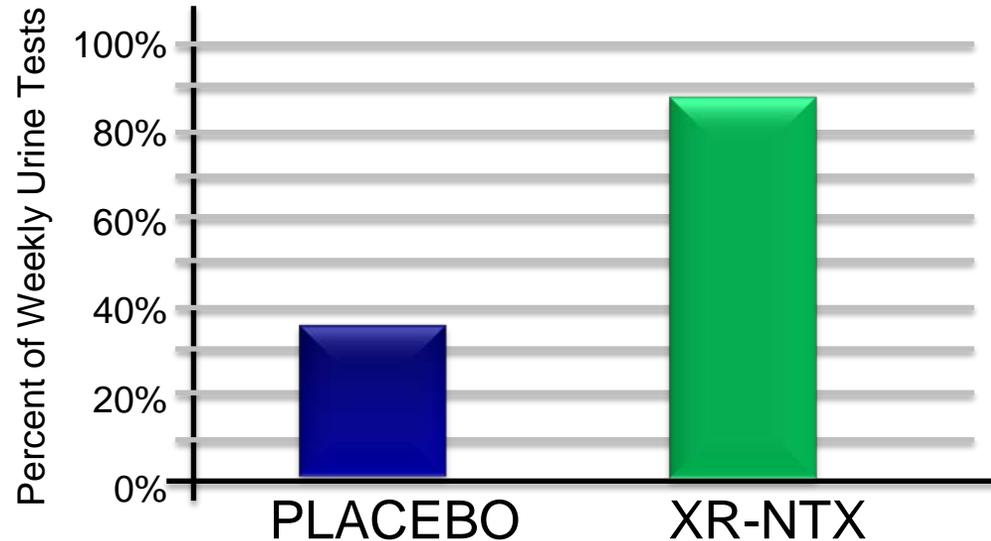
Extended Release Formulations

Vivitrol®



IM Injection q 4 weeks for 24 weeks

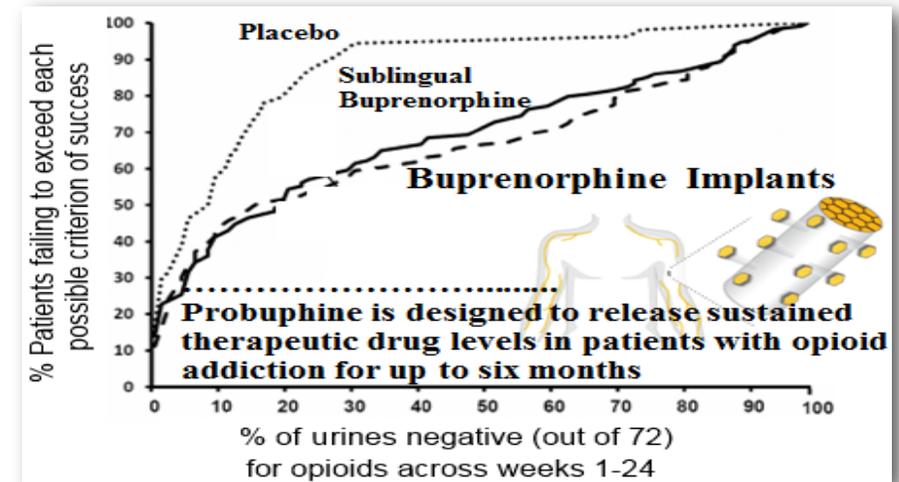
Median % Opioid-Negative Urines



■ Placebo: N=124
 ■ XR-NTX: N=126

Krupitzky et al., Lancet 2011

PROBUPHINE®



Rosenthal et al., Addiction 2013;105.

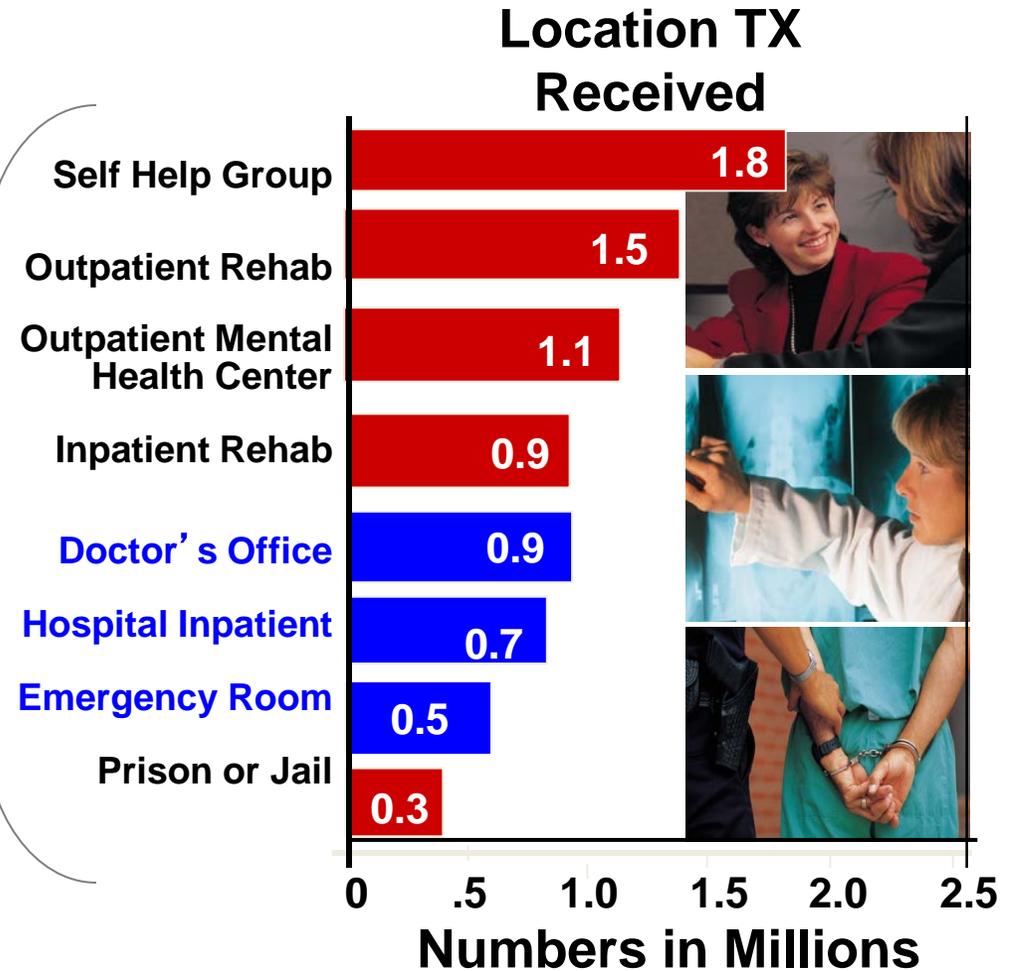
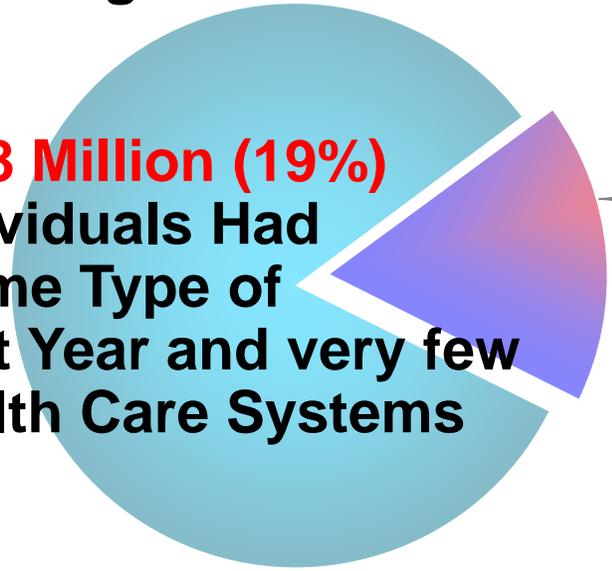
FDA approval – May 26, 2016

Opportunities for Partnership in the Development of Longer Acting Formulations and/or Drug Combinations to Improve Treatment Compliance and Retention

Opportunities to Expand Involvement of the Health Care System in Treatment of SUD

In 2016 An Estimated **20.1 Million Americans** 12 or Older Were Dependent On Any Illicit Drugs or Alcohol

But...Only **3.8 Million (19%)** of These Individuals Had Received Some Type of Tx In the Past Year and very few involved Health Care Systems



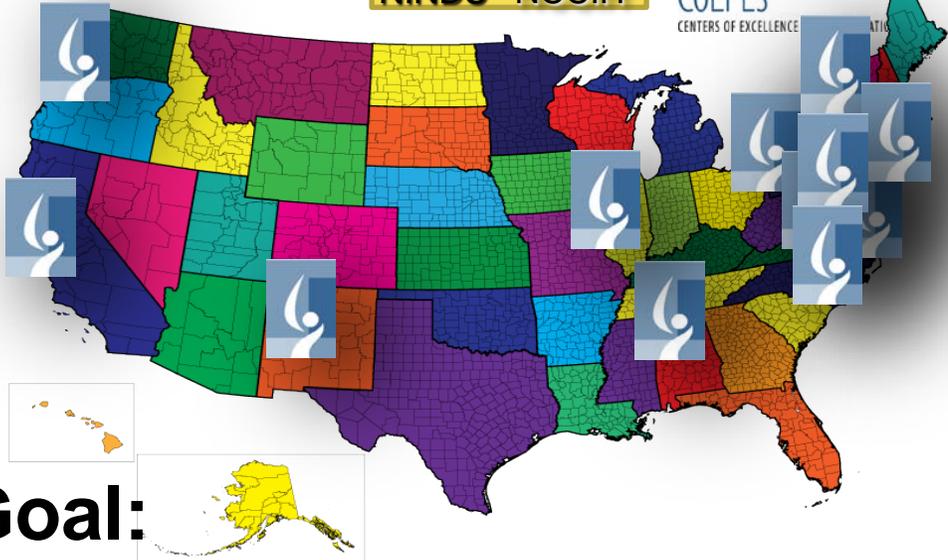
Source: 2016 NSDUH, National Findings, SAMHSA, OAS, 2017.

Education

PAIN

NIH Pain Consortium Centers of Excellence in Pain Education

- ORWH
- OBSSR
- NIDA
- NIDCR
- NINDS
- NIA
- NINR
- NICHD
- NIAMS
- NCCIH



Goal:
Improve pain treatment through education

SUD

**Centers of Excellence
for
Physician Information**

Goal:
Prevent SUD and improve outcomes in addiction through education of health care providers

