

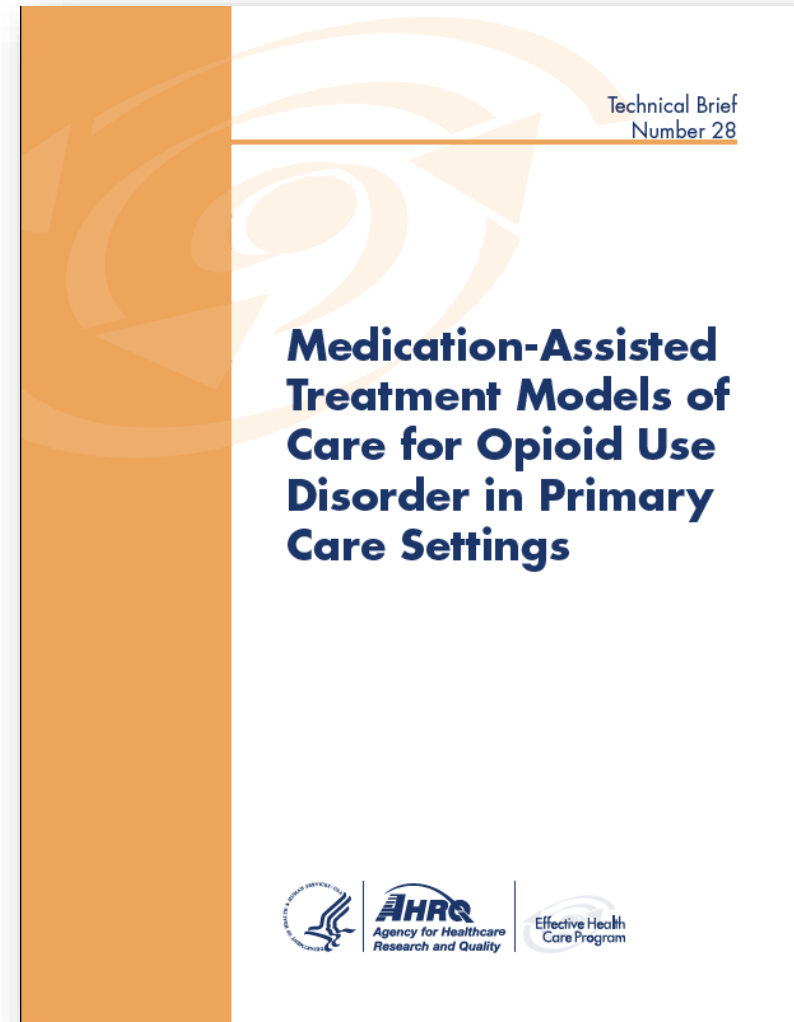
MAT in Primary Care

Experience of a unique partnership:

CommUnityCare – Integral Care – Community Care Collaborative

MAT Models

- Practice Based Models
 - OBOT
 - HIV/MAT
 - One-Stop-Shop (HIV/HCV/MAT)
 - Prenatal MAT
- Systems Based Models
 - Hub-And-Spoke
 - Medicaid Health Home
 - Project ECHO
 - Collaborative opioid prescribing
 - Nurse Care Manager
 - ED initiation of OBOT
 - Inpatient initiation of MAT



(Modified) Collaborative Care Model*

Patients

- MAP enrolled/eligible
- 18yo or older
- Stable housing
- Primary or secondary diagnosis of OUD

Conditions requiring consultation:

- Active alcohol or benzodiazepine or other substance abuse or dependence.
- Allergy to buprenorphine.
- Previous unsuccessful Buprenorphine/Naloxone treatment.
- Seizure disorder.
- HIV, Hepatitis C or B.
- Unsupportive recovery environment.
- Breastfeeding.

Care Team

- SW: intake call, screening
- RN/SW/MA: intake visit, data collection, UDS
- Physician: Exam, assessment, diagnosis of OUD, Rx
- RN: observed induction, patient education, monitoring, pharmacy coordination.
- SW: registry maintenance, CBO-partner outreach.
- BHC/SW: wrap-around BHC and social support.



*Alford, et al. Arch Intern Med. 2011 Mar 14;171(5):425-31

From: **Collaborative Care of Opioid-Addicted Patients in Primary Care Using Buprenorphine Five-Year Experience**

Arch Intern Med. 2011;171(5):425-431. doi:10.1001/archinternmed.2010.541

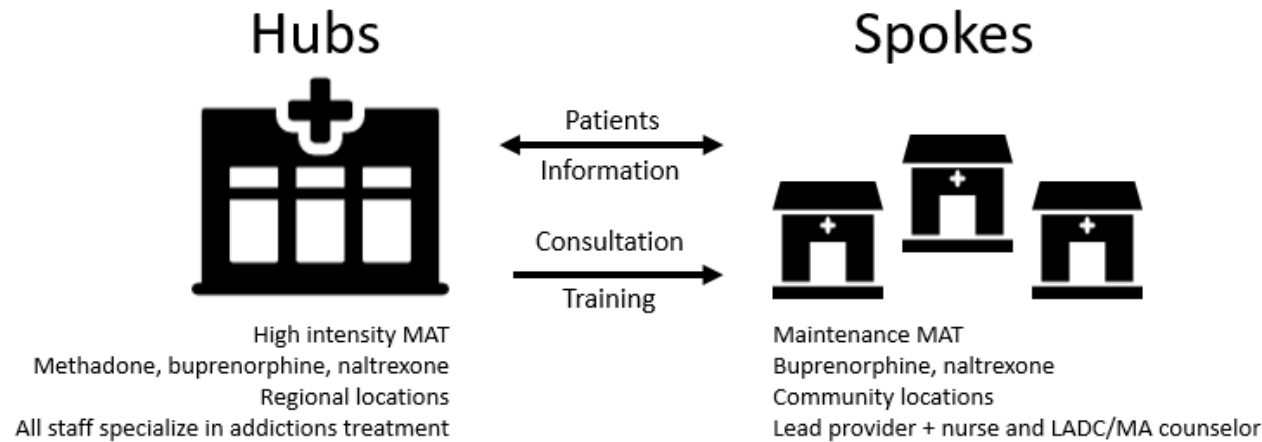
Table 2. Treatment Outcomes at 12 Months of 382 Opioid-Dependent Patients Entering Office-Based Opioid Treatment in Primary Care

Outcome	Patients, No. (%)
Successful treatment	196 (51.3)
Treatment retention	187 (49.0)
Successful taper after 6 months of adherence ^a	9 (2.4)
Unsuccessful treatment	162 (42.4)
Lost to follow-up	113 (29.6)
Nonadherence despite enhanced treatment ^a	46 (12.0)
Administrative discharge due to disruptive behavior	2 (0.5)
Adverse effects of buprenorphine hydrochloride	1 (0.3)
Transfer to methadone hydrochloride treatment program	24 (6.3)

^aAdherence was defined as attending scheduled office-based opioid treatment program appointments, complying with required monitoring (ie, urine drug tests or pill counts), absence of evidence of buprenorphine diversion, and lack of sustained illicit opiate use.

Table Title:

Treatment Outcomes at 12 Months of 382 Opioid-Dependent Patients Entering Office-Based Opioid Treatment in Primary Care



Hubs Offer Intensive Treatment for Complex Addictions

Expanded services and strong connections to Spokes.

Treatment intensity and staff expertise that some people require during recovery.

Hubs provide daily medication and therapeutic support.

Patients may move back and forth between Hub and Spoke settings over time.

Hubs offer all elements of Medication Assisted Treatment.

Additional Health Home supports are available: case management, care coordination, management of transitions of care, family support services, health promotion, and referral to community services.

Hub staff offer trainings and consultation to the Spoke providers.

Spokes Provide Ongoing Treatment in Community Settings

OBOT: addiction care is integrated into general medical care.

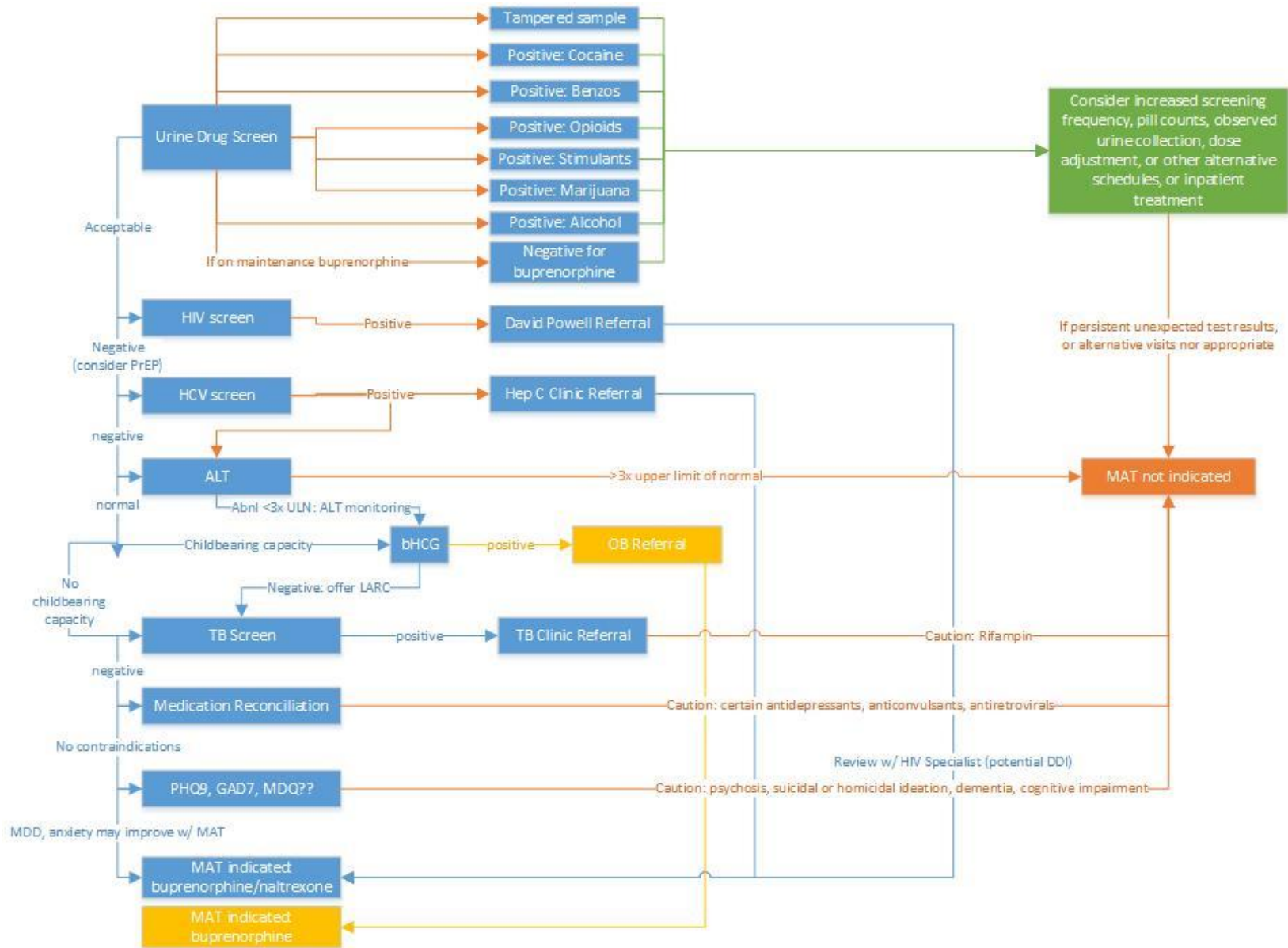
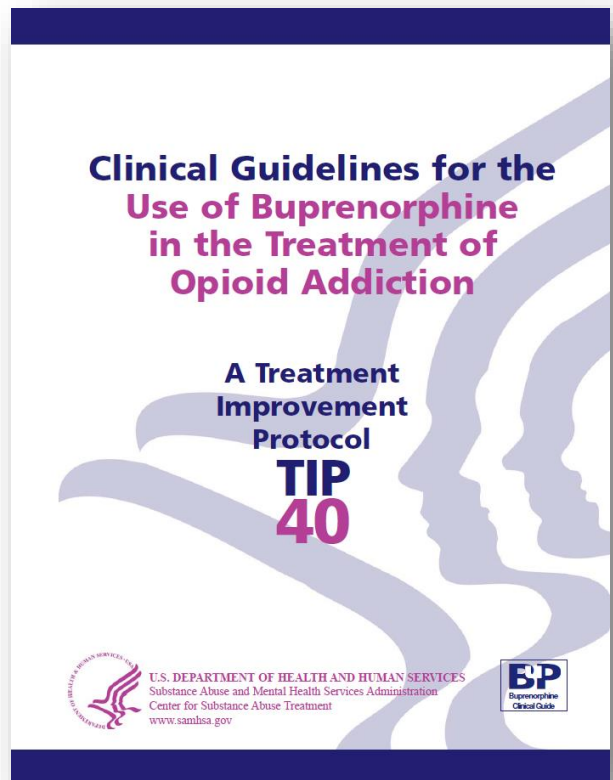
Spokes are primary care practices, including OB/GYN, outpatient addiction and chronic pain services.

Prescribers are physicians, NP/PAs federally waived to prescribe buprenorphine.

People with less complex needs may begin their treatment at a Spoke, other patients transition to a Spoke after beginning recovery in a Hub.

Care teams: one nurse and one licensed mental health or addictions counselor per 100 patients. Promote team-based care.

MAT Workflow



Data Collection

- Behavioral Health Measures
 - Level of Participation wellness services
 - Readiness Ruler Score
 - PHQ-9 assessment
- Medical Measures:
 - BMI & BP control
 - Tobacco usage
 - Substance Usage
 - Buprenorphine dose
 - QOL score
 - 1-year/5-year Mortality
- General Measures
 - ER utilization/costs
 - All-cause acute hospital admissions
 - PMPM Cost of Intervention
- Process Measures
 - Retention in Care
 - Enrollment

Next Steps

- Partnership
 - Dell/Seton hospital system for inpatient inductions
 - Austin Public Health
 - Texas Department of Corrections
 - Harm Reduction resources
 - Community outreach
 - Other CBOs
- Hub & Spoke team builds
- Data processing and sharing



Referrals:

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MAT Program

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Inpatient Buprenorphine Induction – Dell Seton Medical Center



A new start-up program – an important referral source for community MAT.

Inpatient buprenorphine induction

- Why initiate MAT in the hospital?
 - Hospitalization rates; readmission rates; relapse rates; recovery rates
 - Trowbridge, et al. Journal of Substance Abuse Treatment. 2017;79:1-5
- Barriers to MAT in the hospital
 - Patient misconceptions; clinician experience; stigma; leadership engagement; linkage to outpatient care
 - Hassamal, et al. Journal of Psychiatric Practice. 2017;23(3):221-229
- The case for Dell Seton Medical Center
 - Significant patient population in need of SUD treatment
 - Our Team & Goals
 - Where we are in the build
 - Where we are going...

Questions?

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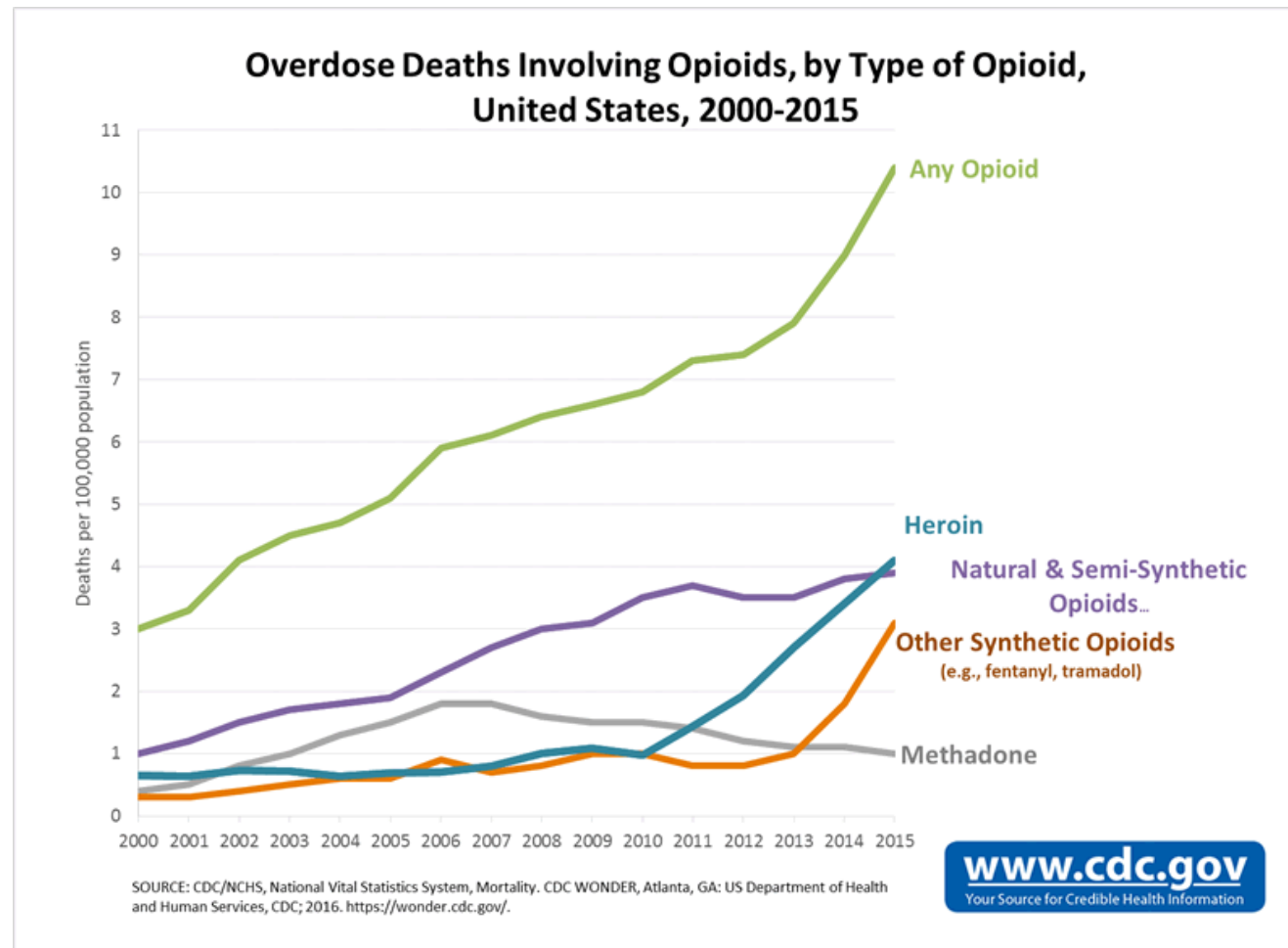
Implementation of MAT.

Craig Franke, MD
Chief Medical Officer

Epidemiology

The Impact of Opioid Use.

The Opioid Epidemic...



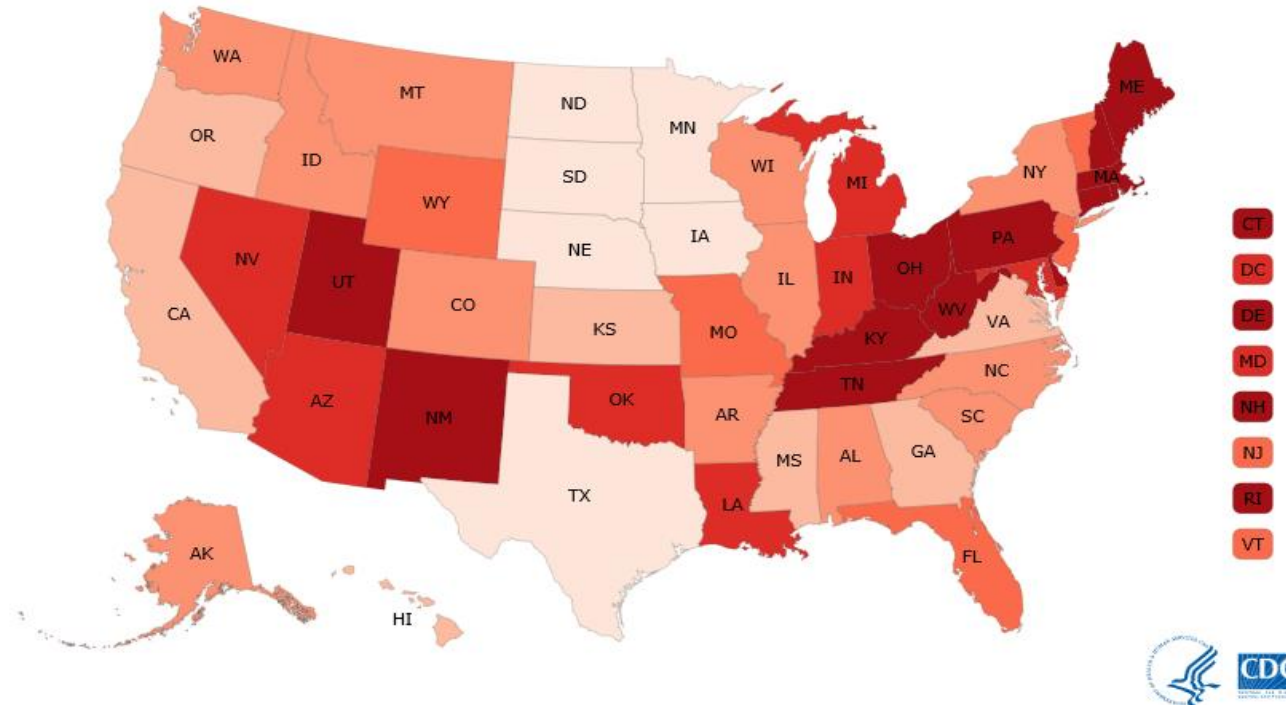
The supply of prescription opioids is high in the U.S.

- An estimated 1 out of 5 patients are prescribed opioids and 1 in 4 of these will suffer with addiction.
- Evidence is lacking that opioids improve chronic pain, function, and quality of life.
- Each day, 1000 people are treated in the emergency department for using opioids not as prescribed/directed.

Daubresse M, Chang H, Yu Y, Viswanathan S, et al. Ambulatory diagnosis and treatment of nonmalignant pain in the United States, 2000 – 2010. *Medical Care* 2013; 51(10): 870-878. <http://dx.doi.org/10.1097/MLR.0b013e3182a95d86>

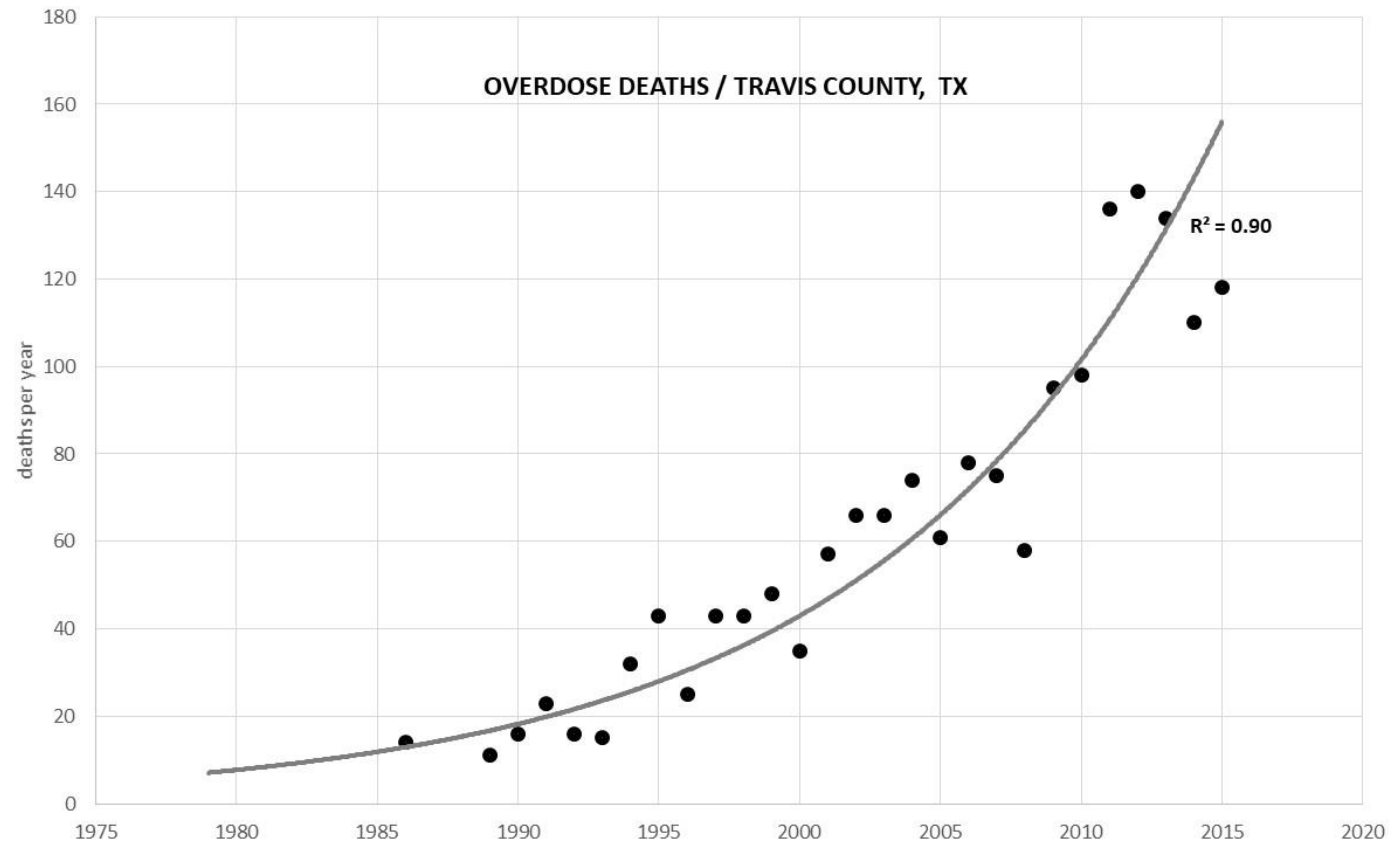
Substance Abuse and Mental Health Services Administration. Highlights of the 2011 Drug Abuse Warning Network (DAWN) findings on drug-related emergency department visits. The DAWN Report. Rockville, MD: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration; 2013. Available from URL: <http://www.samhsa.gov/data/2k13/DAWN127/sr127-DAWN-highlights.htm>

Number and age-adjusted rates of drug overdose deaths by state, US 2015 (per 100,000). *SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.*



Texas: age-adjusted rate of 9.4% totaling 2,588 deaths.

Overdose Mortality in Travis County, TX



Overdose Rates in Texas by County

2014 Overdose Death Rates per 100,000 in Texas Counties Due to **Heroin, Other Opiates, Other Synthetic Opioids, and Methadone**

- Bexar County 5.1
- Collin County 3.7
- Dallas County 6.8
- Denton County 2.8
- El Paso County 3.2
- Harris County 5.1
- Nueces County 10.4
- Tarrant County 4.9
- **Travis County 2.3**
- Counties not listed had unreliable rates

Source: CDC Wonder, Data downloaded on March 1, 2016

Treatment

Current available evidence-based interventions

Clinical Practice

- [Integration.samhsa.gov](https://integration.samhsa.gov)
- Practice implementation check list (SAMHSA)
- TIP 54: Managing Chronic Pain in Adults With or in Recovery from Substance Use Disorders
- Treatment Improvement Protocol (TIP) 40: Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction
- TIP 49: Incorporating Alcohol Pharmacotherapies into Medical Practice

Medication Assisted Treatment (MAT)

- Agonists
 - e.g., Methadone and buprenorphine
- Antagonists
 - e.g., Naltrexone and Naloxone
- Other
 - On-going research of novel approaches and/or repurposing use of medications. e.g., Gabapentin

Chronic noncancer/nonmalignant pain (CNCP).

- 32% chronic pain patients may have SUD (Chelminske et al., 2005).
- 29-60% with opioid use disorder report chronic pain (Peles, Schreiber, Gordon, & Adelson, 2005; Potter, Shiffman, & Weiss, 2008; Rosenblum et al., 2003; Sheu et al. 2008).

Chronic Pain

- **Nociceptive pain:** Prolonged nociceptive input can cause central hypersensitization and the experience of spontaneous or amplified pain.
- **Neuropathic pain:** results from lesion or dysfunction of the sensory nervous system. A compressed, injured, or severed nerve can trigger neuropathic pain, as can disorders that affect the neural axis (e.g., metabolic diseases, infections, autoimmune disorders, vascular diseases, neoplasia [Campbell & Meyer, 2006]).
- **Other:** Pains such as migraine and fibromyalgia, in which there is no noxious stimulus and no apparent neurological lesion, are attributed to dysfunction of a structurally intact CNS.

Chronic Pain

- Chronic pain often results from a protracted process of neural sensitization following acute injury or illness resulting in:
 - thresholds are lowered
 - responses are amplified (hyperalgesia)
 - normally non-noxious stimulation becomes painful (allodynia)
 - spontaneous neural discharges occur.

Pain Physiology

- Transduction
 - potassium, histamine, and serotonin, may be released by damaged tissue cells or by the circulating blood cells that migrate out of blood vessels into the area of tissue damage. Other chemicals, such as bradykinin, prostaglandins, and leukotrienes, are synthesized by enzymes activated by tissue damage
- Transmission
 - Ipsilateral ascending **Lateral Spinothalamic tract** (fast- and slow-conducting).
 - Projects to brain stem reticular formation, thalamus, somatosensory cortex, and limbic system. **Mu Receptors** are located in the Brainstem and Medial Thalamus, they are responsible for supraspinal analgesia, respiratory depression, euphoria, sedation, decreased gastrointestinal motility and physical dependence.
- Modulation
 - discrete neuronal network running from the midbrain to the medulla and then to the spinal cord (Basbaum and Fields, 1978, 1984). This descending, pain-modulating pathway projects to regions of the spinal cord that contain pain-transmission neurons.

Managing Pain in SUD

- Focus on function/pain reduction (not absence of pain).
- Treatment agreements
- Opioid rotation and Mu-receptor polymorphism.
 - Cochrane review (Quigley, 2004) showed limited evidence but concluded practice efficacious.
- Failure of prolonged opioid therapy should be discontinued.
- Non-opioid pharmacological and non-pharmacological interventions (CAM).
- Unstable psychiatric and SUD co-morbidities must be treated primarily.