Northwest (HHS Region 10)
ATTC Addiction Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

Northwest ATTC presents

Management of Opioid Use Disorder in Primary Care

Joseph O. Merrill, MD, MPH
University of Washington Associate Professor of Medicine

ADAI | ALCOHOL & DRUG ABUSE INSTITUTE

Today's Presenter

Joseph Merrill, MD, MPH

- University of Washington Associate Professor of Medicine
- Certified expert in addiction medicine
- Clinical and research expertise
  - Primary care
  - Addiction medicine
  - Pain medicine
  - HIV medicine

Management of Opioid Use Disorder in Primary Care

NW ATTC Webinar
April 25, 2018
Joseph Merrill, MD, MPH
University of Washington
Harborview Medical Center

Case – Initial Presentation

- 35 yo man with HIV and HCV admitted to HMC after an opioid overdose
- Complicated by respiratory failure and deltoid abscess requiring operative debridement
- History of heroin multiple times daily and methamphetamine use daily for over 10 years
- Disengaged from medical care with high HIV RNA and CD4 180, but no HIV complications
- Requiring high doses of opioids for pain control

Management of OUD in Primary Care

- Update on the opioid epidemic
- Effective phamacotherapy of opioid use disorder
- Models of primary care OUD treatment
- Massachusetts Nurse Care Manager Model implementation at Harborview
- Program policy evolution

Opioid Epidemic

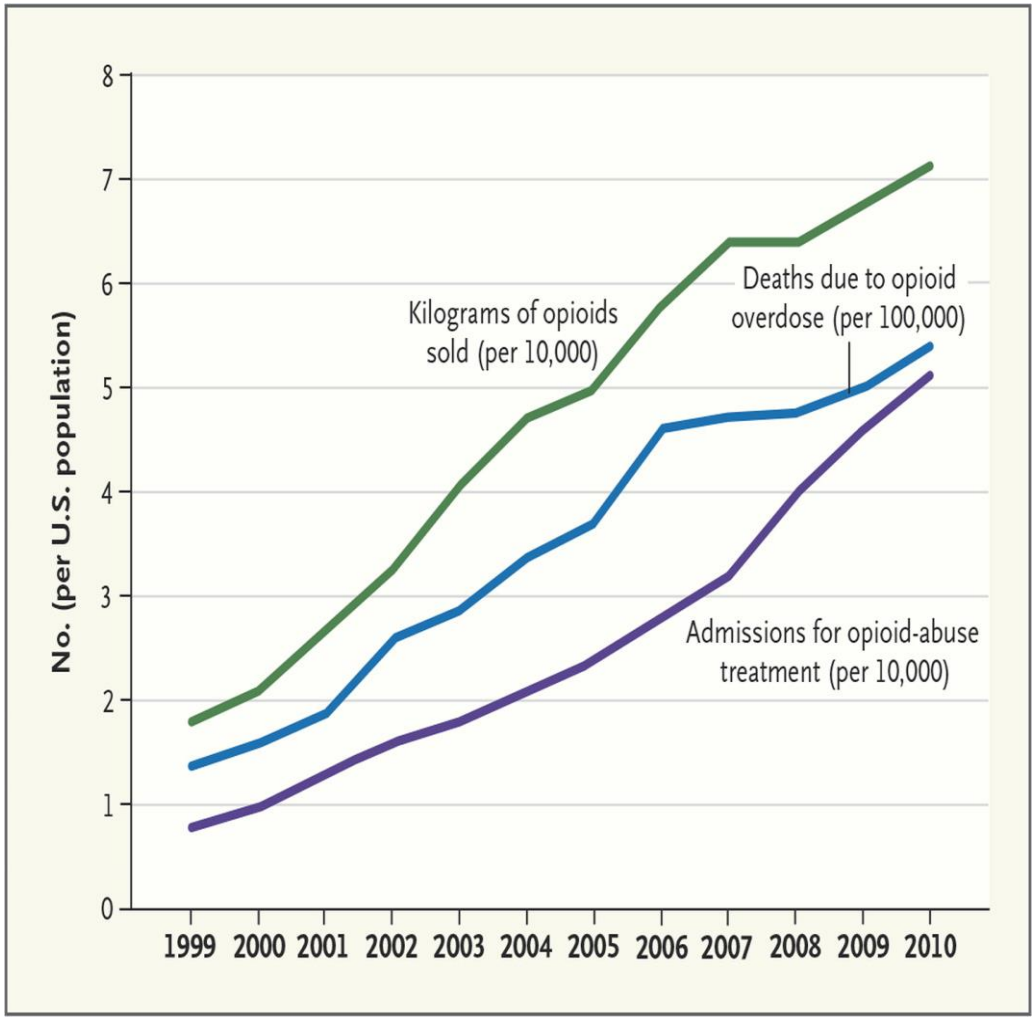
- In 2015, 2 million US adults had prescription Opioid Use Disorder (OUD) and 591K had heroin-involved OUD
- 33,091 died from opioid-related overdose
- New increases noted in HIV and HCV cases in rural areas and among young adults due to injection use of opioid

Origins of the Opioid Epidemic

- 1990s norm that all pain should be eliminated
  - Pain as the "5th vital sign"
- Pharmaceutical company promotion
- Opioid over-prescribing
- Diversion, and widespread non-medical use of opioids, especially among youth
- Heroin widely available and less costly
- Limited access to medication treatment

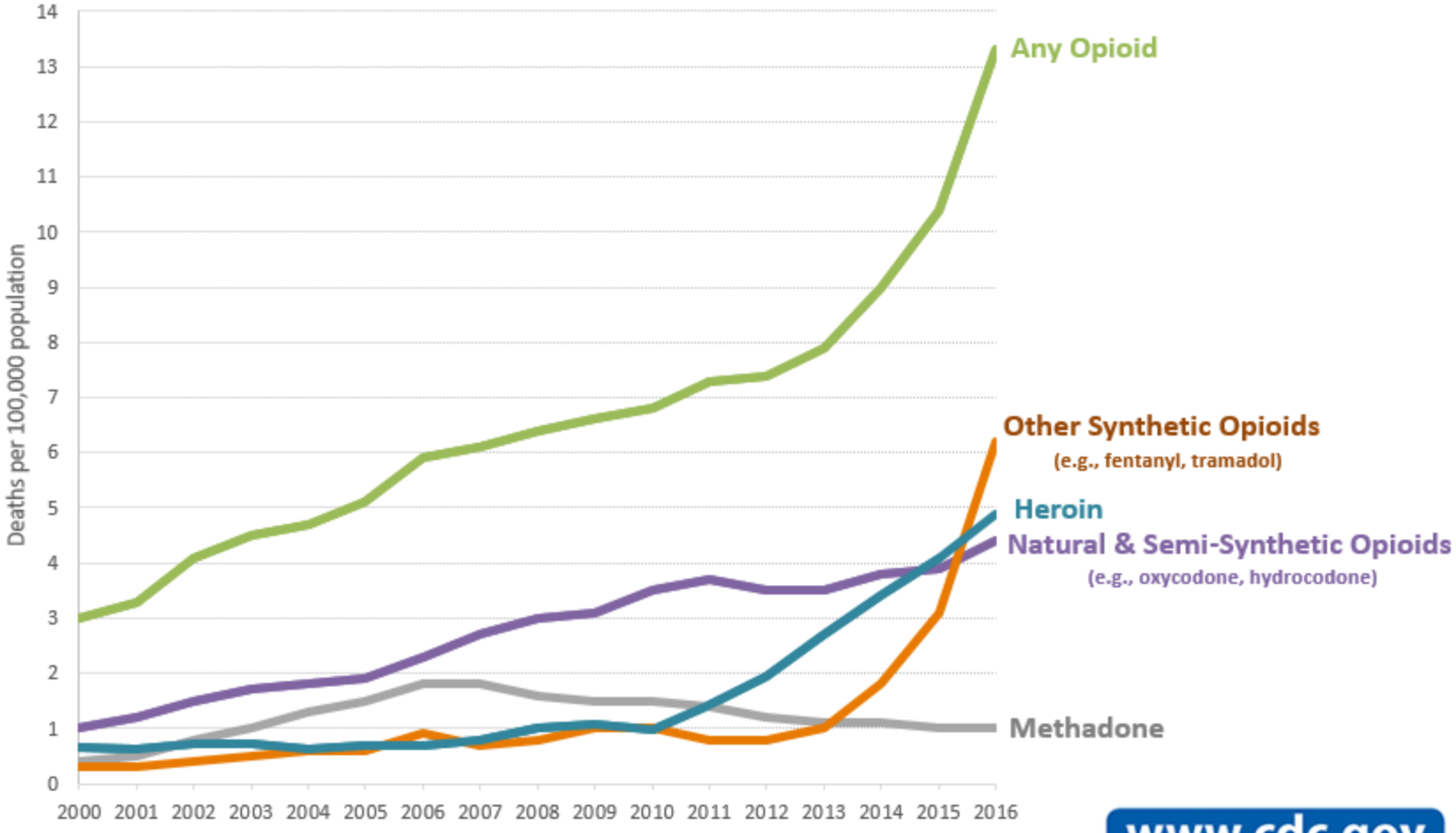
Dreamland: The True Tale of America's Opiate epidemic by Sam Quinones

Opioid Sales, Admissions for Opioid-Abuse Treatment, and Deaths Due to Opioid Overdose in the United States, 1999–2010.



Volkow ND et al. N Engl J Med 2014;370:2063-2066.

Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2016



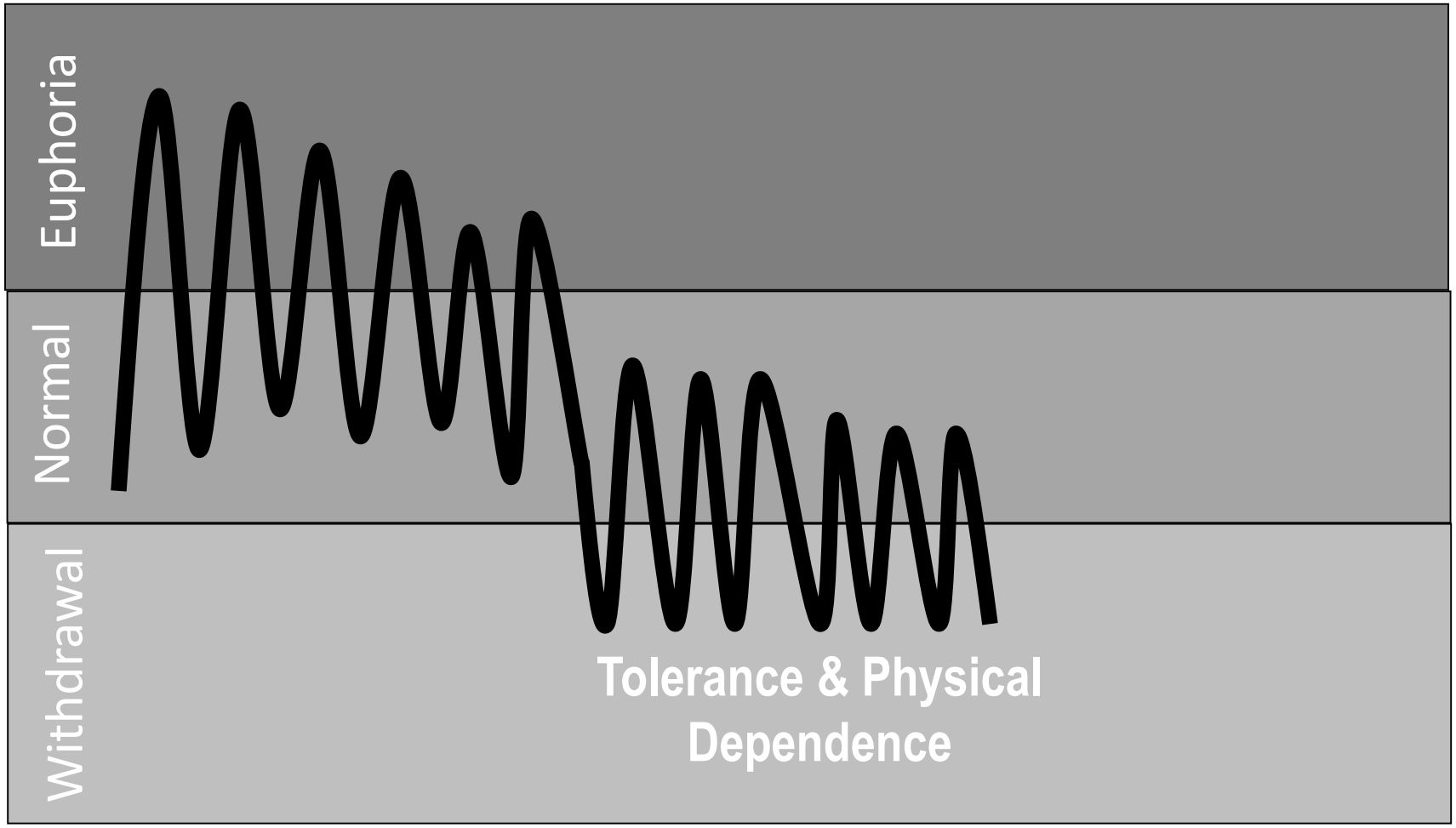
SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Ser vices, CDC; 2017. https://wonder.cdc.gov/.

www.cdc.gov
Your Source for Credible Health Information

Case – Hospital Course

- Acute pain service consulted early in course, with multi-modal therapy including opioids
- Initially resistant to addiction treatment, but as discharge approached and pain medication tapered, asked for treatment for OUD
- Distant history of methadone maintenance but discharged for ongoing methamphetamine use
- Never treated with buprenorphine

Opioid Addiction and Treatment



Alford, Boston University, 2012

Methadone for OUD

- Most effective treatment
  - ↑ survival, treatment retention, employment
  - ↓ illicit opioid use, hepatitis and HIV infections, crime
  - Longer duration and higher dose treatment more effective
  - Cost-effective: every dollar invested generates $4-5 in savings
  - Poor outcomes after discharge (90% relapse rates)
- Highly regulated, dispensed at Opioid Treatment Programs (OTP)
  - Supervised daily dosing with take-home doses if stable
  - Counseling, urine testing
  - Psychiatric, medical services often not provided
- Illegal to prescribe methadone for OUD

Methadone for OUD

- Full opioid agonist with active metabolites
- Onset 30-60 minutes
- Long-acting: single daily dose effective for OUD
- Dose 20-40 mg daily for acute withdrawal
- Maintenance dosing 80-120 mg daily
- Mechanism of action is increased tolerance
- Some important drug interactions (rifampin, anticonvulsants, some HIV medications)

Methadone for OUD

- Key questions for patients on methadone:
  - Recent urine test results
  - Take-home status – best measure of stability
  - Dose trajectory
- Advise staying in treatment until social, medical, psychiatric, legal and family issues are stable
- Discuss possibility of extended take-home doses as an alternative to tapering

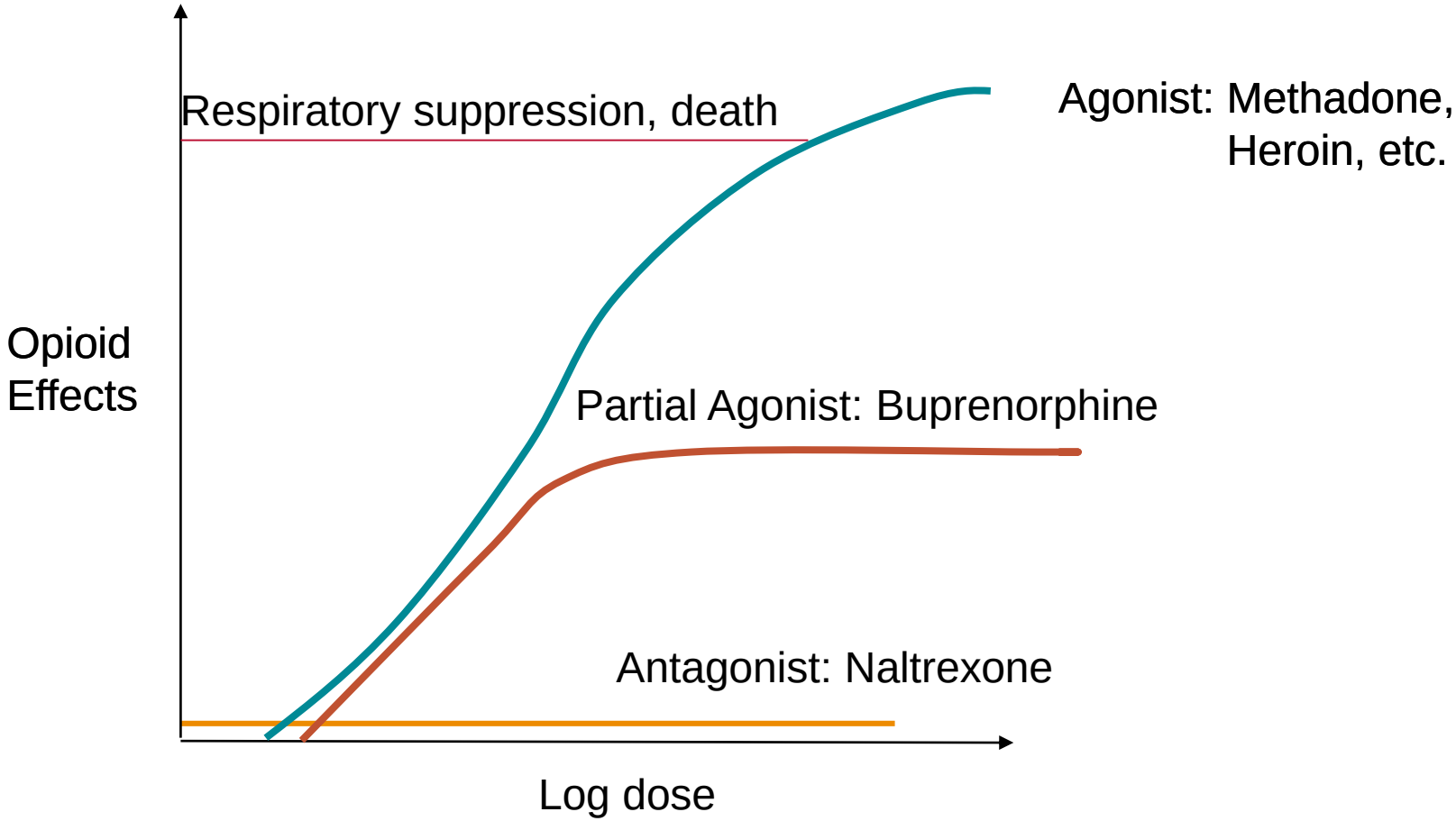
Buprenorphine for OUD

- 2000 Federal Drug Addiction Treatment Act :
  - Made office-based addiction treatment by physicians legal
  - Must complete 8-hour training and obtain federal waiver
- 2002: Buprenorphine/naloxone) FDA approved
  - Outcomes much superior to psychosocial treatment alone
  - Longer treatment duration is more effective
- Compared to methadone:
  - Similar abstinence from illicit opioids and decreased craving
  - Lower retention in treatment
  - Can be prescribed in general practice, lowering barriers to treatment

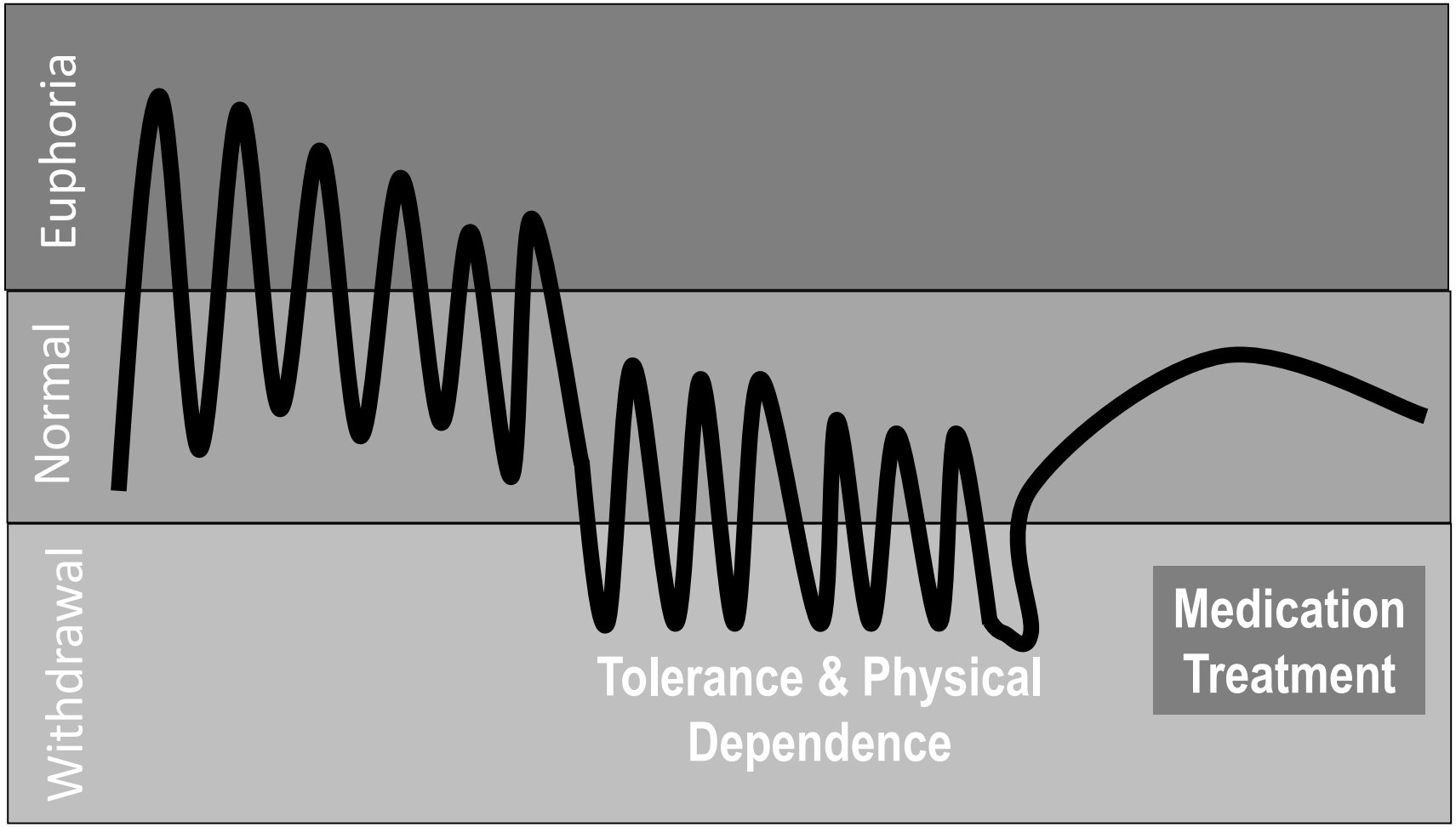
Buprenorphine for OUD

- Partial opioid agonist, so safer than methadone
- High mu receptor affinity, so blocks other opioids
- Can precipitate withdrawal in tolerant patients
- Formulated with naloxone - abuse deterrent
- Sublingual dosing
- Requires induction after patient enters mild-moderate withdrawal
  - Home induction appears to be safe and effective
- Induction from methadone more difficult
  - Taper to ~30 mg
- Implant approved for stable patients on ≤8 mg buprenorphine. Monthly injectable recently approved

Why is Overdose Potential Low with Buprenorphine?



Opioid Addiction and Treatment



Alford, Boston University, 2012

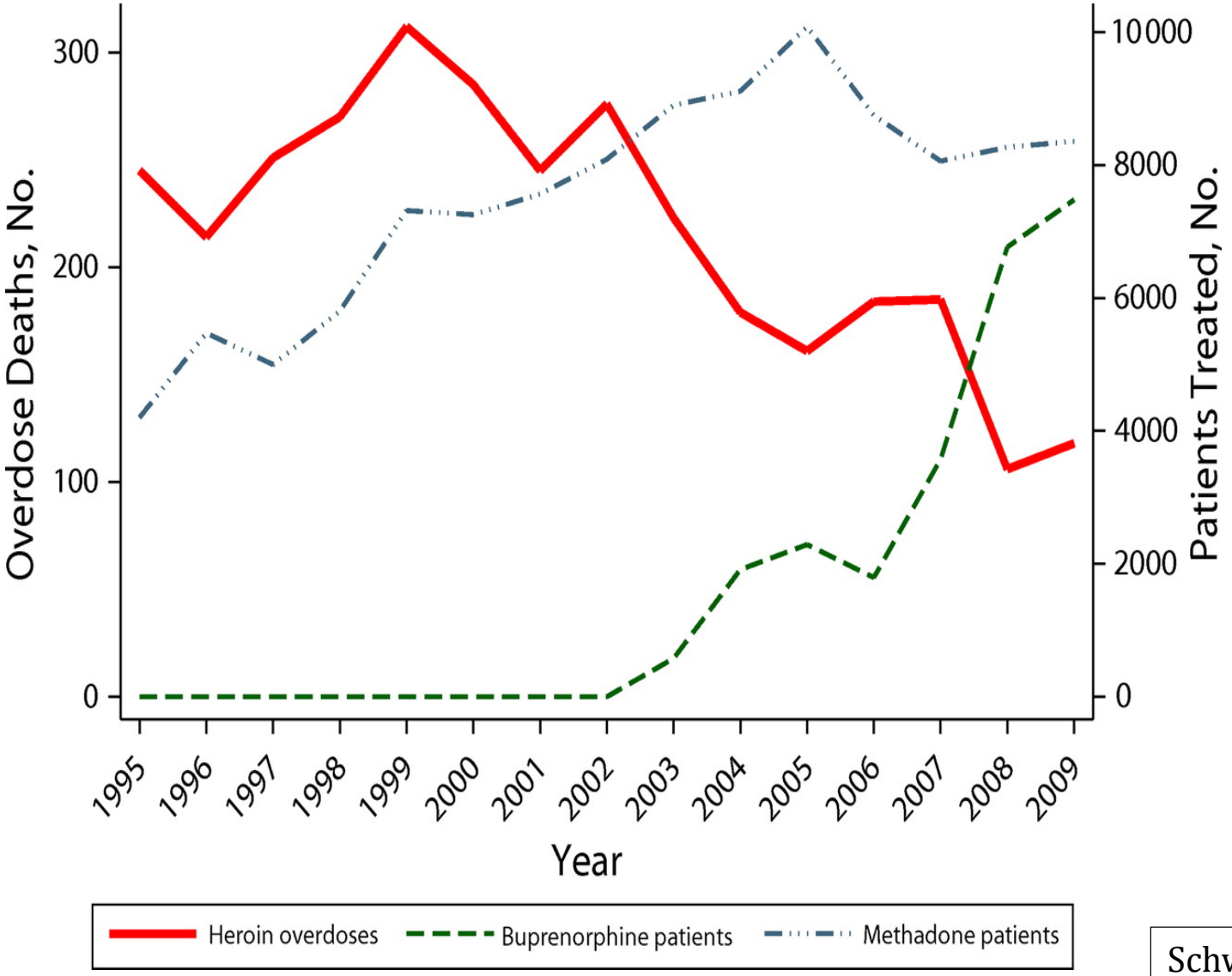
Trial of Buprenorphine

- 40 people addicted to heroin
- Buprenorphine 16mg/day vs taper + placebo
- All received individual counseling + therapy groups
- Followed for 1 year

	Buprenorphine	Placebo
Retained at 1 year	70%	0
Died	0	20%

Kakko et al, Lancet 2003

Opioid agonist treatments and heroin overdose deaths: Baltimore, Maryland, 1995-2009



Schwartz, AJPH, 2012

Naltrexone for Opioid Addiction

- Opioid antagonist with low diversion risk
- Requires full opioid detox prior to induction
- Oral formulation ineffective
- Monthly injectable (XR-NTX) FDA approved
- X:BOT trial XR-NTX vs BUP-NX recently reported:
  - More patients induced onto BUP-NX than XR-NTX (94% vs 72% $p<0.001$) and fewer relapsed (57% vs 65% $p=0.036$)
  - Of those induced (per protocol), relapse rates were comparable (XR-NTX 52% vs BUP-NX 56% $p=0.44$)
- Agonist treatment should be offered to those unable to complete detox

Lee JD, et al. Lancet 2017. Published online 11/14/17

Buprenorphine in Primary Care

- Not widely used in primary care
- Most prescribers treat few patients, so poor access
- Barriers in primary care include:
  - Urgency of scheduling
  - Induction visit and frequent early follow up (consider home induction)
  - Urine testing and prescription logistics
  - Linkages to psychosocial services
  - Difficult decisions about when to stop or refer
- Some physicians restrict prescribing to patients who were already in their own practice

Buprenorphine in Primary Care

- Advantages of buprenorphine in primary care:
  - Setting built for chronic disease management
  - Reduces the stigma of addiction treatment
  - Reduced contact with active drug users
  - Facilitates management of mental health and medical co-morbidities and preventive care
  - Important tool when problems arise during chronic opioid therapy for chronic pain
  - Public health benefit: increases local access to lifesaving care
- Highly gratifying form of treatment!

Models of Primary Care OUD Rx

- Practice-based OBOT with little or no additional staff beyond DATA 2000 waivered prescribers
  - Adapted for HIV, prenatal clinics
- Systems-based models with additional staff
  - Hub & Spoke/Collaborative models
    - Some centralized induction/stabilization/referral
  - Massachusetts Nurse Care Manager Model
  - Telehealth ECHO expert support for local staff
- Linkage to primary care from ED, inpatient

Korthuis PT et al. Ann Intern Med 2017;166:268

Barriers to Treatment

- Spectrum of policies determine access to treatment
  - Calls/visits prior to medication
  - Requirements for initiating or remaining in treatment
- Lower barrier programs (eg same day treatment)
  - Targets harder to reach patients (homeless, not treatment seeking, co-occurring problems)
  - Priority on access to medication (counseling optional)
  - Issues include missed appointments, diversion concerns, untreated mental health problems, transition to ongoing care
- Each program needs to create policies that balance access to treatment with maintaining integrity of the treatment setting

Kourounis G, et al. Drug Alcohol Depend 2016 Apr 1;161:1

Massachusetts Model

- Staffing/funding model to expand capacity:
  - Nurse Care Manager - provides most clinical care
  - Program Manager – scheduling, paperwork, reporting, etc.
  - Leverages prescribing physician time
- Replicated in >20 clinics in MA through state grants:
  - Clinics commit to hire staff
  - Nurse Care Manager case load of 100-125 patients
  - Admit 2-3 patients per week
- Replicated in Adult Medicine Clinic at Harborview and Evergreen Treatment Services through SAMHSA grant

LaBelle C et al. JSAT 2016 Mar;74:65

Primary Care Patient Flow

- Program Manager screening
- Nurse Care Manager Assessment
- Physician intake appointment
- Nurse Care Manager induction visit (or home induction)
  - Close follow up by phone
  - Weekly visits until stable
  - Weekly urine testing
- Physician visits monthly or less

Clinical Decision Making

- Stable patients attend monthly
- Unstable patients continue weekly
  - Consider dose increase
  - Add mental health care, sober support, HAP groups
- Weekly team meetings for tough decisions
- Can transfer to OTP for daily buprenorphine
  - Return after 4 consecutive negative urine tests
- Can transition to methadone maintenance, inpatient addiction treatment

Harborview Progress

- Funding began 8/15, full staffing 1/16
- Enrolment of ~12 patients/month
  - 55% male, average age 36.9, 78% white
  - Moderate-severe depression (67%), anxiety (62%), PTSD (56%)
  - IDU 31%, housed 91%, employed 31%, criminal justice 12%
  - 6-month retention rate 60%, 1-year 51%
  - Large reductions in drug use, ED and hospital admissions
- 3 summer training programs at HMC in 2016, 2017
- AMC site supporting prescribers at other HMC primary care clinics
- Evergreen model similarly successful

Opioid State Targeted Response (STR)

- WA State Opioid STR
  - Prevention (prescribing practices, PDMP, others)
  - Treatment, especially Hub & Spoke Project

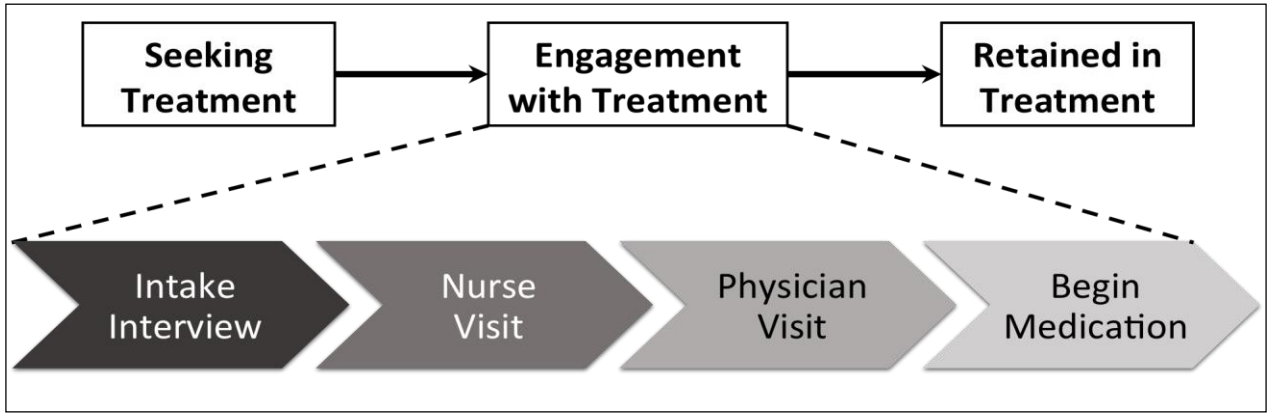
Hub & Spoke Project funded 6 networks

- Includes primary care, behavioral health, SUD treatment providers
- Flexible staffing support for Nurse Care Managers, care navigators, administrative support at Hubs and Spokes
- Commit to treating 200 new patients per year

Case – Outpatient Course

- Buprenorphine initiated on hospital discharge
- Not interested in addiction treatment groups, so treated in primary care
- Fully engaged in treatment
  - Making all appointments – “bonding” with team
  - Urine tests consistently negative for opioids
  - Adherent to antiretroviral medications
  - Wants Hepatitis C treatment
- Continues using methamphetamine

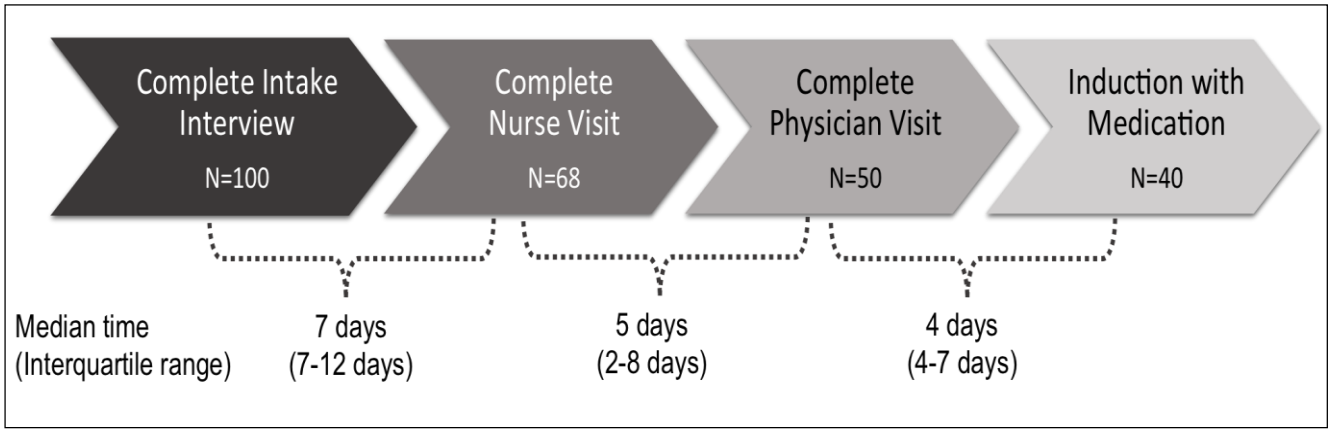
Linking Patients with Buprenorphine Treatment in Primary Care: Predictors of Engagement



- Retrospective chart review of first 100 HMC OBOT patients, including detailed telephone screening data
- Assessed predictors of medication initiation
- Initial clinic policy required urine test without cocaine or methamphetamine prior to medication initiation

Simon C, et al. Drug Alcohol Depend. 2017 Oct 10; 181:58-62.

Predictors of Engagement: Results



- Sixty percent dropped out prior to medication initiation
- Initiation less likely in those with polysubstance use and prior addiction treatment
- As a result, clinic policy changed to allow induction prior to discontinuation of cocaine/methamphetamine

Simon C, et al. Drug Alcohol Depend. 2017 Oct 10; 181:58-62.

Lowering Barriers to Engagement in a Primary Care Based Buprenorphine Treatment Program

- Retrospective chart review of patients before and after policy change lowering barrier to care
- Patients stratified by recent cocaine/meth use
- Low barrier conditions led to higher rates of medication initiation among cocaine/meth users
- Low barrier condition not associated with overall 90 day treatment retention
- Polysubstance users may require additional supports

Payne B, et all. In preparation.

Case – Harm Reduction

- Assessing continued progress in treatment
  - HCV infection treated successfully
  - Switched from injecting to smoking meth
- Conversation switched from possibility of changing treatment setting to options for safer use of meth
  - Hydration, nutrition, mouth care
  - Safer sex
  - Use in a safe place with safe people
  - Maybe take a day off each week

Management of OUD in Primary Care

- The opioid epidemic requires urgent efforts
- Effective phamacotherapy of OUD is available
- Multiple primary care OUD treatment models exist, but none are widespread
- Additional staffing very helpful in primary care to serve those in need
- Program policies impact access to care and need for support services

Thanks!

Contact: joem@uw.edu

Surveys

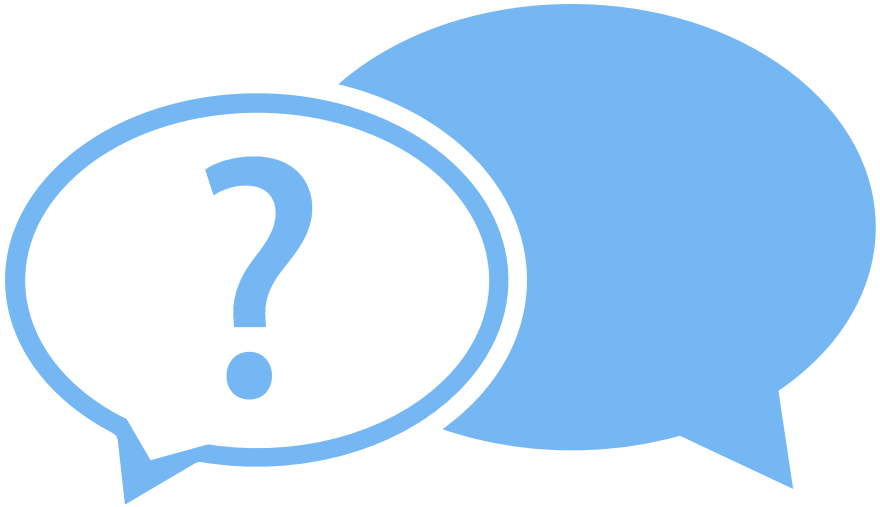
Look for our surveys in your inbox!

We'll send two short surveys:
one now, and
one in a month.

We greatly appreciate your feedback! Every survey we receive helps us to improve and develop our programming.

Q&A

Questions? Please type them in the chat box!



Upcoming Events

Thank you for coming!

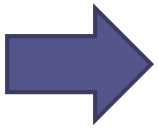
Join us for our next webinar:

Best Practices in Recovery Oriented Systems of Care: the Case of Pioneer Human Services, in WA State

Dr. Stephen Woolworth
May 30, 2018, 12-1pm

Opioid Use Disorder – DSM-5

OPIOID USE DISORDER
Larger amounts than intended
Persistent desire to cut down or quit
Significant time spent taking, obtaining
Craving or urge to use
Failure to fulfill obligations
Continued use de spite negative interpersonal consequences
Reduced social, recreational activities
Use in physically hazardous situations
Use despite knowledge of harms
Tolerance (excludes rx medication)
Withdrawal (excludes rx medication)
* Recurrent legal problems deleted



SEVERITY
No SUD: 0-1
Mild: 2-3
Moderate: 4-5
Severe: >5

Moderate-severe OUD ≈ opioid dependence (DSM-IV)

Key principles:
- Negative consequences
- Cravings
- Tolerance
- Withdrawal