Current Opiate Prescribing Trends

• CDC reports that health care providers wrote 259 million prescriptions for painkillers in 2012
• Enough for every adult in the US to have a bottle of Rx painkillers (around the clock every day for 1 month)
Current Drug Abuse Trends

• 4.9 million people in US are current, nonmedical users of prescription opioids
• 80 percent of heroin users started with painkillers
• Approximately 100 people die every day in US from drug overdoses (Tripled since 1990)
• Opiates were involved in 74% of these overdose deaths
• Leading cause of accidental deaths in 30 states including PA (more than MVA’s)

-PA Med Society
The graph shows the percentage of respondents using different primary drugs over the years from 2008 to 2014.

- **Prescription opioids only**: The percentage decreased annually from 70% in 2008 to 64% in 2014, with an annual percent change of -6.1%.

- **Heroin and prescription opioids**: The percentage increased annually from 20% in 2008 to 30% in 2014, with an annual percent change of +10.3%.

- **Heroin only**: The percentage increased slightly from 10% in 2008 to 12% in 2014, with an annual percent change of +14.4%.

ASAM National Practice Guidelines

- 3 FDA approved meds to treat Opiate Use Disorder
- Medication Assisted Treatment (MAT)
- Clinically and cost effective interventions
- Psychosocial treatment recommended with all MAT
- Saves lives, saves money (healthcare and societal)
- Only 30% of treatment programs offer MAT
- 3% of US physicians have DEA waiver-1% active
- Less than half of eligible patients have access to MAT
- MISSED OPPORTUNITY to use most effective medications we have to treat OUD amidst a crisis
MAT: Methadone

- Methadone-maintenance programs developed in 1960’s
- Full Mu opioid agonist
- Used for physiologic dependence on opioids
- Suppresses opioid withdrawal
- Blocks effects of illicit opioids
- Reduce cravings and stop illegal use of opioids
- Increase participation of recovery activities
- Prescribed within a structured setting-limits availability
- Dosed daily
- Inexpensive
MAT:Buprenorphine

• Partial Mu agonist*
• Used for physiologic dependence on opioids
• Suppresses opioid withdrawal
• Blocks effects of illicit opioids
• Reduce cravings and stop illegal use of opioids
• Increase participation of recovery activities
• Expanded availability through outpatient treatment
• DATA 2000-DEA Waiver for any physician (8 hr training)
• Partial mu agonist-ceiling effect/poor bioavailability/lower OD risk
• Prevents withdrawal symptoms limiting euphoria
• Strong affinity at mu receptor- may precipitate withdrawal if taken while opiates are still in system
• Withdrawal from buprenorphine is less severe than a full agonist
Pharmacology of Buprenorphine

• *Orally* it’s rapidly metabolized and as a result has poor bioavailability
• *Sublingually*, bioavailability is significantly better
• Onset 1 hour, peaks at 2 hours, half life 24-36 hours
• Relatively safe for patients with renal insufficiency
• Combined with benzodiazepines can cause fatal respiratory depression (contraindicated)
• Metabolized in the liver via cytochrome P450 3A
• Use with caution in patients with moderate hepatic impairment; dosage adjustment recommended in severe hepatic impairment
Suboxone (buprenorphine/naloxone)

• Why Naloxone?
  • poor bioavailability when taken SL or PO, but excellent bioavailability when it is taken IV (deters from IV abuse)

• Buprenorphine/naloxone combination is preferred but still abused (esp. opioid naïve pts)

• Suboxone
  • Buprenorphine + Naloxone
  • Tabs/filmstrips

• Zubsolv
  • Buprenorphine + Naloxone
  • Tabs

• Subutex
  • Buprenorphine mono
Buprenorphine Practical Application

• Induce medication when patient is in mild to moderate withdrawal (COWS)
• Approximately 6 hours after heroin, 24 hrs after methadone
• Start low: 2-4 mg and increase in 2-4 mg increments
• Ceiling effect at 16 mg a day
• Can split dose (generally 8 mg bid)
• Can also treat withdrawal with adjuvant therapies
  • Clonidine, NSAID's, loperamide
MAT: Naltrexone

• Mu antagonist-long acting
• OUD treatment/relapse prevention
• Prevents relapse to opioids to those *no longer physically dependent*
• Blocks effects of opiates
• Reduces cravings
• Oral and depo formulations available (ReVia/Vivitrol)
• No withdrawal
• Stop 1 day prior to starting opiates (30 days for depo)
MAT: Naltrexone

- Mu receptor antagonist-short acting (Narcan)
- Used to treat opiate overdose
- Third party Rx legal in PA
- Auto injector available
- Virtually no contraindications including pregnancy