Community Care
OF NORTH CAROLINA

Project ECHO®

CCNC Opioid SPARC ECHO

High-Dose Opioid Management

Steven Prakken MD
Chief, Medical Pain Service
Duke Pain Medicine

September 4, 2019

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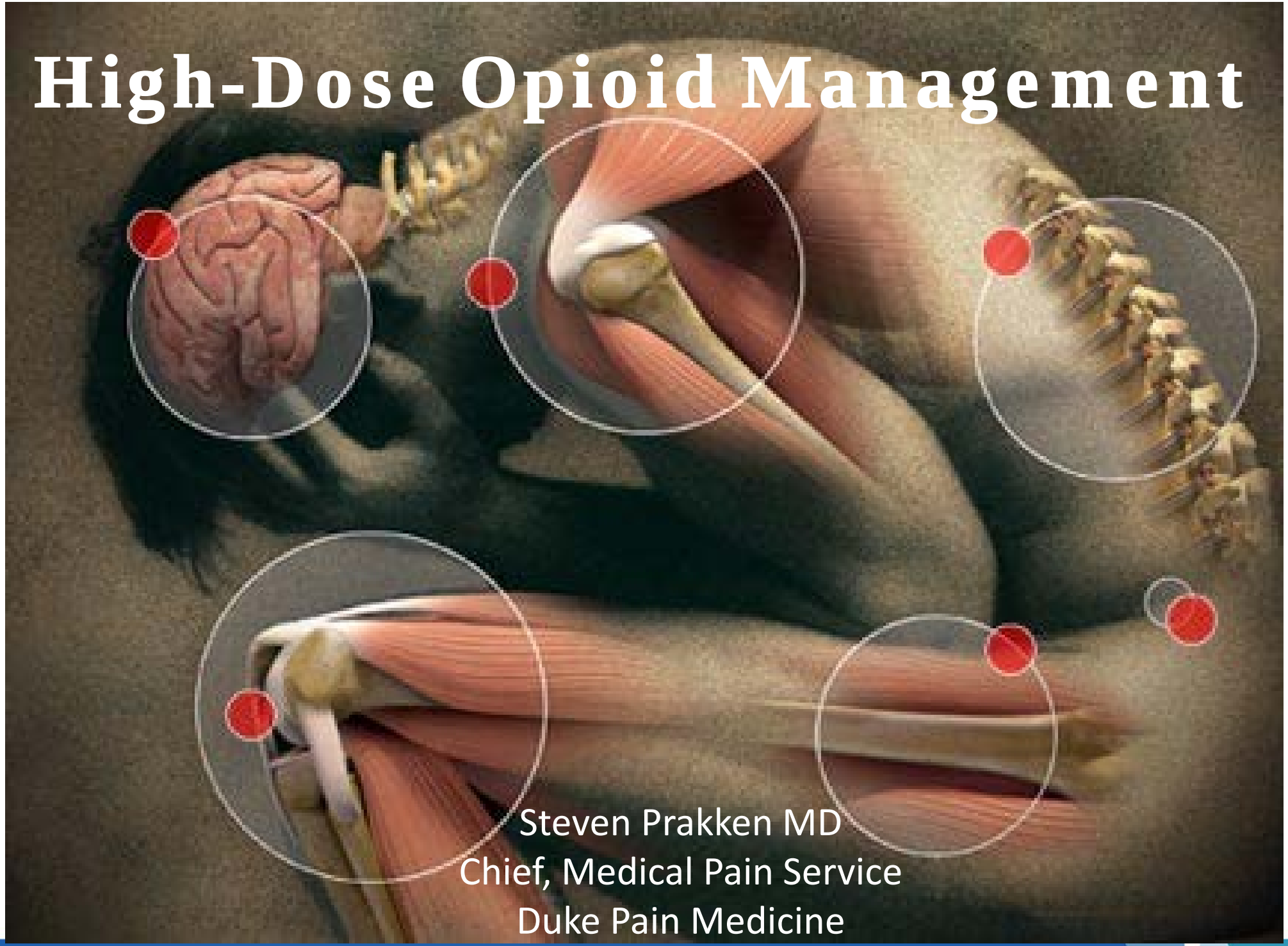

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High Dose??

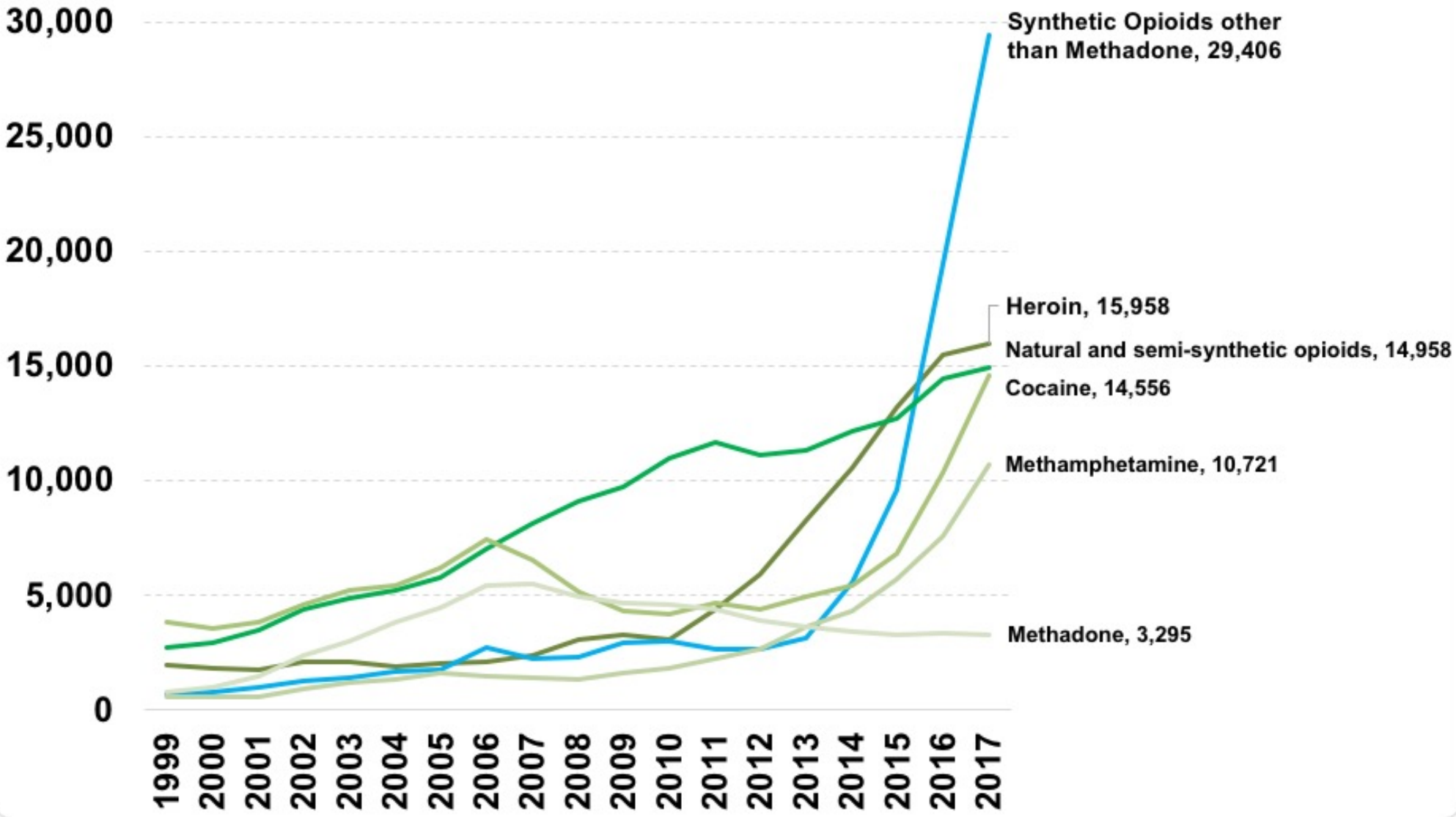
- CDC guidelines
  - #5, Use lowest possible dose, determine cost/benefit if >50 MME and avoid >90 MME
  - Level 3 data, observational studies
- Pain patient study
  - 80% of death is >100MME
- NC data 2010
  - No change in curve after 100MME

CDC 2016, Dasgupta 2010

Why Not High Dose?

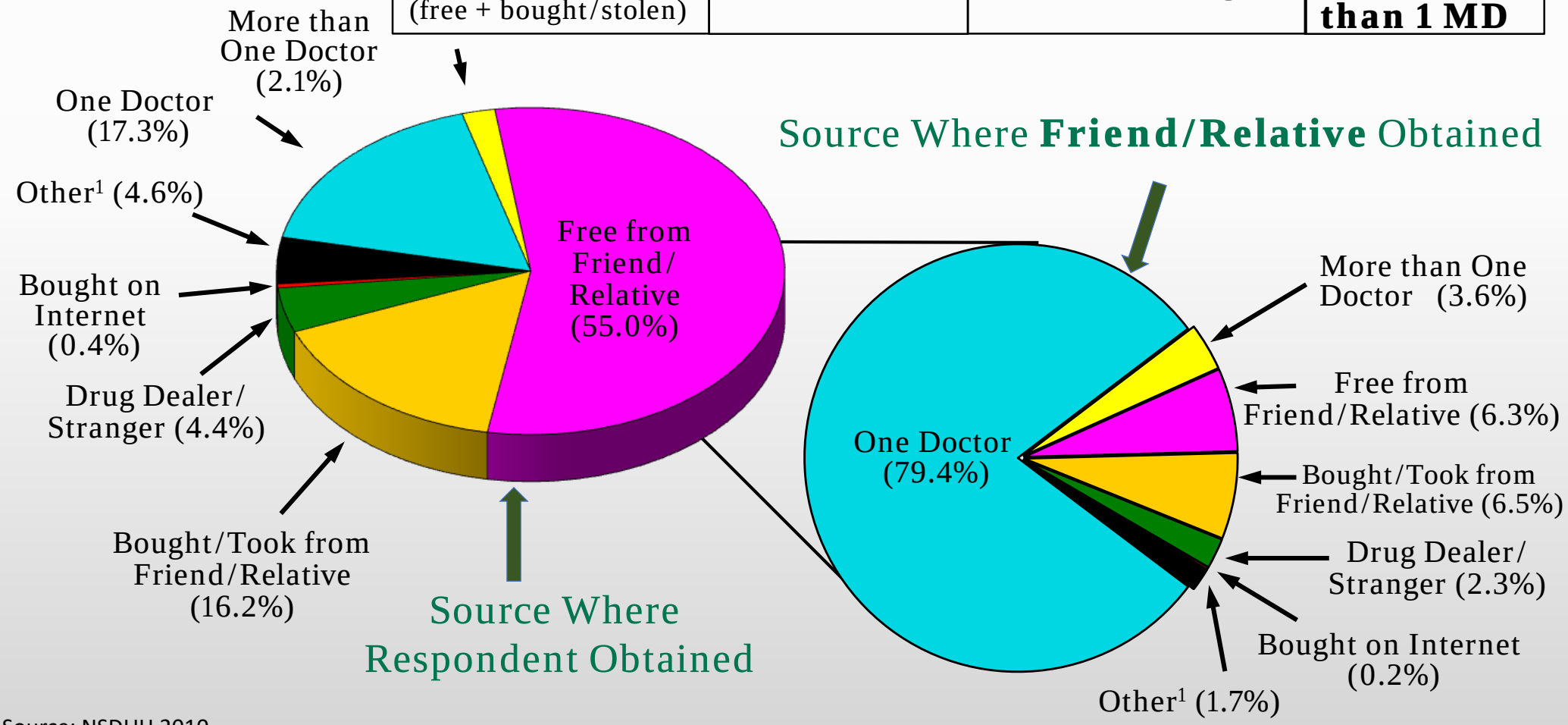
- Death
- Diversion
- SUD vs. Misuse
- Side effects
  - Constipation
  - Hormonal dysregulation
  - Immunologic dysregulation
  - Sedation
  - Stimulation
  - OIH
- Tolerance

Drugs Involved in U.S. Overdose Deaths, 1999 to 2017



Source Where Pain Relievers Were Obtained for Most Recent Nonmedical Use Among Past Year Users Aged 12 or Older: 2010

71% From **friend/relative** (free + bought/stolen)	**73%** of all meds/nonmedical are from **1 MD**	**4%** of all nonmedical are from **Drug dealer/stranger**	**4%** of all nonmedical are from **more than 1 MD**



Source: NSDUH 2010

[1]The Other category includes the sources "Wrote Fake Prescription," "Stole from Doctor's Office/Clinic/Hospital/Pharmacy," and "Some Other Way."

Substance Use Disorder (SUD)

- Rate in pain "last year" for 2016, SAMHSA
  - 7.5% of population with SUD (20.1 million)
    - 75% with ETOH
    - 37% with illicit drug
    - 12% with both
- Rate in Pain and Primary Care
  - 8% - 12% (Systematic review from 38 studies, with 26% primary care settings, 53% pain clinics)
- Chronic pain in opioid addiction is 29% to 60%

2017 NSDUH Report, Vowles 2015, Peles 2008

Substance Related Disorders

- Pharmacological indicators
  - Tolerance
  - Withdrawal
- Impaired control
  - Greater amount and longer use
  - Unable to quit
  - Time to obtain extensive
  - Craving
- Social impairment
  - Role failure
  - Use with known social harm
  - Social loss due to use
- Risky use
  - Use in spite of physical danger
  - Use with continued psych/social harm

Severity score:

-Mild (2-3)

-Moderate (4-5)

-Severe (6 and more)

Opioid Misuse

- Rate in pain last year for 2016, SAMHSA
  - 4.4% of population (11.8 mil)
    - No change from 2009-2016
  - 80% say that their misuse is for pain, tension, sleep, or mood
  - 12% say they use to "get high" or "feel good"
- Rate in Pain and Primary Care
  - 21% - 29% (Systematic review from 38 studies, with 26% primary care settings, 53% pain clinics)
- Misuse is not SUD

2017 NSDUH Report, Vowles 2015

High-Dose Opioid Management

- First things to do:
  - Avoid getting there
    - Treatment based on function, not pain score
    - Realistic expectations
      - 30% - 50% max relief
    - Interventional options
    - Adjunctive meds
    - Opioid rotation
      - Early and repeatedly
      - Use for MME reduction

Pharmacologic Treatments

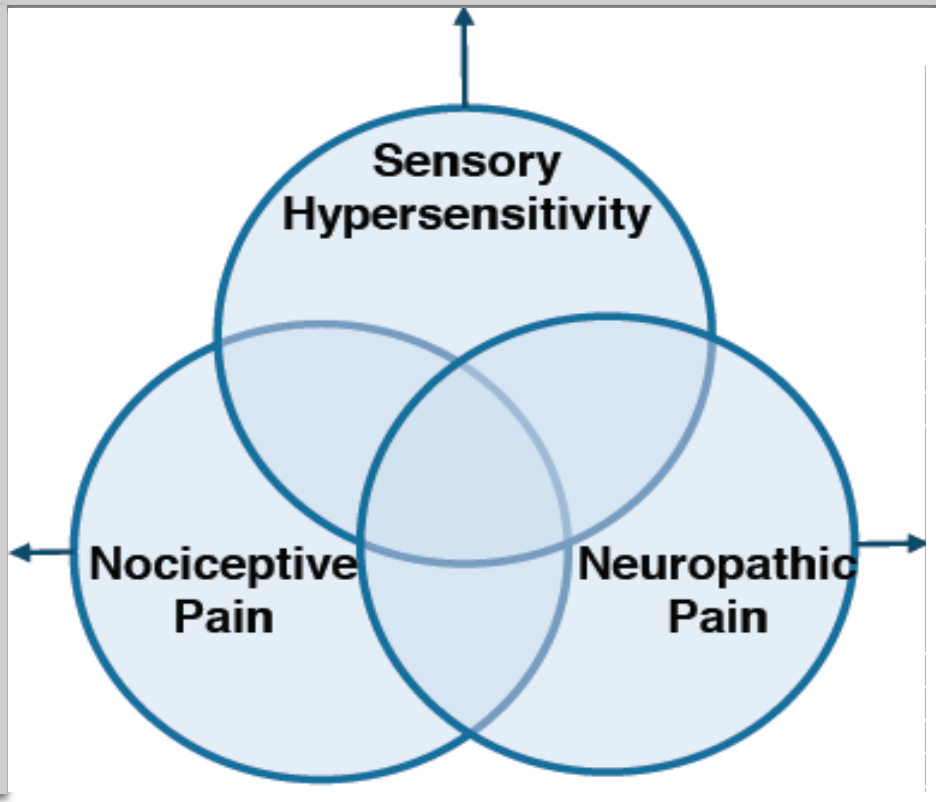
Alpha-2-delta ligands, SNRI'S,
tricyclics, beta-blockers, antidepressants
NE agents, etc. Tramadol, Tapentadol
Avoid opioids in Migraine and Fibromyalgia

NSAIDS
oral
Topical

Duloxetine

Tramadol
Tapentadol

Opioids
last option



Alpha-2-delta ligands
SNRI's
Tricyclics
Anticonvulsants
NMDA antagonists
Etc

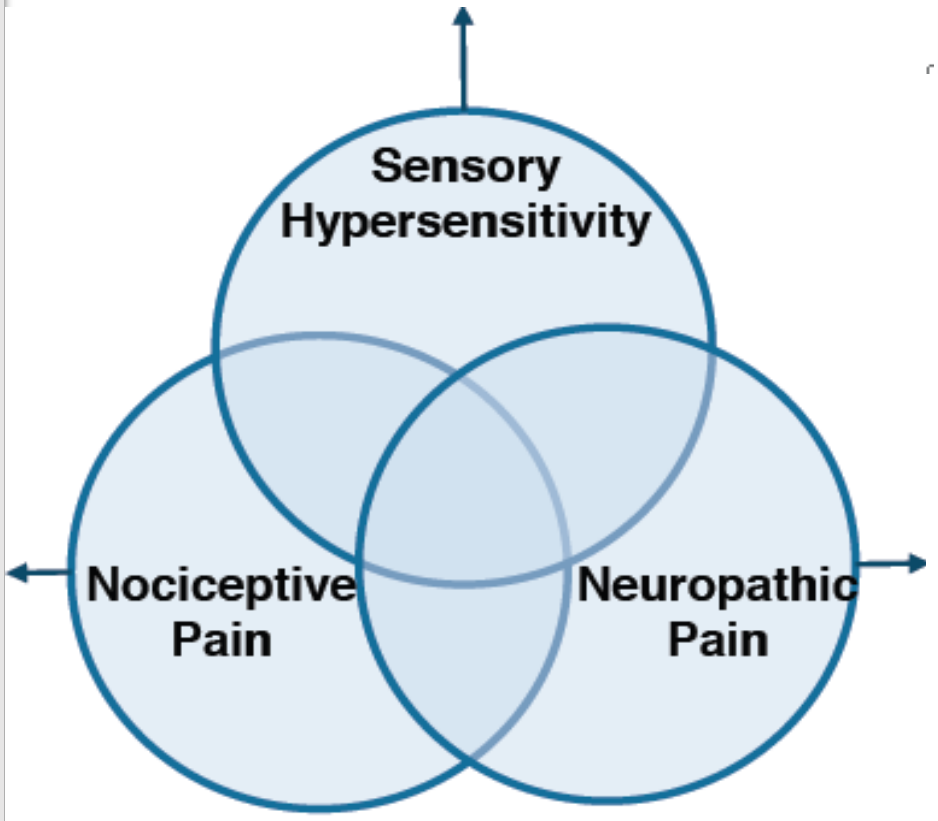
Tramadol
Tapentadol

Opioids
last option

Overlapping Pathophysiology

• Fibromyalgia • Irritable Bowel Syndrome • Functional Dyspepsia • Interstitial Cystitis • Neck & Back Pain (without structural pathology) • Myofascial Pain (TMJ) • Pelvic Pain Syndrome • Restless Leg Syndrome • Headaches • Complex Regional Pain Syndrome

- Osteoarthritis
- Rheumatoid Arthritis
- Tendonitis, Bursitis
- Ankylosing Spondilitis
- Gout
- Inflammatory Myositis
- Sjogren's Syndrome
- Cushing's Disease
- Tumor-related nociceptive pain
- Neck & Back Pain *with* structural pathology
- Sickle-cell Disease
- Inflammatory Bowel Disease



- Postherpetic neuralgia
- Diabetic Peripheral Neuropathy
- Sciatica / Stenosis
- Entrapment Syndromes
- Spinal Cord Injury Pain
- Tumor-related neuropathy
- Chemotherapy-induced neuropathy
- Small fiber neuropathy
- Post-Stroke Pain
- MS Pain

Woolf CJ. Central sensitization: implications for the diagnosis and treatment of pain. Pain. 2011;152(3 Suppl):S2-S15.; Dworkin 2011

High-Dose Opioid Management

- If you are there, what do you do?
  - Reevaluate repeatedly
    - Mood, pain, SUD, function, UDS, CSRS, etc.
  - Functional assessment of all medication
    - What used for, including side effects
  - Trials of medication reduction
    - Opioids, benzos, etc.
  - Misuse of meds as cues to functional need
    - Treat more directly the functional need they tx'ed
    - Misuse is not SUD
- Be aware of atypical effects of meds

Unexpected Medication Responses

- Beneficial for symptoms, deleterious for function
  - Adjunctives
    - AED's, muscle relaxants, AD's, etc.
  - Opioids
  - Benzodiazepines
- Atypical medication reactions
  - Expect sedation, get stimulation
    - Opioids, topiramate, pregabalin, benzodiazepines, etc.
  - Expect stimulation, get sedation
    - Stimulants, NE agents, etc.
- Generic medication changes

Opioid Stimulation Syndrome

Opioid Induced Somatic Activation

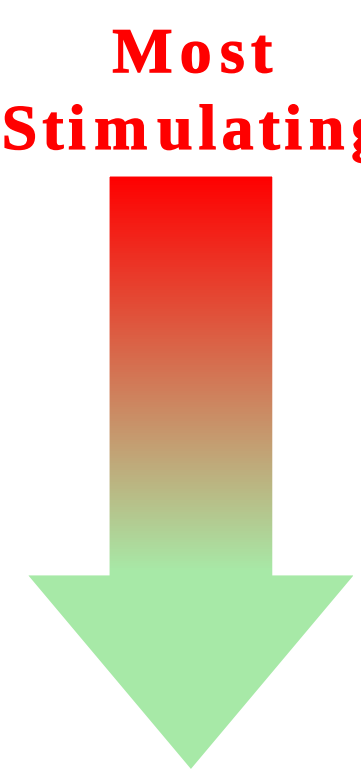
- Somatic and cognitive activation
  - Increased talking
  - Sleep disturbance
    - Sedative use/overuse
  - Irritability
    - Discharge from clinic
    - Irritable mania possible
  - Impulsivity
    - Medication misuse
  - Addiction
  - Opioid induced hyperalgesia?

Opioid Stimulation Syndrome

- Does it exist?
  - Duke Pain HU study, N=570, top and bottom 100 of the cohort
  - Overall average of 5 opioid trials per patient
  - 48% at least 1 opioid stimulating
  - 62% at least 1 opioid sedating
  - Oxycodone 24% stim vs MS 9% stim
- What is the etiology
  - Mu receptor
  - Glial cell
  - Unknown
- Influence on addiction
- Influence on OIH

Stimulation from Opioids

- Oxycodone
- Hydrocodone
- Fentanyl
- Buprenorphine
- Tapentadol (Nucynta)
- Tramadol (Ultram)
- Oxymorphone
- Morphine
- Hydromorphone
- Methadone



Opioid Misuse Scenarios; "Short"

Patient short on medication, again!

- Curious as to why, when, how much, etc.
- Most common reasons (decreasing order)
  - Pain control
  - Impulsivity
  - Poor memory
  - Selling
- Intervention
  - 3 bottle system
  - Reduced availability
    - Partner holding, shorter scripts
  - Fully random UDS/pill count

Opioid Misuse Scenarios; UDS w/o CII

- Curious, what is the story?
- Common reasons
  - Short
  - UDS not accurate
  - Selling
- Intervention
  - Admission of being short?
    - Then back to previous slide
  - UDS at different parts of script cycle
  - UDS not accurate?
    - No meds of any kind
      - Observed UDS in future
    - Make sure UDS test looks for the missing opioid

Opioid Misuse Scenarios; UDS With Additional Meds

UDS with meds not currently prescribed

- Curious as to reason
- Common reasons
  - Misuse, then to previous slide (pain, mood, etc.)
  - Impulsivity
  - "Have to have"
    - SUD vs. misuse of other medication
  - Other prescriber
- Intervention
  - Clarification of med list or prescribing roles
  - Limitation of current meds if dangerous
  - Medication destruction of old scripts
    - House sweeps by others

Opioid Misuse; What to do?

Use as Cue to Functional Need!

- Opioid stim
  - Treating depression or ADHD?
  - Helping them function?
  - (Careful with sleep aides if opioids stim)
- Opioid sedation
  - Treating anxiety?
  - Sleeping aide?
- Misuse a cue about what they feel is needed
  - So replace it
  - Likely not SUD

Substance Misuse;

Also a cue to Functional Need?

- MRJ
  - Treating anxiety, depression, pain, nausea?
  - Giving energy and better function?
- Alcohol
  - Treating anxiety or depression?
- Cocaine
  - Treating ADHD, anxiety, or depression?
- Heroin
  - Treating pain, depression, or anxiety?

Opioid Misuse: Pearls

- Morphine and/or fentanyl = heroin
  - Fentanyl in many SUD products now
- Metabolites not present
  - Just took pill
  - Dipped pill
  - Not tested for
  - P450 issue
- Pill count accuracy suspect
  - Pills available for count, street contract

Misuse? Abuse? Not Sure?

- Send for SUD evaluation
  - They will apply criteria
  - Find someone that understands pain and opioids
- Choose safer opioid
  - Tramadol
  - Tapentadol
  - Buprenorphine

Risk Management Tools

UDS --	6 months	Any infraction	3 months	Every visit/random
CSRS--	Quarterly	→	Every Script	Pair with UDS
Scripts--	Q 3 Months	→	Monthly	Weekly
Medication--	IR prep	ER prep	Pill counts	Buprenorphine only
Collateral--	Never	Once	Q 6 months	Every visit
Visits--	Q 3 months	→	Monthly	Weekly
SUD tx-	Never	Evaluation	Ongoing tx	Mandated tx
Psych tx-	Never	Evaluation	Ongoing tx	Mandated tx

Stopping Opioids

- Tapering
  - Lack of efficacy or functional improvement
  - Side effects
  - Breaking contract
  - Increasing risk factors
    - Psychiatric
    - Medications
- Stopping
  - Recreational use
  - Diversion
  - Forging
  - Dangerous behavior
  - Active SUD

Opioid Tapering Strategies

- AAPM 2005, Disaster Work Group
  - Reduction of daily dose by 10% each day, or…
  - Reduction of daily dose by 20% every 3-5 days, or…
  - Reduction of daily dose by 25% each week
- Opiophile
  - Cut by 33% every 3 days, until done
- VA/DOD in 2/2017
  - 5% - 20% every 4 weeks is suggested
- Clinically Driven
  - As needed, depending on situation

Approach to the Patient

Optimal Approach

- Curious, not authoritarian
  - Let them teach you what they are doing
    - Avoid telling them what they are doing
  - Normalize behaviors, not judgement
    - Overuse, impulsivity, irritable all normal
  - Translate the message they are sending
  - Avoid playing “gotcha”
    - Tactical
    - Patient hiding
  - Share control
- Establish clear limits
  - Functional goals in pain
  - “Football field” analogy

Clinical Patient Interactions

- Feels personal
  - Transference
  - Assumptions will be made about you
  - Regardless of outcome, they will do it again
    - Predictable
- Personality contributions
  - Poor affective constancy
    - Impulsivity
  - Irritability, anxiety, depression
  - Makes it predictable, unchanging
- Practitioners' emotional response
  - You will make assumptions
    - Don't believe all you think
    - Consciousness of state of mind is optimal

Difficult Conversations

All related to safety or function

- Never about you, Med Board, CDC, etc.
  - "Have new data now"
- Includes.....
  - UDS failures
    - Substances or additional medication
  - When limiting/stopping meds
    - Cultural or patient safety
  - Wanting too aggressive of treatment
    - Realistic expectations
    - "More" can be dangerous
  - Time for discharge

Safer Opioids

- Pain
  - Tramadol (Ultram)
    - SNRI primary
    - Opioid minimal, in metabolite only
  - Tapentadol (Nucynta)
    - NE and full agonist
    - 50mg - 75mg = 10mg oxycodone ***clinically***
  - Buprenorphine
    - Partial agonist, ceiling effect
    - Transdermal Patch (Butrans)
    - Buccal (Belbuca)


Questions?

Thank you