Managing Pain in Serious Illness for Individuals at Risk for Substance Use Disorder

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Disclosure

- No disclosures related to this presentation

Objectives

- Discuss strategies for incorporating opioid screening and management guidelines into any setting

- Describe strategies to manage pain in individuals:
  - At risk for substance use disorder
  - With active illicit drug use
  - On medications for opioid use disorder
  - In remission, not in treatment

Case 1

- 49 year old woman with pancreatic cancer with liver metastases
- Abdominal pain treated with oxycodone ER 60 mg q8h and oxycodone IR 15 mg (taking 4 doses daily)
- History anxiety, current tobacco use, previous EtOH use, denies illicit drug use
- Lost opioids in summer and reported opioids missing from house in fall during power outage
- 6 local ED visits this year for pain

Should we have concerns?

Case 2

- 44 year old man with newly diagnosed rectal cancer with liver metastases
- Abdominal pain treated with oxycodone 5 mg (6 daily); lorazepam 1 mg BID – prescribed by PCP
- PMH: alcohol use disorder, opioid use disorder (heroin, prescription drugs); anxiety, attention deficit disorder
- States he will ‘never use heroin again’

What are your concerns?

Case 3

- 58 year old woman with metastatic lung cancer with bony metastases; femur fracture on diagnosis
- Presents to outpatient clinic after hospitalization – on 400 mg morphine equivalent – requesting increase of medications
- Significant anxiety – on high-dose benzodiazepines
- Substance use: tobacco use, denies illicit drug use
- Prescription drug monitoring program check – on buprenorphine/naloxone for the last year prior to hospitalization

What are you worried about?

Scope of Problem

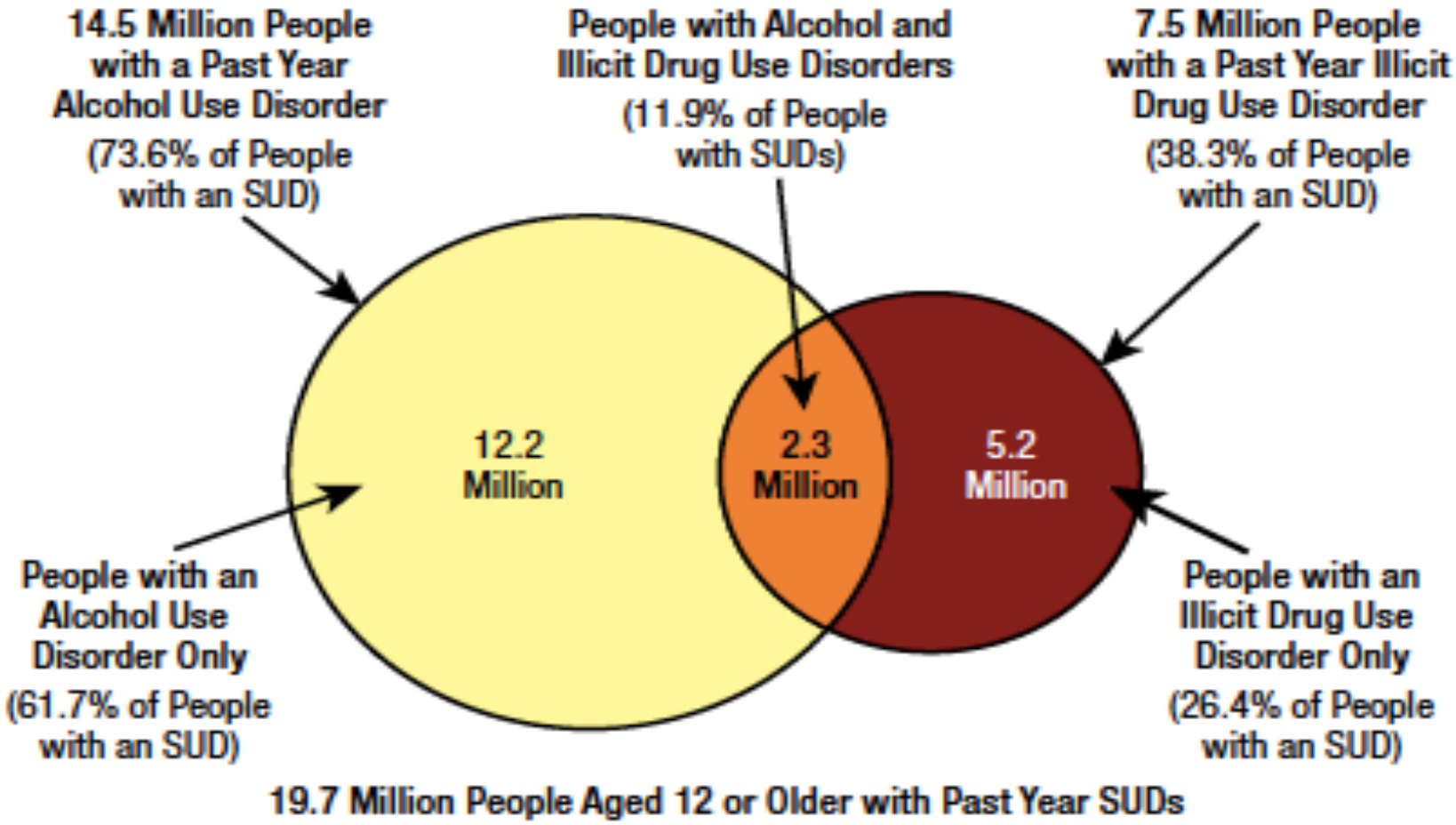
Scope of the Problem

- 2017 data
  - 47,600 of the more than 70,237 overdose deaths involved opioids
    - Over **17,029 deaths** from prescribed opioids
    - **More than 28,000 deaths from illicitly manufactured fentanyl and fentanyl analogs**
  - 11.1 million adults misused prescription pain relievers

- 130 people die daily of an opioid overdose (prescription or illicit)

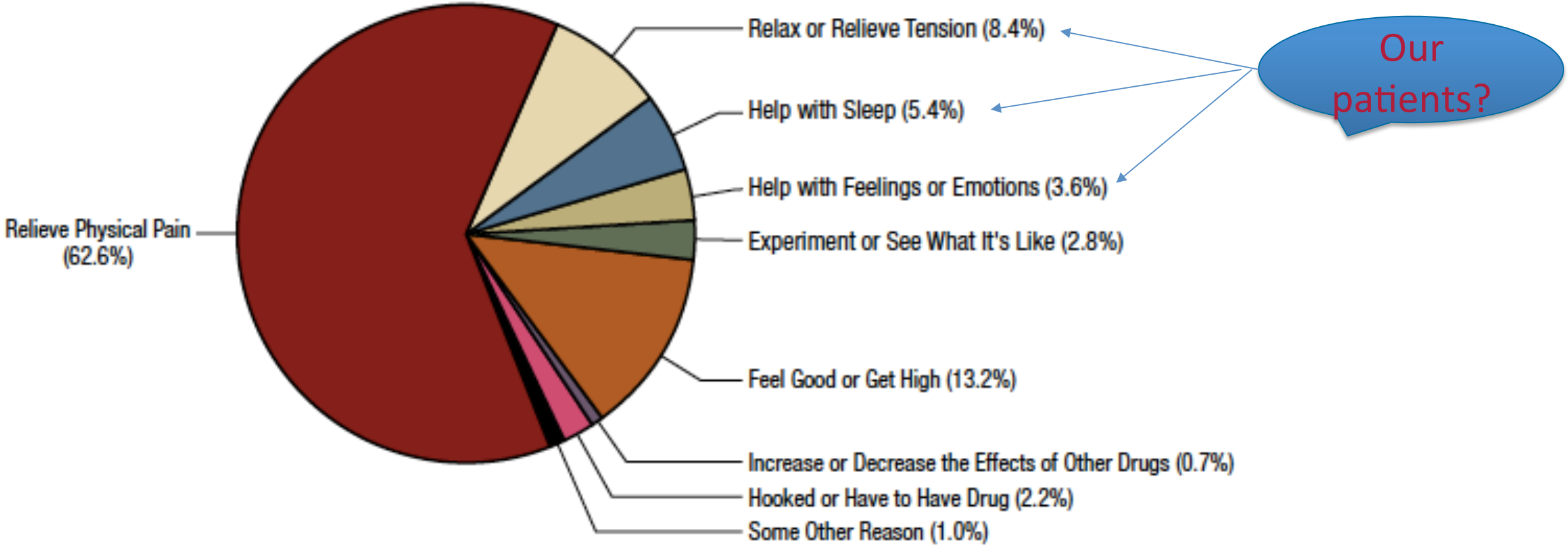
Overdose death rates. https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates
CDC Data Briefs. https://www.cdc.gov/nchs/products/databriefs/db329.htm

Alcohol and Illicit Drug Use Disorders: 2017



2017 NSUDH Annual Report: https://www.samhsa.gov/data/report/2017-nsduh-annual-national-report

Reason for Pain Medication Misuse: 2017



11.1 Million People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year

2017 NSUDH Annual Report: https://www.samhsa.gov/data/report/2017-nsduh-annual-national-report

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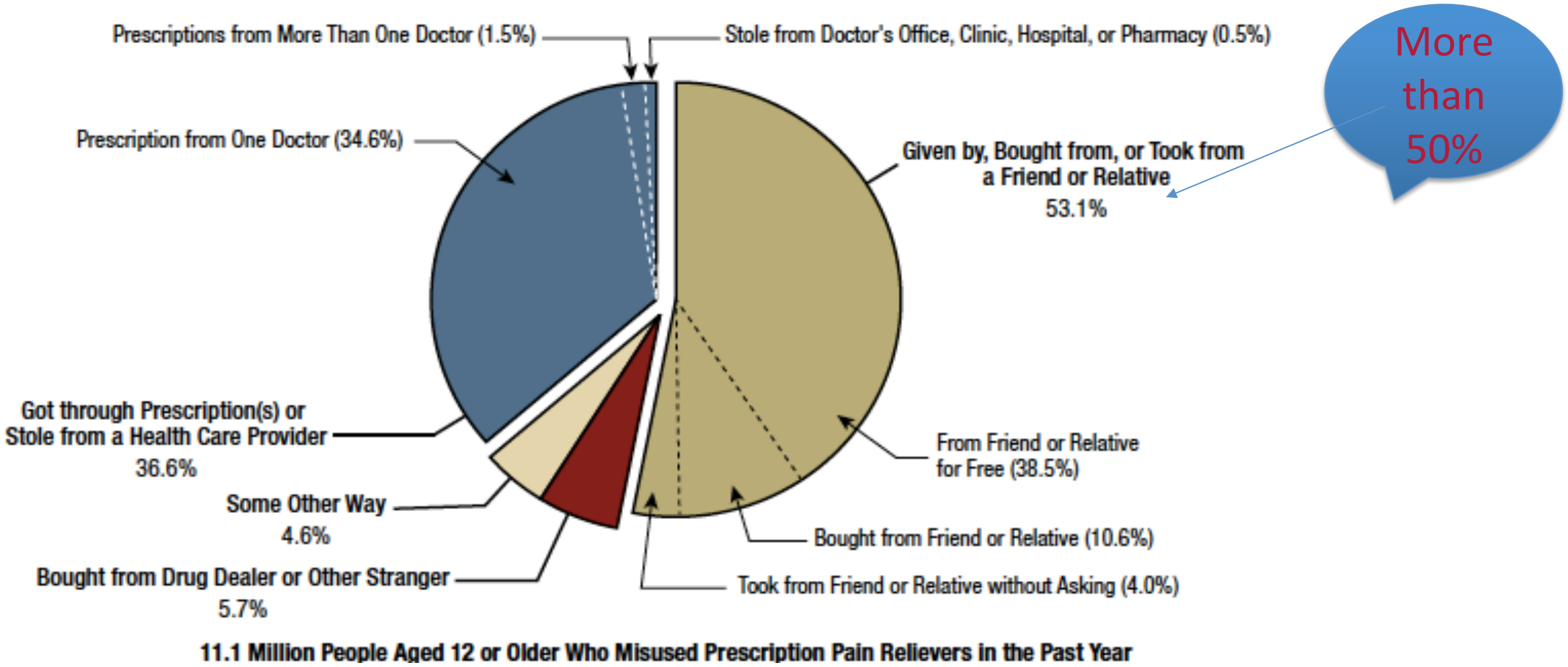
Prescribed Medications – Family & Friends



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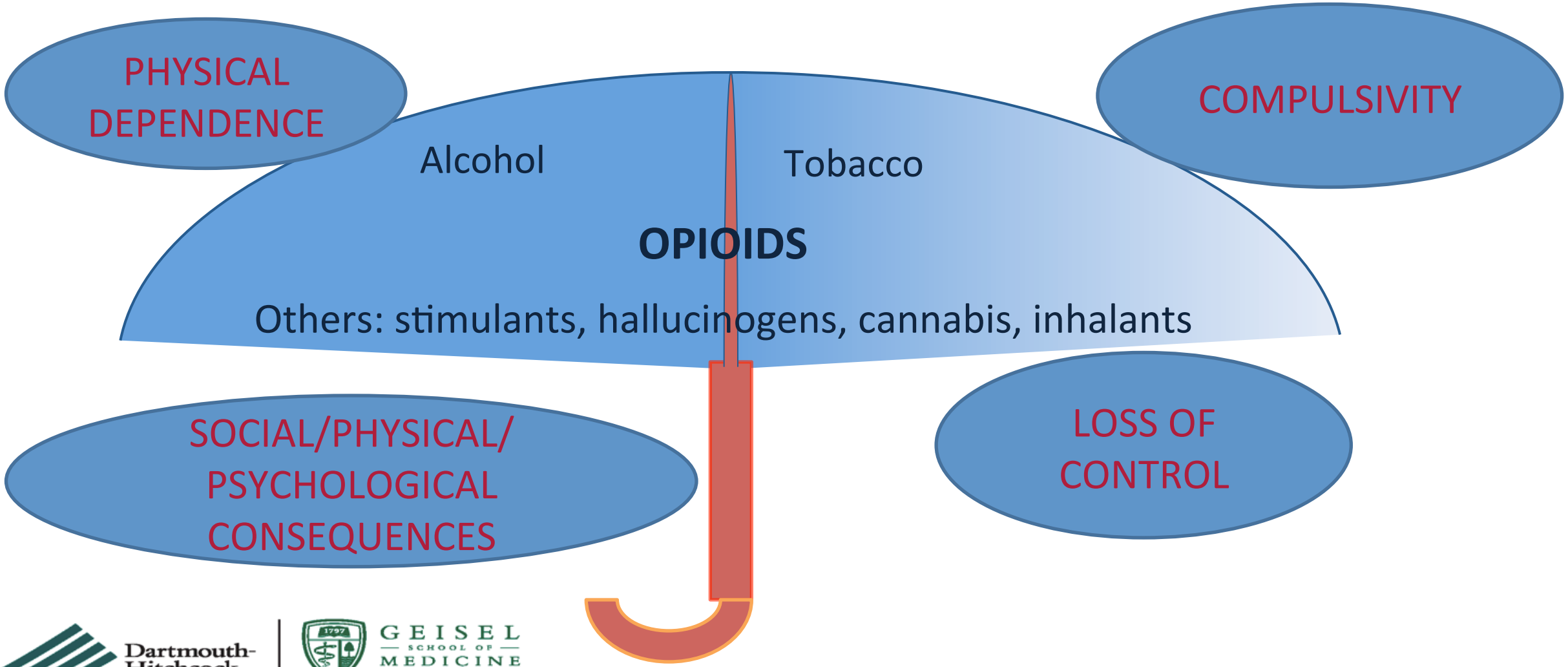
Substance Use Disorder

Disorders have similar criteria



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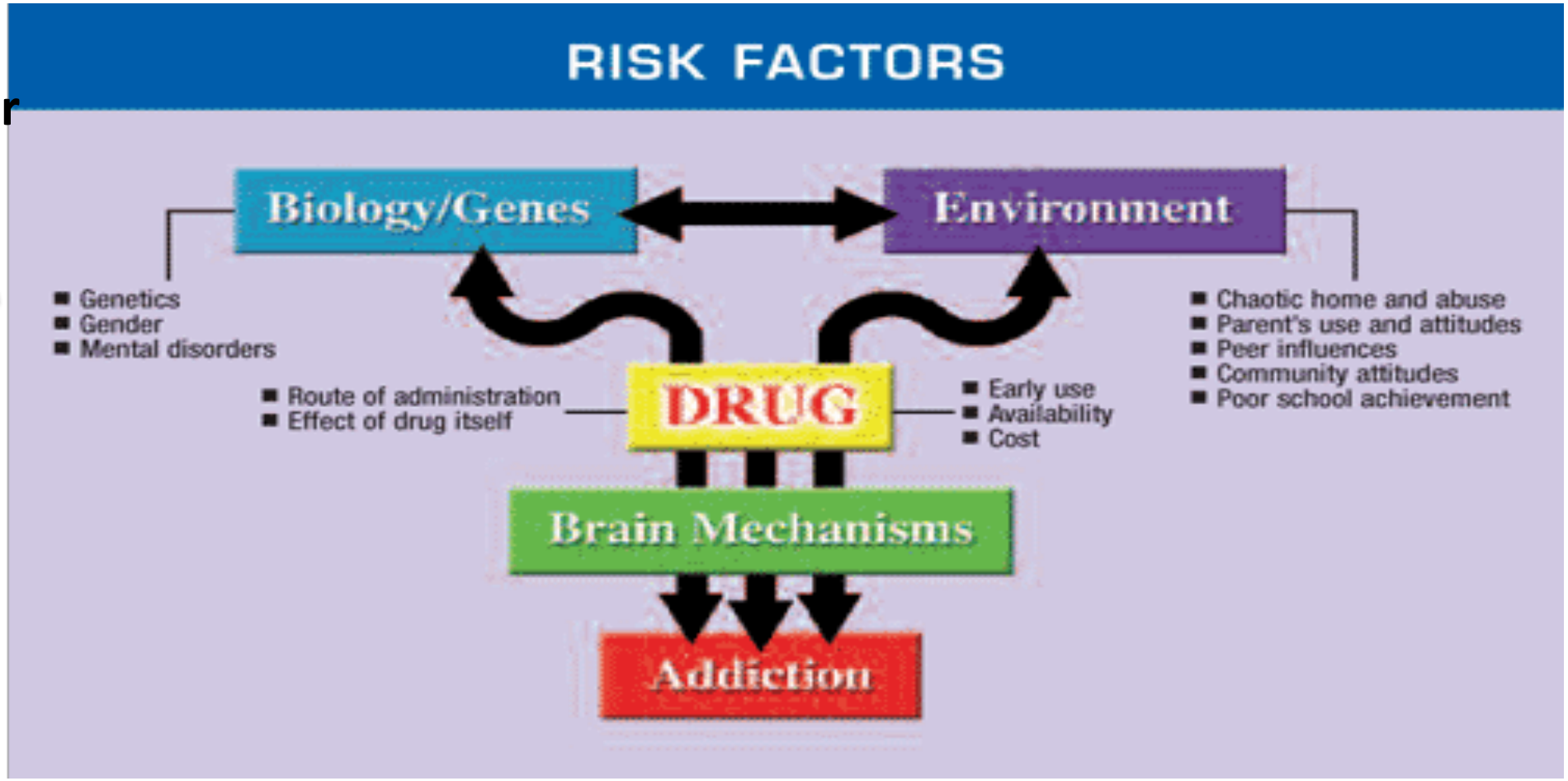
Risks for Substance Use Disorder

Accounts for about 50%



https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/drug-abuse-addiction

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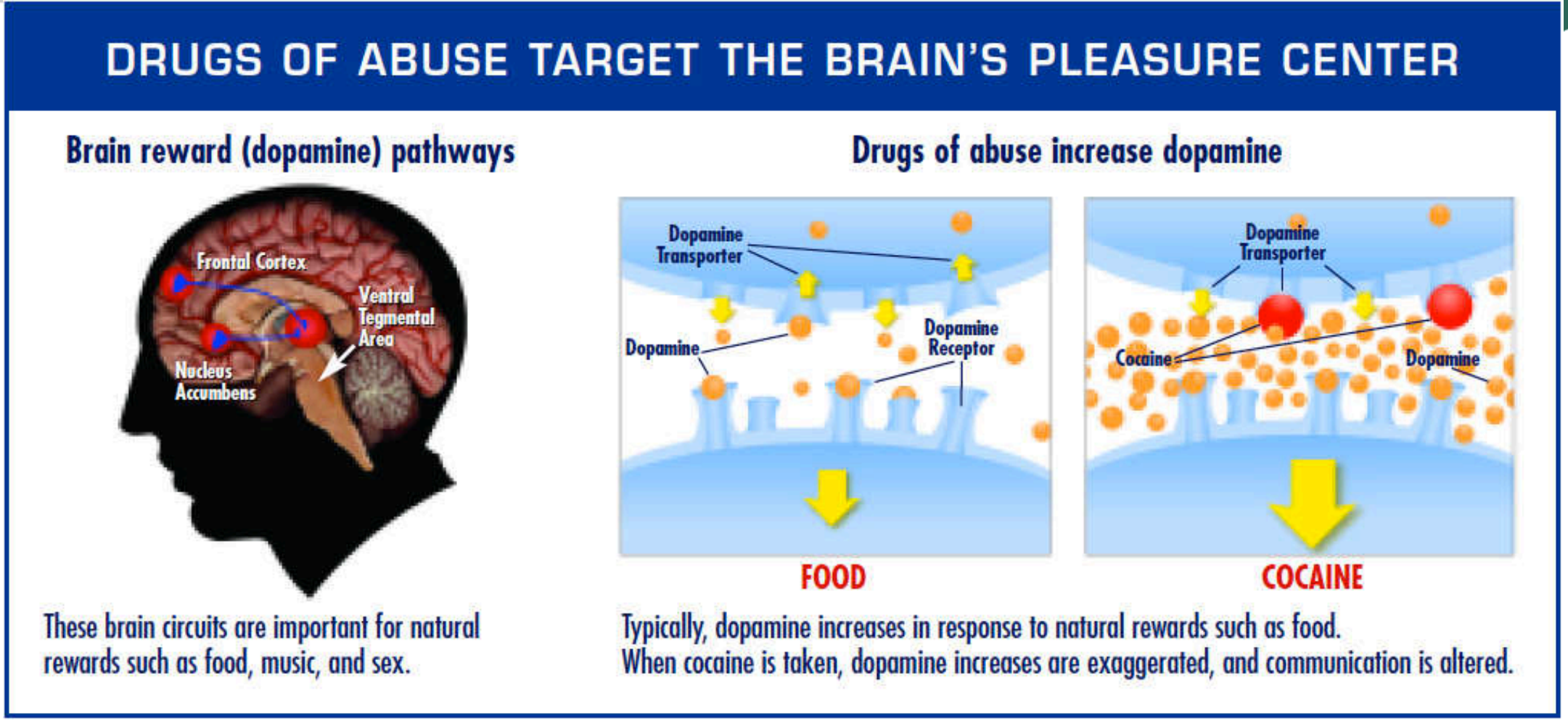

- Rewarding substances (including opioids) activate dopamine pathway in brain
- Dopamine activity decreases during withdrawal
- Leads to desire (craving) to use again **for those susceptible to 'addiction'**
- Chronic use causes changes leading to decreased reward from same amounts of drug

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https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/drugs-brain

Opioid Use Disorder – DSM-V

A problematic pattern of opioid use leading to clinically significant impairment or distress

- Opioids taken in larger amounts for longer than expected
- Unsuccessful attempts to cut down or control use
- Craving or strong desire/urge to use opioids

- Significant time spent in activities to obtain, use, or recover from effects
- Use in hazardous situations
- Continued use despite recognition of related social/interpersonal problems

- Failure to fulfill major role obligations
- Important social, occupational, or recreational activities given up due to use
- Use despite knowledge of physical/psychological problems

- Tolerance and withdrawal (not applicable when taken as medically indicated)

Mild = 2-3
Moderate= 4-5
Severe ≥ 6

https://pcssnow.org/wp-content/uploads/2014/02/5B-DSM-5-Opioid-Use-Disorder-Diagnostic-Criteria.pdf

Opioid Risk Assessment

Why Conduct an Opioid Risk Assessment?

- Optimize safe prescribing
- Decrease societal impact of misuse and diversion

BOTTOM-LINE:

It's just good clinical practice

Opioid Risk Assessment

- **Risk assessment is one component** of utilizing universal precautions in opioid prescribing
- Many opioid risk screening tools available
  - None validated in population with serious illness
  - Suggested tools:
    - Opioid Risk Tool (ORT)
    - Screening for Opioid Assessment People in Pain Revised (SOAPP-R)

Webster & Webster. *Pain Med.* 2005; 6:432-442. Cheatle et al. *J Pain. 2019.* https://doi.org/10.1016/j.jpain.2019.01.011

Opioid Risk Tool (ORT)

- Use to predict which individuals more likely to develop aberrant behaviors when prescribed opioids for chronic pain
- Original validation (*n* = 185)[1]
  - In low-risk patients, 94.4% did not develop aberrancies
  - In high-risk patients, 90.9% developed aberrancies
- 2019 revised tool (*n* = 1178)[2]
  - Eliminated preadolescent sexual abuse question
  - Unweighted responses between female and male
  - Predictor of risk for development of **opioid use disorder**
    - Sensitivity 0.85 and specificity 0.85, Odds Ratio 3.085

[1]Webster & Webster. *Pain Med.* 2005; 6:432-442. [2]Cheatle et al. *J Pain. 2019.* https://doi.org/10.1016/j.jpain.2019.01.011

Revised Opioid Risk Tool*

Mark each box that applies	YES	NO
Family history of substance abuse		
Alcohol	1	0
Illegal drugs	1	0
Rx drugs	1	0
Personal history of substance abuse		
Alcohol	1	0
Illegal drugs	1	0
Rx drugs	1	0
Age between 16-45 years	1	0
Psychological disease		
ADD, OCD, bipolar, schizophrenia	1	0
Depression	1	0
Scoring totals		

A score of 2 or lower indicates low risk for development of opioid use disorder. A score of ≥ 3 indicates a high risk for opioid use disorder

*Validated in Caucasians

Cheatle et al. *J Pain. 2019.* https://doi.org/10.1016/j.jpain.2019.01.011

Opioid Risk Screening in Oncology

Studies Using SOAPP-R* risk tool

- 522 patients with cancer related pain[1]
  - 29% high risk
  - Most common reported risk factors:
    - Age (<55), higher pain intensity, more symptoms of anxiety and depression, higher morphine equivalent daily dose
- 209 patients with cancer related pain seen in the emergency department[2]
  - 34% high risk
  - Most common reported risk factors:
    - Higher pain intensity, poor coping, depression, current illicit substance use

[1]Koyyalagunta et al. *Pain Med*. 2013 May;14(5):667-75; [2]Reyes-Gibby et al. *Acad Emerg Med*. 2016 Feb;23(2):151-8

***Screener & Opioid Assessment for Patients with Pain-Revised (SOAPP-R)**

Opioid Risk Screening in Oncology

Studies Using ORT

- 114 patients with cancer in palliative clinic[1]
  - 43% medium to high risk
  - 40% had urine drug screen - 45.65% urine drug screens abnormal
  - Most common reported risk factors:
    - Age (16-45), personal history of alcohol or illicit drug use
- 107 patients with cancer and 7 with sickle cell disease in palliative clinic[2]*
  - 25% high risk
  - Most common reported risk factors:
    - Depression and family history of alcohol abuse[2]

[1]Barclay et al. *Support Care Cancer*. 2014 Jul;22(7):1883-8; [2]Ma et al. *J Pain Palliat Care Pharmacother*. 2014 Mar;28(1):4-9.

***Results consistent with removal of sickle cell disease data**

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Opioid Risk Screening in Oncology

Feasibility Pilot Using ORT in Thoracic and Head/Neck Oncology Clinic

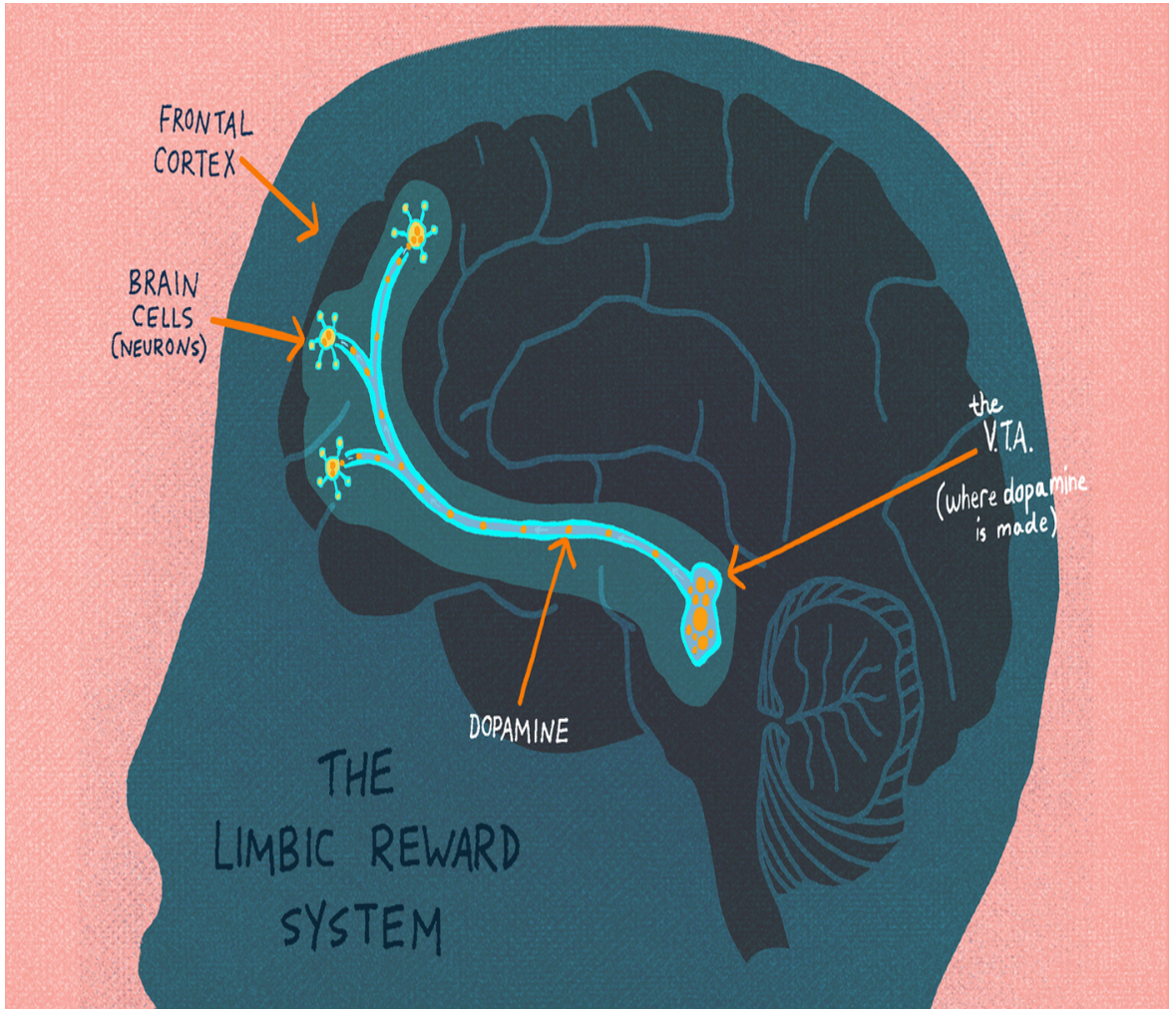
- 40 new patients screened at pretreatment visit
  - **Of the 40 patients screened over a 2 month period, 30% (*n*= 12) were moderate to high risk (6 from thoracic, 6 from head/neck)**
  - Of moderate to high risk patients:
    - 10 had a family history of alcohol abuse
    - 8 had a history of depression
    - 8 had a personal history of substance abuse (alcohol, prescription, and/or illicit drugs)

Teulings L…….. Broglio K. 2018 Northern New England Clinical Oncology Society Meeting, Poster Presentation

Opioid Risk Screening in Oncology

Few studies in the oncology population

However, risks for opioid use disorder are similar to risks in population with chronic non-malignant pain



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Pain Management Strategies

Baseline Considerations

- Is patient at moderate to high risk for misuse based on opioid risk screening?
- Does the patient have active substance use?
- Is the patient in remission from substance use (including alcohol)?
- Would the addition of non-opioid adjuvants be effective for pain management?

Universal Precautions for Opioid Prescribing

- All patients treated as at-risk for opioid misuse
- Originally developed for use in chronic pain management
- Effective strategy as clinicians may not always identify at-risk individual
- Reduces the stigma associated with labeling an individual as at-risk

Gourlay & Heit. *Pain Med.* 2009;10 Suppl 2:S115-23.

Components of Universal Precautions

- Opioid risk assessment
- Comprehensive pain assessment
- Clear documentation of the treatment plan and goals for opioid therapy
- Ongoing reassessment of analgesia effect
- Use of urine drug screening
- Informed Consent/Treatment agreement (previously called opioid contract)
- **Prescription drug monitoring program checks (prior to each prescription)**
- **Coordination with colleagues from other disciplines**

[1]Gourlay & Heit. *Pain Med.* 2009;10 Suppl 2:S115-23; [2]Walsh & Broglio. *Nurs Clin N Am.* 2016; 51:433–447; [3]National Comprehensive Cancer Network. 2019 ttps://www.nccn.org/professionals/physician_gls/pdf/pain.pdf

Prescribing: General Considerations

- Consider more frequent prescribing for those at moderate to high risk (weekly or every two weeks)
- Reassess individuals with repeated dose escalations for potential reasons for inefficacy of opioid as well as possibility of diversion/ misuse
- Use of non-opioid adjuvants as part of the management plan is important component
  - Escalating doses of opioids may not always adequately address the pain
- Counsel to refrain from alcohol use

Savage. *The ASAM principles of Addiction Medicine*.2014:1500-29. Walsh & Broglio. *Nurs Clin N Am.* 2016; 51:433–447

Opioid Reversal

- Prescribe naloxone rescue kits for **ALL** patients who are:
  - On high dose opioids
    - > 50 mg morphine equivalent daily
  - At risk for overdose
    - Frail, organ dysfunction, etc.
  - Diagnosed with substance use disorder
  - Safety risks in the home

https://www.hhs.gov/opioids/sites/default/files/2018-12/naloxone-coprescribing-guidance.pdf

Patient and Caregiver Education

- Avoid use of alcohol
- Safe opioid administration (doses/timing)
- Assessment and treatment of common adverse side effects
- Safe Storage (LOCKBOXES)
- Use/availability naloxone for opioid reversal
- Opioid disposal

Moderate to High Risk for Opioid Misuse No Active Substance Use

Opioid Selection

- Mu-agonist opioids activate **dopaminergic reward system**
  - Triggers craving and possible misuse in susceptible individuals
- Immediate-release opioids
  - Oxycodone, hydromorphone, etc.
  - Faster onset/increase of blood levels triggers reward system

Savage. *The ASAM Principles of Addiction Medicine*. 2014:1500-29

Opioid Selection

- Extended-release (ER) and long-acting opioids
  - ER opioids: morphine ER, oxycodone ER, transdermal fentanyl, etc.
  - Long-acting: methadone
  - Decreases reward/likeability component of medication effect
- Abuse-deterrent formulations[1]
  - Be aware may have problems with cost/authorizations
- Opioids with low street value and/or more difficult to abuse[1]
  - Consider morphine ER and transdermal fentanyl

[1]Walsh & Broglio. *Nurs Clin N Am.* 2016 [2]Webster et al. *J Opioid Manage.* 2011;7:235-45

Opioid Selection

- Minimize use of immediate release breakthrough medications[1]
  - When possible, limit to 3-4 doses daily maximum
  - Certain formulations may be at higher risk for diversion
- Utilize opioids with potential less likeability
  - Morphine may have less likeability than oxycodone[2]

[1]Walsh & Broglio. *Nurs Clin N Am*. 2016;51 433-445; [2]Wightman et al. *J Med Toxicol.* 2012;8(4):335-40

Opioid Use Disorder
Active Use or
Using Medications for
Opioid Use Disorder

Overall Goal – Harm Reduction

- Harm reduction approach
  - Root in public health
  - Do not endorse illicit drug use – accept as reality
  - Minimize the 'harmful consequences
  - What is ideal?
  - What is realistic?

General Considerations

- If active use, refer for addiction treatment if possible
- Close collaboration with prescribing facility is essential for patients with pain also enrolled in methadone or buprenorphine/naloxone maintenance programs
  - Maintenance medication dosed once daily not likely to manage pain
- Always ensure patient has prescription for naloxone for opioid reversal

Kampman & Jarvis. *J Addict Med,* 2015;*9:3*58-367; Broglio & Matzo. *Am J Nurs.* 2018;118(10):30-8; https://www.hhs.gov/opioids/sites/default/files/2018-12/naloxone-coprescribing-guidance.pdf

Medications for Opioid Use Disorder

Medication	Action	Dose	Where obtained?	Comments
Methadone	Full mu agonist	60-120 mg (usual doses – may be higher or lower) PO once daily	Must be administered through a federal Opioid Treatment Program Patient goes daily for observed dosing May graduate to take doses home on weekends or have weekly pick-ups	• Provides analgesia for 6-12 hrs • More than once daily dosing necessary for pain management • Many drug/drug interactions • Can cause QTc prolongation
Buprenorphine/ naloxone Buprenorphine (pregnancy) Buprenorphine implants or injection	Partial mu agonist	8-24 mg sublingual or transmucosal daily 320 mg implant q6mo 100- 300 mg monthly injection	Prescribed by physicians, nurse practitioners, and physician assistants in ambulatory office setting who have waiver Consider obtaining waiver	• May provide analgesia if given in split doses (every 8 or 12 hours) • If pure mu opioids administered, need higher doses • Implants can be removed prior to six months • Fewer interactions than methadone
Naltrexone	Full mu antagonist	50 mg orally daily 380 mg monthly intramuscular depot	Injection administered by any clinician who is prescriber	• Also used for alcohol use disorder • Blocks the effects of **opioids – not a good choice for those with pain requiring opioid therapy**

Source document for information in table Kampman & Jarvis. *J Addict Med,* 2015;*9:*358-367; Broglio & Matzo. *Am J Nurs.* 2018;118(10):30-8

Methadone for OUD and Pain

- Collaborate with Opioid Treatment Program(OTP) as only these programs can prescribe methadone for opioid use disorder
- Options include
  - Individual continues with OTP
    - Add additional doses of methadone to provide pain management – ex: 10 mg in afternoon and evening- Clearly document on prescription/chart for 'pain management'
    - Can utilize other opioids if additional methadone contraindicated (prolong QTc) – USE caution not to trigger craving (ex – morphine may be better choice than oxycodone)
  - Too seriously ill to continue with OTP
    - Utilize methadone in split dosing (q6 – 12 hours) – clearly document on prescription/ chart for 'pain management'

Buprenorphine for OUD and Pain

- Obtain waiver to prescribe buprenorphine/naloxone for opioid use disorder
  - Split doses of buprenorphine/naloxone for pain management – utilize up 32 mg daily (generally insurance approval becomes problematic at doses greater than 24 mg daily)
- Generally do not use mu-opioids with buprenorphine unless patient hospitalized with acute pain

Buprenorphine and Acute Pain Management

- Mu opioid receptors occupied by buprenorphine but not activated
- If patient requires opioids for pain – WILL REQUIRE much higher doses to overcome occupied mu receptors
- If buprenorphine discontinued takes about 72 hours to disassociate from mu receptors
- If patient admitted on buprenorphine with pain crisis/trauma –

What is your course of action?

Buprenorphine and Acute Pain

- Continue buprenorphine therapy and consider divided doses every 6-8h and can increase dose to maximum of 32 mg daily
- Utilize multimodal analgesia
- Treat acute pain with mu-opioid agonists such as fentanyl, hydromorphone or morphine or sublingual or intravenous buprenorphine if available

This is my (and others) preferred method:

You can override the mu receptors with higher doses of opioids

Bryson, *Cur Opin Anaesthesiology,* 2014:*27,* 359-364

Individual on Naltrexone with Pain

- Discontinue naltrexone
- If monthly implant of naltrexone may need to use 20x of usual dose of mu opioid to obtain efficacy
- Utilize multimodal analgesia

Bryson, *Cur Opin Anaesthesiology,* 2014:*27,* 359-364

Other Considerations for Pain Management

- Maximize use of multimodal analgesia to include non-opioids and when possible nonpharmacologic treatment
- Prescribe opioid therapy for pain **ONLY** if you have:
  - Experience or can collaborate with addiction medicine
  - Nursing and/or social work support to co-manage
  - Ability to closely and prescribe small amounts frequently (every three days or one week)

Opioid Use Disorder In Remission – Not on Medications for Opioid Use Disorder

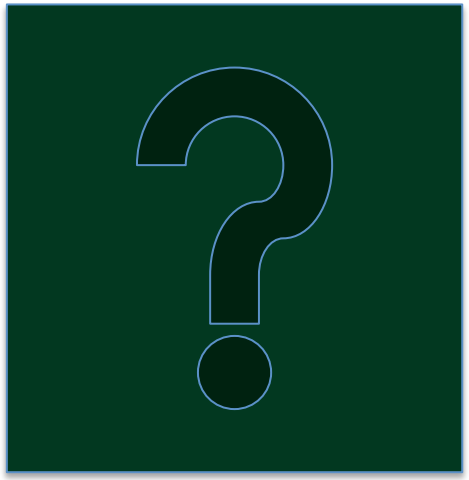
General Considerations

- Utilize universal precautions for opioid prescribing
- Recognize fears that may arise in patients- AT risk for relapse
- Support patients by ensuring safe, appropriate pain management
- Co-prescribe naloxone for opioid reversal

Take Home Points

- Consistently utilize safe prescribing techniques for individuals with moderate or high risk for opioid misuse to prevent progression to opioid use disorder
- Treat patients with opioid use disorder with compassion – it is a disease, not a moral failing
- Consider further education on pain and addiction management if there are limited resources for referral in your community

Thank you



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