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Acute Pain Management in Individuals with Opioid Use Disorder

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Disclosures

Kathleen Broglio has no financial disclosures to report

Note: If AAAP is the continuing education provider for this training, please complete our COI form here: <http://www.cvent.com/d/ntqcxz>.

*The content of this activity may include discussion of off label or investigative drug uses.
The faculty is aware that is their responsibility to disclose this information.*

Target Audience

- The overarching goal of PCSS is to train healthcare professionals in evidence-based practices for the prevention and treatment of opioid use disorders, particularly in prescribing medications, as well for the prevention and treatment of substance use disorders.

Educational Objectives

At the conclusion of this activity participants should be able to:

- Discuss acute pain management strategies for those with active substance use
- Describe medications for opioid use disorder (MOUD)
- Develop treatment strategies to treat acute pain for individuals with substance/opioid use disorder (SUD/OUD)
- Describe safe discharge strategies for individuals with acute pain and co-morbid SUD/OUD

It's a Balancing Act



General Considerations

Advocate for safe,
appropriate pain
management

Utilize a harm
reduction approach

Maximize use of
multimodal analgesia

Consider treatment
for mental health
issues

Collaboration with
prescriber if receiving
medications for
opioid use disorder
(MOUD)

Language Matters and can be a Source of Stigma

Stigmatizing Language	Preferred Language
Addict, junkie, user	Person with substance use disorder
Drug Abuser	Person who uses drugs (PWUD)
Drunk, Alcoholic	Person with alcohol use disorder/misuses alcohol
IV drug abuser	Person who injects drugs (PWID)
Medication Assisted Treatment	Medication for Opioid Use Disorder (MOUD)
Relapsed	Returned to use, Used
Recovering Addict	Person in Long Term Recovery
Dirty urine, failing drug test	Testing positive on a drug screen

Adopt a Harm Reduction Strategy



Avoid Strategies that could cause Harm



Adapted and Used with Permission Drs Katrina Nickels, Monika Holbein, Janet Ho
Source document: National Harm Reduction Coalition: <https://harmreduction.org>

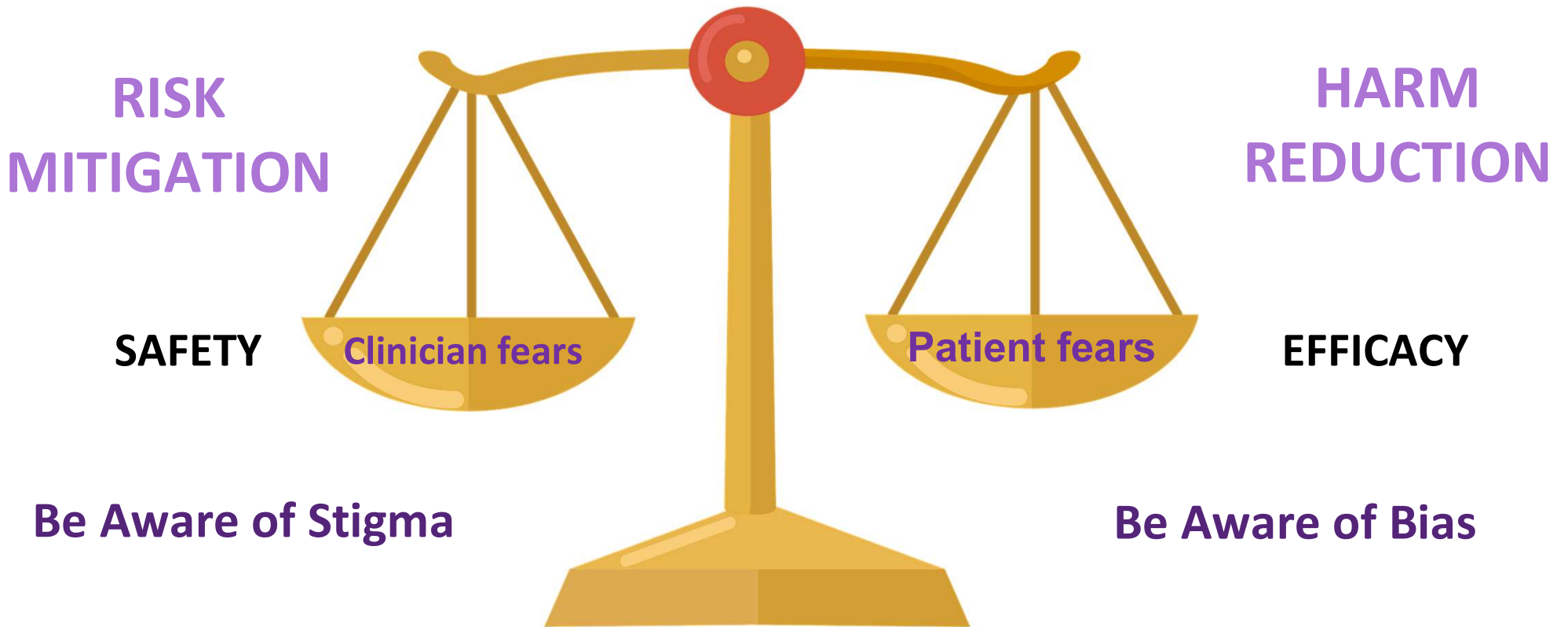
Always make sure the Patient leaves the Hospital with Naloxone

- Prescribe naloxone rescue kits for **ALL** patients who are:
 - ⑩ Diagnosed with a SUD/ODU
 - Active use
 - On MOUD
 - In remission not on MOUD
 - ⑩ On high dose opioids
 - > 50 mg morphine equivalent daily
 - ⑩ At risk for overdose
 - Frail, organ dysfunction, etc.
 - ⑩ Safety risks in the home



U.S. Department of Health and Human Services, Surgeon General. 2018.
<https://www.hhs.gov/opioids/sites/default/files/2018-12/naloxone-coprescribing-guidance.pdf>

It's a Balancing Act



Case #1

- 58 y.o. woman admitted to the ICU with respiratory distress, diagnosed with small cell lung cancer with extensive osseous metastases
- PMH: Intravenous drug use (IVDU) – regular heroin, occasional methamphetamine; lumbar abscess s/p laminectomy; chronic low back pain
- SOC: lives in boarding house; TOB use, IVDU heroin; twin daughters with active IVDU, one hospitalized at same time with endocarditis

Case #1 (continued)

Hospital Course

- Started methadone for treatment of substance use disorder and pain
- Due to perceived intolerance to methadone, hospitalist rotated to Oxycodone ER and IR
- Discharged with #60 Oxycodone ER 30 mg and #60 oxycodone/APAP 5/325 mg
- Follow-up scheduled for palliative medicine clinic to manage pain
- Pt calls 2 days after discharge for refill, out of meds

How could we have better managed pain in the inpatient setting?

Managing Acute Pain in Individuals with Active Substance Use

- Medical history
- Substance use assessment
- Withdrawal assessment
- Social support



- Non-opioid multimodal analgesia
- Consider initiation of MOUD
- Intravenous Patient Controlled Analgesia (IV-PCA) or scheduled opioids
- Higher doses opioids due to tolerance
- Treat withdrawal symptoms

Raub JN, Vettese TE, *J Hosp Med.* 2017;12(5):375-379; Crotty, K et al., *J Addict Med.* 2020;14(2):99-112; Kohan L et al., *Reg Anesth Pain Med;* 2021;0:1–20. doi:10.1136/rapm-2021-103007

Screen for Opioid Withdrawal

Clinical Opioid Withdrawal Scale

Symptoms	Scores
Resting pulse rate	0 ≤ 80; 1 = 81-100; 2 = 101-120; 4 ≥ 120
Sweating	0 (no report) – 4 (sweat streaming off face)
Restlessness	0 (sits still) – 5 (unable to sit still for more than a few seconds)
Pupil size	0 (pinned or normal) – 5 (only rim of iris is visible)
Bone or joint aches	0 (no pain) – 4 (rubbing joints/muscles, can't get comfortable)
Runny nose / tearing	0 (absent) – 4 (constantly running/tearing)
GI upset	0 (no GI symptoms) – 5 (multiple episodes of vomiting/diarrhea)
Tremor	0 (absent) – 4 (gross tremor / muscle twitching)
Yawning	0 (absent) – 4 (yawning several times per minute)
Anxiety / Irritability	0 (none) – 4 (difficulty participating in assessment due to anxiety)
Gooseflesh skin	0 (smooth skin) – 5 (prominent piloerection)
Score	5-12 = mild 13-24 moderate 23-36 = moderately severe > 36 = severe withdrawal

Wesson, Ling. *J Psychoactive Drugs*, 2003;35(2):253-9

Treat Opioid Withdrawal and Manage Pain

Opioid Withdrawal Symptoms (not all inclusive)

- Nausea, vomiting, diarrhea, abdominal cramping
- Increased joint pain
- Anxiety, restlessness, irritability, insomnia
- Hypertension, tachycardia
- *Protracted withdrawal from illicit fentanyl*

Withdrawal Treatment

- Opioids (methadone, buprenorphine)
- Alpha-2 adrenergic agonists (clonidine, lofexidine)
- Symptomatic treatment cramps, nausea, insomnia, etc.

Remember to Screen for Withdrawal from Cannabis

Cannabis Withdrawal symptoms

- Anxiety
- Irritability
- Anger
- disturbed sleep-dreams
- mood changes
- appetite loss

Withdrawal Treatment (no strong evidence)

- Supportive counseling
- Psychoeducation
- Cannabis agonists (limited evidence)
- Supportive treatments symptoms

What about Stimulant Withdrawal?

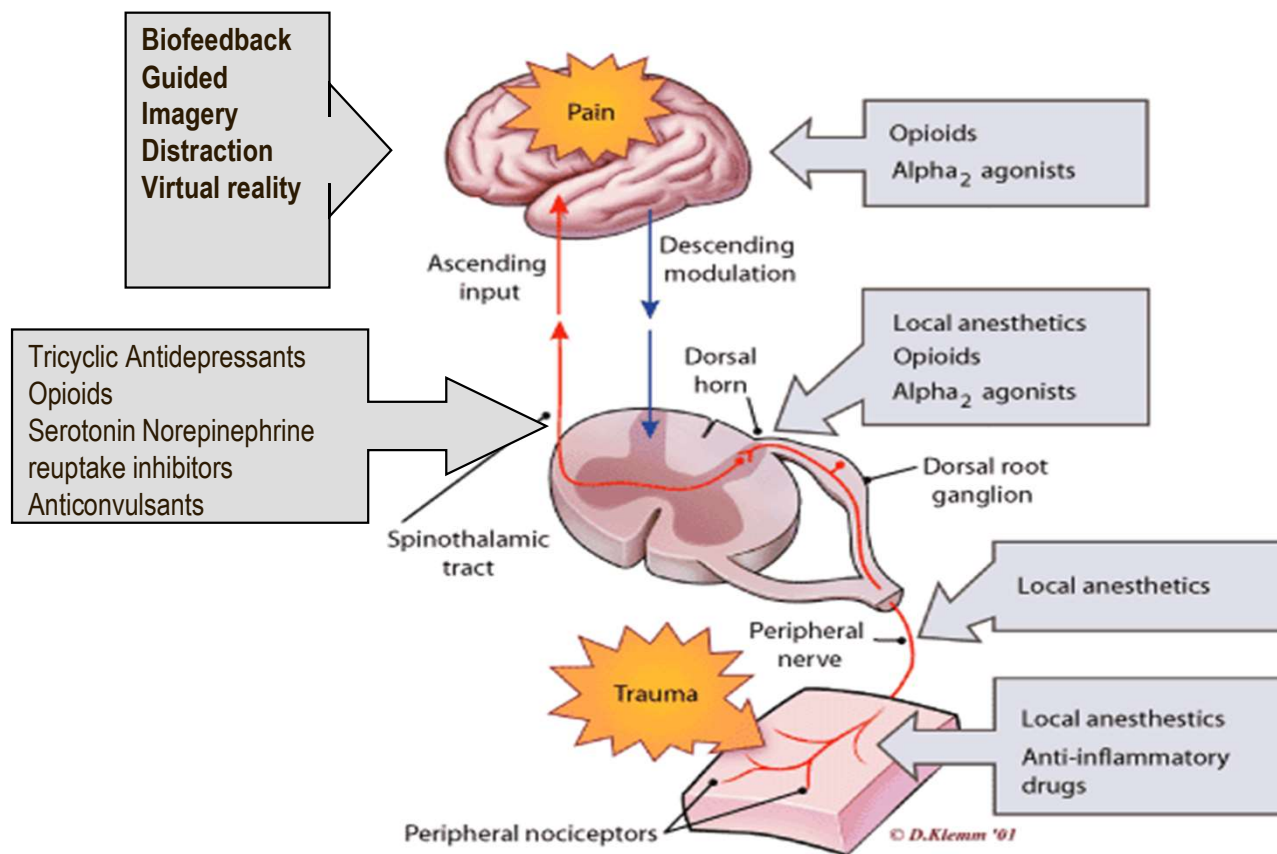
Assess for effects of intoxication (differs dependent on stimulant)

- Hypertension, tachycardia, hyperthermia, psychomotor agitation, seizures
- Confusion, paranoia, anxiety,

Treatment strategies for stimulant use disorder

- Acutely treat life-threatening conditions, provide quiet environment
 - No specific antidotes
- Long term:
 - Motivational interviewing,
 - Cognitive behavioral therapy
 - Contingency management
 - Stimulant replacement therapy?

Implement Multimodal Pain Management



Advocate for a Safe Discharge Plan

- Who is the prescriber after discharge if opioids necessary?¹
- **Avoid a gap in care if plans to continue MOUD**
- If started MOUD inpatient, discontinue prior to discharge if no plan to continue after hospitalization
- Prescribe naloxone for overdose prevention due to higher risk for overdose due to loss of tolerance¹⁻³

¹Raub JN, Vettese TE, *J Hosp Med.* 2017;12(5):375-379 ²Crotty, K et al., *J Addict Med.* 2020;14(2):99-112; ³U.S. Department of Health and Human Services, Surgeon General. 2018. <https://www.hhs.gov/opioids/sites/default/files/2018-12/naloxone-coprescribing-guidance.pdf>

Case #2

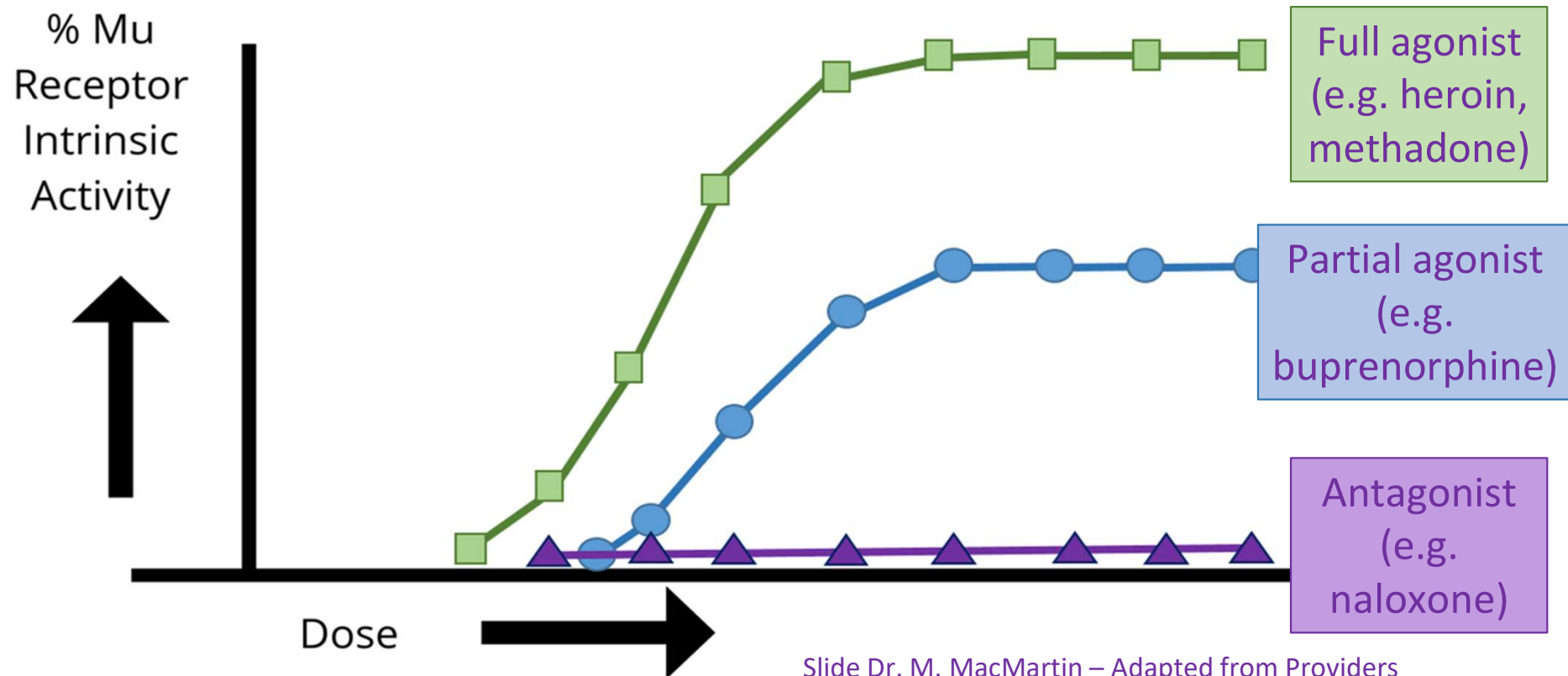
- 55 y.o. man with history of alcohol use disorder, opioid use disorder from prescription opioid use with chronic abdominal pain
 - PMH
 - Pancreatectomy secondary to alcohol use disorder
 - Three myocardial infarctions
 - Depression with suicide attempts
 - Severe peripheral artery disease
 - Current treatment
 - Buprenorphine/naloxone 16mg/4mg in divided doses
 - Planned surgery for the peripheral artery disease
 - Fearful of restarting opioids in the acute care setting
- How should we manage perioperative pain?**

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	<ul style="list-style-type: none"> • More than once daily dosing necessary for pain management- analgesia 6-12 hours • Many drug/drug interactions • Can cause QTc prolongation
Buprenorphine/naloxone Buprenorphine (pregnancy) Buprenorphine subcutaneous injection	Partial mu agonist	8-32 mg sublingual or transmucosal daily 100- 300 mg SC monthly	Prescribed by physicians, nurse practitioners, and physician assistants in ambulatory office setting who have waiver	<ul style="list-style-type: none"> • May provide analgesia if given in split doses (every 6 or 12 hours) • If pure mu opioids administered, need higher doses • Fewer drug interactions than methadone
Naltrexone	Full mu antagonist	50 mg orally daily 380 mg monthly intramuscular depot	Injection administered by any clinician who is prescriber	<ul style="list-style-type: none"> • 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

Buprenorphine works differently than other Opioids



Slide Dr. M. MacMartin – Adapted from Providers Clinical Support System - MAT

Managing Acute Pain for Individuals on MOUD

Preoperative/Admission

- Medical History
- Social support
- Medication/drug use
- Prescriber MOUD- verify medications
- Discontinue naltrexone (if applicable)

Methadone
Buprenorphine

Naltrexone

Perioperative /Acute phase

Continue methadone* or buprenorphine
*discontinuation not recommended by most experts
Multimodal non-opioid analgesia
As needed opioids (may need much higher doses)

Multimodal non-opioid analgesia
As needed opioids (may need much higher doses if on injectable naltrexone)

Source documents: Crotty, K et al., *J Addict Med.* 2020;14(2):99-112; Sritapan et al. *Balkan Med J.* 2020;37:247-252;; Harrison et al. *Anesthesiol Clin*, 2018;36:345-59; Lembke. *Pain Med.* 2018;20:425-8; Buresh et al, *J Gen Intern Med.* 2020;35(12):3635-43; Kohan L et al., *Reg Anesth Pain Med*; 2021;0:1–20. doi:10.1136/rapm-2021-103007

Acute Pain - Postoperative Management

Methadone
Buprenorphine



Continue non-opioid multimodal analgesia
Continue methadone or buprenorphine – consider increased dosing if postoperative pain and use split dosing (every 6-12 hours)
Collaborate Outpatient Treatment Provider

Naltrexone



Continue non-opioid multimodal analgesia
Collaborate Outpatient Treatment Provider
Education about risk for overdose- - naloxone prescription
Resume naltrexone once pain resolved

Source documents: Crotty, K et al., *J Addict Med.* 2020;14(2):99-112; Sritapan et al. *Balkan Med J.* 2020;37:247-252;; Harrison et al. *Anesthesiol Clin*, 2018;36:345-59; Lembke. *Pain Med.* 2018;20:425-8; Kohan L et al., *Reg Anesth Pain Med*; 2021;0:1–20. doi:10.1136/rapm-2021-103007

Prevent Overdose after Hospitalization

If MOUD discontinued during acute care event MUST activate safety plan to decrease risk of accidental overdose

RECOMMEND:

- Restart buprenorphine or methadone PRIOR to discharge
- If not able to restart naltrexone - education/counseling about increased risk for overdose
- Naloxone for opioid overdose prevention should be in the patient's hands at discharge

Strategies to manage Pain in those with SUD/ODU in Remission or Recovery who are **not** on MOUD

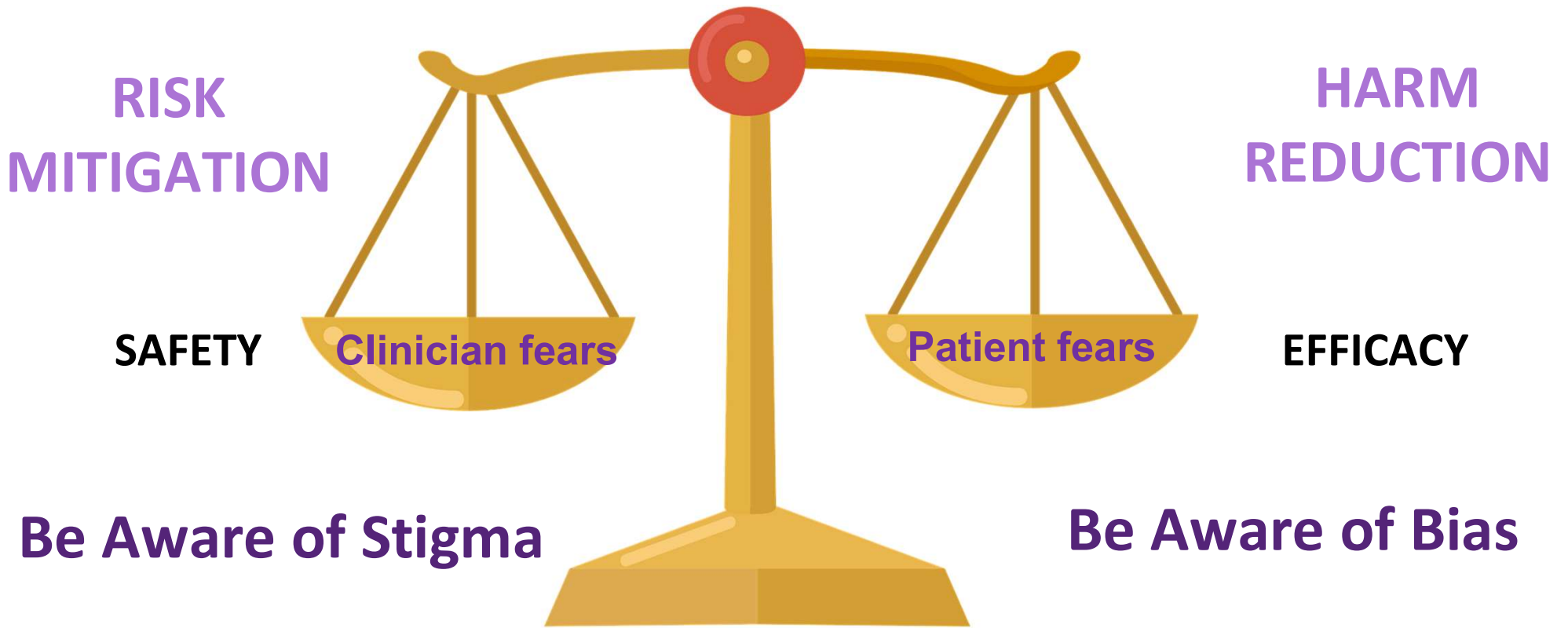
Multimodal approach
non-pharmacologic
strategies

Education/counseling
if opioids necessary
(acute pain/serious
illness)

Continue or engage in
psychosocial
programs

Naloxone for opioid
reversal even if NOT
on opioids due to risk
of recurrence of
substance use

It's a Balancing Act- Know Thyself Know your Resources



Take Home Points

- Adopt a harm reduction strategy to care
- Always consider a multimodal approach to pain management to include treatment for co-morbid mental health and substance use issues
- Ensure individual has naloxone for opioid reversal in hand when discharged from the hospital
- Collaboration with clinicians treating SUD/ODU essential part of ensuring appropriate pain management in the acute care setting

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PCSS Mentoring Program

- PCSS Mentor Program is designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid use disorder.
- PCSS Mentors are a national network of providers with expertise in **addictions, pain, evidence-based treatment including medications for opioid use disorder (MOUD)**.
- 3-tiered approach allows every mentor/mentee relationship to be unique and catered to the specific needs of the mentee.
- No cost.

For more information visit:

<https://pcssNOW.org/mentoring/>



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PCSS Discussion Forum

Have a clinical question?

Ask a Colleague

A simple and direct way to receive an answer related to medications for opioid use disorder. Designed to provide a prompt response to simple practice-related questions.

<http://pcss.invisionzone.com/register>



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PCSS is a collaborative effort led by the American Academy of Addiction Psychiatry (AAP) in partnership with:

Addiction Technology Transfer Center	American Society of Addiction Medicine
American Academy of Family Physicians	American Society for Pain Management Nursing
American Academy of Pain Medicine	Association for Multidisciplinary Education and Research in Substance use and Addiction
American Academy of Pediatrics	Council on Social Work Education
American Pharmacists Association	International Nurses Society on Addictions
American College of Emergency Physicians	National Association for Community Health Centers
American Dental Association	National Association of Social Workers
American Medical Association	National Council for Mental Wellbeing
American Osteopathic Academy of Addiction Medicine	The National Judicial College
American Psychiatric Association	Physician Assistant Education Association
American Psychiatric Nurses Association	Society for Academic Emergency Medicine



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