# Buprenorphine in Palliative Care

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## Conflicts of Interest

- None of the presenters have a conflict of interest to disclose

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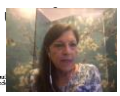
## Objectives

- Discuss ways to incorporate buprenorphine into the treatment of cancer related pain or pain secondary to serious illness in patients at risk for or with substance use disorder
- Develop methods to educate clinicians on the appropriate use of buprenorphine to treat both pain and substance use disorder
- Propose ideas to decrease stigma related to the buprenorphine in those with serious illness



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## Key Abbreviations

- BUP: buprenorphine (for the purposes of this presentation, this includes formulations, with or without naloxone, FDA approved for the treatment of Opioid Use Disorder)
- MEDD: Morphine Equivalent Daily Dose
- MOUD: Medication for Opioid Use Disorder
- OUD: Opioid Use Disorder
- SUD: Substance Use Disorder
- SL: sublingual
- HPM: hospice and palliative medicine
- IDT: interdisciplinary team

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## Case

- 58 y.o. woman admitted to the hospital with respiratory distress, was intubated and during hospitalization diagnosed with small cell lung cancer with extensive osseous metastases
- PMH: Intravenous drug use (IVDU) – heroin; 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

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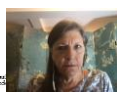
## Case (continued)

- While hospitalized on tapering 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 to manage pain



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## Case (continued)

- Initial palliative visit– offered Suboxone (buprenorphine) – refused
- Harm reduction approach
  - Prescribed only Oxycodone ER
  - No breakthrough opioids
  - Weekly prescriptions
- Continued to use heroin/fentanyl
- WHAT WOULD YOU DO??

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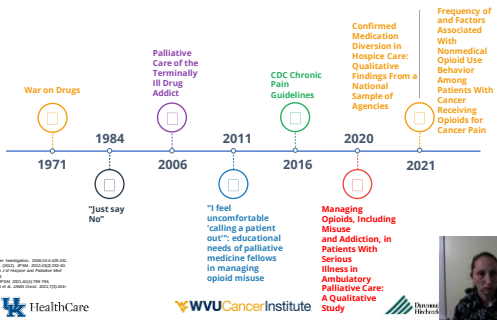


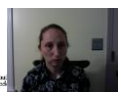

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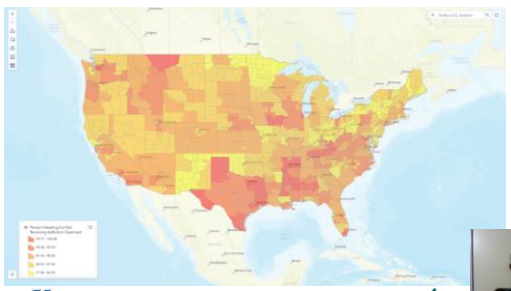

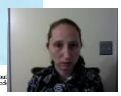

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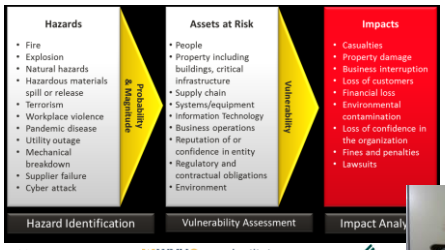
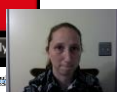
## Risk Assessment



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## Risk Mitigation and Harm Reduction

- Mitigation strategies aim to reduce possibility of damage from hazards
- Harm reduction strategies aim to reduce the extent of damage from the hazards

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## Risk Assessment for SUDs

**RELATIONSHIPS**

Risk factors

Family members who use drugs or alcohol

Family history of mental illness

Adverse childhood experiences

Protective factors

Family involvement

**COMMUNITIES**

Risk factors

Neighborhood poverty

Neighborhood violence

Protective factors

Availability of faith-based resources

Community activities

**SOCIETY**

Risk factors

Norms and Laws favorable to substance use

Racism

Lack of economic opportunity

Protective factors

Hate crime laws

Policies limi availability

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## Screening Tools for Current SUDs

- ADULT SUBSTANCE USE SURVEY (ASUS)
- ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT)
- CAGE, CAGE-AID MODIFICATION
- CRAFFT
- DRUG ABUSE SCREENING TEST (DAST)
- DRUG USE SCREENING INVENTORY-REVISED (DUSI-R)
- MICHIGAN ALCOHOL SCREENING TEST (MAST)
- MASSACHUSETTS YOUTH SCREENING INSTRUMENT-VERSION 2 (MAYSI-2)
- PERSONAL EXPERIENCE SCREENING QUESTIONNAIRE (PESQ)
- RAPID ALCOHOL PROBLEMS SCREEN (RAPS4)
- SUBSTANCE ABUSE SUBTLE SCREENING INVENTORY, 3RD EDITION (SASSI-3)
- SUBSTANCE ABUSE SUBTLE SCREENING INVENTORY-ADOLESCENT (SASSI-A2)
- TRIAGE ASSESSMENT FOR ADDICTIVE DISORDERS (TAAD)
- TWO-ITEM CONJOINT SCREENING TEST (TICS)
- TWEAK
- COMPOSITE INTERNATIONAL DIAGNOSTIC INTERVIEW VERSION 1.1 (CIDI V1.1)
- UNCOPE
- COMPREHENSIVE ADDICTION AND PSYCHOLOGICAL EVALUATION (CAAPE)
- GLOBAL APPRAISAL OF INDIVIDUAL NEEDS-INITIAL (GAIN-I)
- STRUCTURED CLINICAL INTERVIEW FOR DSM (SCID)
- LEVEL OF CARE INDEX-2 REVISED (LOCI-2R) FOR ADULTS
- ADDICTION SEVERITY INDEX (ASI) and TREATMENT SERVICE REVIEW (TSR)
- FAMILY ASSESSMENT FORM (FAF)
- GLOBAL APPRAISAL OF INDIVIDUAL NEEDS-M90 (GAIN-M90)
- LEVEL OF CARE INDEX-2 REVISED (LOCI-2R)
- RECOVERY ATTITUDE AND TREATMENT EVALUATOR (RAATE)
- RISK INVENTORY FOR SUBSTANCE-AFFECTED FAMILIES
- STRUCTURED DECISION MAKING (SDM) FAMILY AND CHILD ST ASSESSMENT

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## Tools for Risk of Problematic Opioid Use

- ORT, ORT-R = for future development of OUD on opioids
- SOAPP, SOAPP-R, SOAPP-SF
- COMM


Lau, J., et al. Palliative medicine, 2021;35(7), 1299–1322.

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## Risk Mitigation for SUD

**Universal preventive interventions**

Designed to reach entire groups or populations.

*Examples*: might target schools, whole communities, or workplaces

**Selective interventions**

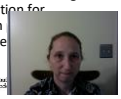
Target biological, psychological, or social risk factors that are more prominent among high-risk groups

*Examples*: include prevention education or peer support groups for adults

**Indicated preventive interventions**

Target individuals who show signs of being at risk for a substance use disorder.

*Examples*: support services for patients who violate drug policies or screening and consultation for patients with alcohol-relate



https://www.samhsa.gov/sites/default/files/20190718-samhsa-risk-protective-factors.pdf accessed on Oct 10,2021

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## Harm Reduction in SUD

- OEND = Overdose Education and Naloxone Distribution
- Fentanyl test strips
- Never Use Alone
- National Suicide Prevention Hotline
- Safer injection practices
- Safe Syringe Programs
- PrEP = pre-exposure prophylaxis anti-retroviral medication

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## Harm Reduction in Pain Management

- Co-prescribing laxatives
- Ambulatory devices
- Continuous Positive Airway Pressure
- Opioid Overdose Education and Naloxone Distribution (OEND)
- National Suicide Hotline
- **BUPRENORPHINE!!!**

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## Systemic Bias versus Implicit Bias

- Systemic Biases are institutional.
- Implicit Biases are individual.

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## Bup Systemic Bias

- Insurance Companies
- Lack of education regarding substance use disorders
- Lack of education regarding buprenorphine
- Media coverage
- Regulations
- Political climate = dichotomous thinking

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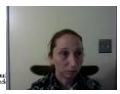
## Bup Implicit Bias

- Patient education
- Provider education
- Population knowledge/experience



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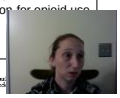
## Stigma and Bias

- Known factor in healthcare disparities
- Words matter!

| Avoid | Try Instead |
|---|---|
| Abuser, addict | Person with an opioid use disorder |
| Abuse, misuse | Substance use, Non-medical use |
| Lapse, relapse, slip | Recurrence of symptoms |
| Clean (regarding person) | In remission or recovery |
| Clean & Dirty (regarding urine drug test results) | Negative or positive (test results) |
| Medication Assisted Treatment (MAT), Opioid Replacement Therapy (ORT), Opioid maintenance therapy, Opioid substitution therapy | Medication for addiction treatment<br>Medication for opioid use disorder |



Addictionary®. Recovery Research Institute.
Ashford RD et al. Drug Alcohol Depend. 2018; 189:131-8.
Kelly JF et al. Int J Drug Policy. 2010; 21(3):202-7.
FitzGerald C et al. BMC Med Ethics. 2017; 18(1):19.

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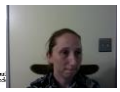
## Language Matters in Pain Management

| | |
|---|---|
| legitimate pain | pain, discomfort, suffering |
| drug seeking | symptoms of OUD |
| be liberal | titrate dose |
| be lenient | working with patient |
| patient reports | patient describes, patient experiences |



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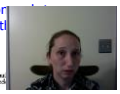
## Reframing the Pain & Palliative Conversation

| | |
|---|---|
| You all never had pain like mine. | You don't feel heard. |
| Are you calling me a liar? | I will help you with what you tell me. |
| Don't call me an addict. | You're concerned about becoming dependent on these medications. |
| Just make me comfortable. | Let's focus on you as a person[illegible] focusing on the disease and th[illegible] are not as helpful anymore. |



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## Buprenorphine Preparations*

| FDA Indication | Preparation | Method of Administration | Patient Population (Opioid naïve or tolerant) |
|---|---|---|---|
| Pain | Belbuca® | Buccal | Naïve |
| | Butrans® | Transdermal Patch | |
| | Buprenex® | Intravenous | Naïve (tolerant in specific circumstances) |
| Medication for Opioid Use Disorder (MOUD) Buprenorphine/ Naloxone | Suboxone® | Sublingual | Tolerant |
| | Zubsolv® | | |
| | Bunavail® | Buccal | |

*Excludes all long-acting injections/implants for MOUD

Information based on associated package inserts

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## The Conundrum

1) BUP for MOUD
   - Most widely utilized of MOUD medications
   - Complex pharmacology
2) Difficulty of acute pain management in opioid tolerant patients

1 + 2 = 🤯

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## Physiologic Changes from Chronic Opioid Exposure

- Hyperalgesia
  - ↑ sensitivity to pain
  - ↓ pain tolerance
- Opioid Induced Hyperalgesia (OIH)
- Neuroplasticity effects on long-term tolerance in OUD
- Endocrinopathies
  - Dysregulation of stress response
  - Sex hormone deficiency

De Andres J, et al. *Pain Manag.* 2015;5(3):167-173.
Macintyre PE, *Drugs.* 2020;80(1):9-21.
Zhou Y, et al. *Eur J Pain Res.* 2016;223:237-251.

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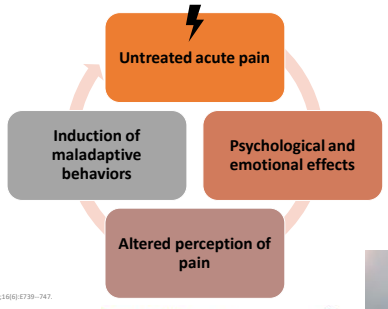


Bounes V, et al. *Pain Physician*. 2013;16(6):E739–747.

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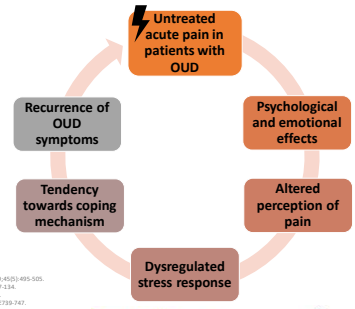


Wachholtz A, *Am J Drug Alcohol Abuse*. 2019;45(5):495-505.
Alford DP, *Ann Intern Med*. 2006;144(2):127-134.
el Absi M. *Psychosom Med*. 2018;80(1):2-16.
Bounes V, et al. *Pain Physician*. 2013;16(6):E739-747.

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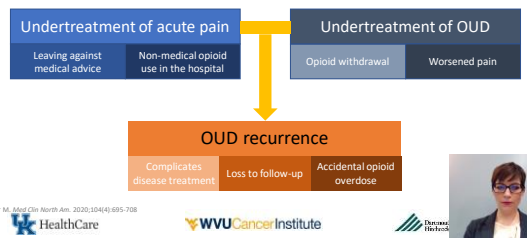
## Risks of Undertreatment




Herscher M. *Med Clin North Am*. 2020;104(4):695-708



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## Common Misconceptions

- MOUD provides analgesia
- Use of opioids for analgesia may result in addiction recurrence
- Full agonist opioids used "on top" of BUP won't provide analgesia
- Reporting pain → manipulation to obtain opioids, drug seeking, manifestation of worsening addiction
- Naloxone in Suboxone® blunts effects of opioids for analgesia

Alford DP. Ann Intern Med. 2006;144(2):127-134.
Haber LA et al. J Hosp Med. 2019;14:633-5.
Herscher M et al. Med Clin North Am. 2020;104(4):695-708.
Lembke A et al. Pain med. 2019; 20(3):425-8.

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## Buprenorphine Pharmacology & Clinical Implications

- Naloxone absorption
- Partial agonist
  - ↓ peak effect
  - ↓ adverse effects
- Affinity for mu opioid receptor
  - Precipitated withdrawal not relevant when continuing therapy

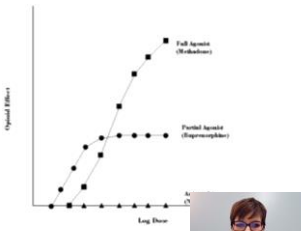


Figure 2-1. TIPS 40, SAMHSA 2004.

Haber LA. *J Hosp Med*. 2019;14:633-5
van Niel JC. *Drug Res (Stuttg)*. 2016;66(11):562-570.

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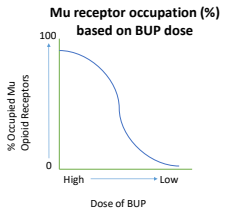
## Buprenorphine Pharmacology & Clinical Implications



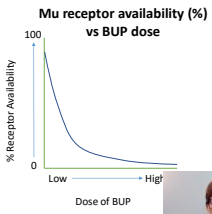




*Figure (left) adapted from Figure 1A: Drug Alcohol Depend. 2014;144:1-11* *Figure (right) adapted from Figure 1: Warner NS. Mayo Clin Proc. 2020 Jun;95(6)*

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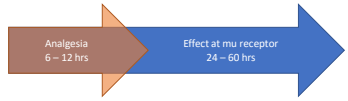
## Buprenorphine Pharmacology & Clinical Implications

- Potency
  - 16 mg SL BUP ~480 MEDD
- SL elimination half-life
  - Duration of analgesia vs OUD treatment




Herscher M. Med Clin North Am. 2020;104(4):695-708
Childers JW. Fast Facts and Concepts #221. 2020

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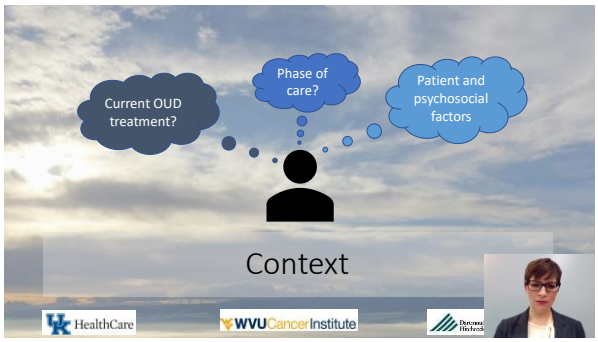


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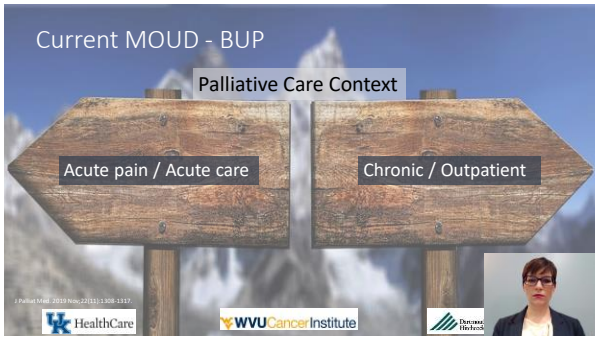


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## Advantages of Continuing BUP

- Don't have to cover large MEDD deficit
- Evidence to support BUP + IR opioids achieving analgesia
- Avoid risk of DIScontinuity in care
- Avoid re-induction complexities
- Decrease risk of OUD relapse and accidental overdose

Haber LA. *J Hosp Med.* 2019;14:633-5
Herscher M. *Med Clin North Am.* 2020;104(4):695-708

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## Advantages of Continuing BUP

- Reduced incidence of hyperalgesia
- Schedule 3 controlled substance
  - Fewer prescribing restrictions
- Safety in renal failure/dialysis?
  - Renal elimination of active metabolites
- Neuropathic pain?

Koppert, W. *Pain.* 118.1 (2005): 15-22.
Wasserman, R. *J natl sci.* 3.2 (2017).
Hand, C. W. *Brit. anaesth.* 64.3 (1990).

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## Scenario - Stopping BUP for MOUD

- Underlying concept - improved OPIOID analgesia
  - Other meds/modalities can and should be used to treat pain in an opioid tolerant patient
  - Baseline MEDD must be covered
    - 16 mg SL BUP ~480 MEDD
    - Concerns for withdrawal & craving
    - Analgesia not possible until baseline requirements met
  - Prescribed full agonist opioids WITHOUT BUP exposes patient to trigger in a tenuous and vulnerable state

Herschar M. *Med Clin North Am.* 2020;104(4):695-708

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## Active OUD – Not on MOUD

- Evaluate Total Pain and optimize non-opioid options
  - Opioid-sparing modalities
  - Address psychological dimensions
- Define expectations, goals of therapy, and frequent monitoring
- Consider long-acting therapies and abuse-deterrent formulations
- Collaborate with addiction specialist, when possible
  - Consider methadone or **BUP/NAL** in divided dose

J Palliat Med. 2019 Nov;22(11):1308-1317.
Am Soc Clin Oncol Educ Book. 2019 Jan;39:24-35.

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## An Intervention: Palliative Care Buprenorphine Education

Background:

- 13% of palliative providers reported having DATA waiver to prescribe buprenorphine as treatment for opioid use disorder.
- 21% of HPM Fellows reported they were satisfied with how they treat symptoms in patients with opioid misuse and/or substance use disorder.
- 41% of HPM Fellows reported feeling trained to manage opioid misuse
- Palliative providers reported least comfort in managing patients with non-opioid substance use disorder

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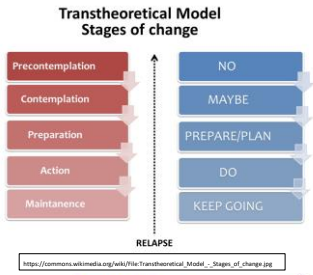


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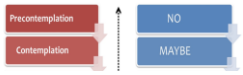
## Buprenorphine in Palliative Care

"I don't DO addiction! I don't DO chronic pain!"

BUT.....

- 7% hospice discharge
  - FOR CAUSE
  - STABILITY
- Upstream palliative care
- Diversion and OUD
- OUD/SUD prevalence in patient population




MAYBE.....

- I might need to diagnose OUD
- I might need more tools in the toolbox

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## Buprenorphine in Palliative Care

Where do I start?

**EDUCATE MYSELF** on long term opioids, chronic pain management, opioid use disorder

- Opioid Misuse = Nonmedical opioid use = Unhealthy Opioid use OR OUD
- Multimodal Pain Management
- Interdisciplinary Addiction Care
- Neurobiologic similarities between complex opioid dependence and mild OUD
- **BUPRENORPHINE???**


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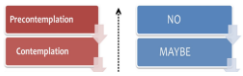
## Buprenorphine in Palliative Care

**EDUCATE OTHERS**

1. engage in conversations
2. dispel myths
3. decrease moral distress
4. garner support




- interdisciplinary team
- referring teams
- patients and caregivers

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## HPM Bup Education

Intervention:

- Regular meetings of HPM, pain management, and addiction medicine clinicians to discuss challenging palliative care cases
- Two DATA waiver training live sessions for providers in central KY

Aims:

- Increase HPM provider awareness of opioid use disorder, chronic pain, and interventional pain treatment options
- Provide DATA waiver training on buprenorphine for opioid use disorder to HPM providers.

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## Buprenorphine in Palliative Care

Plan the Logistics:

- Diagnoses Inclusion
- Prescribing Team
- Prior Authorizations & Administrative Team
- Peer Network for entire IDT (psychosocial and behavioral included!!!)


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## HPM Bup Education

Results from survey study of HPM clinicians:

- Increased comfort and feeling supported in managing patients with substance use
- Increase comfort in talking about goals of care and substance use with patients
- Increased likelihood of referring to interventional pain and nonpharmacologic pain modalities
- Increase in considering buprenorphine as an option

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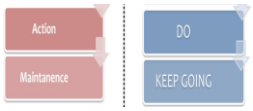
## Buprenorphine in Palliative Care

Implementation & Maintenance:

- Revisit policy and procedures as necessary
- Share experiences
- Peer Network

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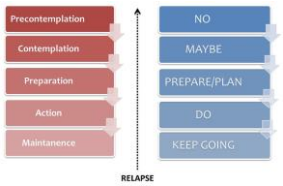
## Buprenorphine in Palliative Care

Next steps:

- Share more cases!!!
- Expand the hospice & palliative literature on buprenorphine
- Decrease systemic barriers and bias
- Encourage DATA waiver in HPM training
- Expand the palliative buprenorphine peer network

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## Case (continued)

- Admitted for 3 days of chemotherapy due need for IV access
- Went through withdrawal due to concurrent use of heroin/fentanyl in addition to Oxycodone ER
- Started on buprenorphine/naloxone
- Remained on buprenorphine with good pain control
- Occasionally used methamphetamine and cocaine but there was no evidence of recurrence of opioid use

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## Case (conclusion)

- Developed brain metastases, neurologic decline and after brief ICU stay, transitioned to comfort focused care
- Daughters both entered treatment for substance use disorder and were able to spend quality time with her
- Transferred to hospice center for end of life care and was surrounded by family and friends

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## Take Home Messages

- Buprenorphine can be a useful medication for use in those with serious illness for both pain and substance use disorder.
- Education and collaboration with colleagues can both promote the better treatment of pain and substance use.

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## Questions?

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## Resources


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