

# **BUPRENORPHINE/NALOXONE TREATMENT OF ADDICTION ADVANCED TRAINING PROGRAM**

**2025**



**DAY ONE**

**BUPRENORPHINE/NALOXONE**

**TREATMENT OF ADDICTION**

**ADVANCED TRAINING PROGRAM**

# SPEAKERS

## Introductions

Dr. Francisco Acevedo

Dr. Lesley Manning

Dr. Kaitlyn Stanford

# LEARNING OBJECTIVES

At the end of this session, participants should be able to:

- Explain the basic features of opioid dependency as outlined by the DSM 5
- Recognize the patient with an opioid use disorder (OUD)
- Understand the initial steps in assessment of the patient with OUD
- Initiate treatment with Buprenorphine/Naloxone adhering to prescribed induction protocols.
- Watch for common and uncommon adverse events seen with Buprenorphine/Naloxone and potential drug interactions.
- Evaluate the stability of a patient on OAT with Buprenorphine.

# **ADDICTION TREATMENT**

Goals and Options for OUD

*“An optimal dose is one where, among other things, the patient is free of opioid withdrawal symptoms for the full 24-hour dosing interval without experiencing intoxication or sedation from the medication.”*

# ADDICTION TREATMENT IS ...

## 1. Any intervention or program that:

- Is designed to help people deal with a problem related to substance use.
- Assists patients in reducing the risk of harm by reducing or eliminating risky behaviours.
- Deals with issues beyond substance use (e.g. health, social, psychological and support issues).

## 2. Treatment may or may not lead to abstinence:

- Setting a goal of abstinence limits treatment options and may undermine outcome in some patients. Instead, treatment goals exist along a continuum.

# ADDICTION TREATMENT SHOULD:

- Focus on improving patient outcomes rather than whether a certain drug is present in the toxicology screen.
- Treat the person, not the problem.
- Be geared toward the patient's current life situation and place in the community.
- Involve and engage the patient in developing the treatment plan, and
- Assist the patient in achieving stability in life.

*Note: As with other chronic health conditions (e.g. diabetes, asthma), if outcome of treatment is poor, the treatment plan should be adjusted rather than abandoned.*

# THE FOUR Cs



# SUBSTANCE USE DISORDERS

Remember: Any pattern of mental health symptomatology can be caused by a pattern of substance use.

Potential substance-induced disorders include the following:

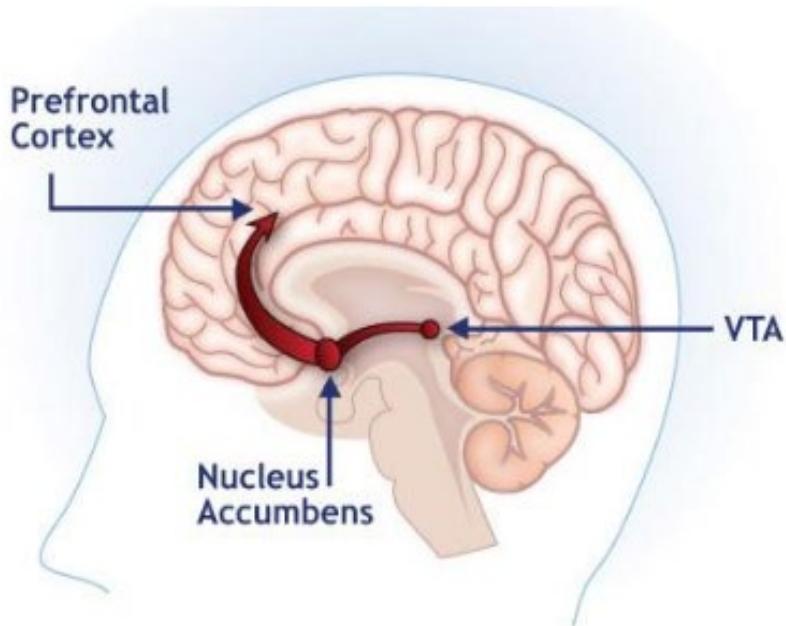
- Intoxication
- Withdrawal
- Substance-induced mental disorders:
  - Delirium or dementia
  - Amnestic disorder
  - Psychotic disorder
  - Mood disorder

# THE REWARD PATHWAY

The Ventral Tegmentum Area (VTA) is a heterogeneous group of cells made up of dopamine and GABA-containing neurons.

Drugs of abuse act through different mechanisms to activate the dopamine-containing neurons in the VTA to release their dopamine into the synapse.

Substances linked to dependence have been found to increase dopamine release in the Nucleus Accumbens, triggering the reward pathway.



# **MAKING THE DIAGNOSIS OF OPIOID USE DISORDER: DSM 5 Criteria**

# DSM-5 CLINICAL DIAGNOSTIC CRITERIA

To be eligible for Opioid Replacement Therapy, patients should meet DSM-5 criteria for opioid use disorder. The presence of at least two of the following criteria are required with severity dependent on the number of criteria.

- MILD: The presence of 2 to 3 criteria
- MODERATE: The presence of 4 to 5 criteria
- SEVERE: The presence of 6 or more criteria

# DSM 5 CRITERIA (1)

1. Opioids are often taken in larger amounts or over a longer period of time than intended. (LOC)
2. There is a persistent desire or unsuccessful efforts to cut down or control opioid use. (LOC)
3. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects. (Comp)
4. Craving, or a strong desire to use opioids. (Crav)

# DSM 5 CRITERIA (2)

5. Recurrent use resulting in failure to fulfill major role obligations at work, school, or home. (Conseq)
6. Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effect of opioid. (Conseq)
7. Important social, occupational or recreational activities are given up or reduced because of opioid use. (Conseq)

# DSM 5 CRITERIA (3)

8. Recurrent opioid use in situations in which it is physically hazardous. (Conseq)
9. Continued use despite knowledge of having a persistent or recurrent physical or psychological problem likely to have been caused or exacerbated by opioids. (Conseq)

# DSM 5 CRITERIA (4)

10. Tolerance, as defined by either of the following:

- a) A need for markedly increased amounts of opioids to achieve intoxication for desired effect.
- b) Markedly diminished effect with continued use of the same amount of an opioid.

11. Withdrawal, as manifested by either of the following:

- a) The characteristic opioid withdrawal syndrome.
- b) The same (or a closely related) substance are taken to relieve or avoid withdrawal symptoms.

# TIME FRAME FOR DIAGNOSIS

- DSM 5 : 12 months
- Real life: ???

# CASE STUDY – ALAN

*Alan is a 35 y old married man. Works in a labour job. Smokes 1 PPD cigarettes since 10 years old.*

- Has been suffering for >15y with recurrent kidney stones.
- Started taking Morphine PRN since he had his first kidney stone attack in his 20s.
- In the last two years, he has had multiple kidney stone attacks that increased his Morphine intake and now he is taking it daily.
- His family physician tried to manage his pain with low doses of Morphine IR but after a few months, his daily dose increased to 120 mg/d.
- He has been coming in as a walk-in, usually at the end of the week, complaining of pain.

# ALAN: IDENTIFYING OUD

One day his family doctor saw that he had a recent KUB from the ER showing no kidney stones and called him back. During the talk the patient revealed:

- He was suffering from pain if he did not take his Morphine.
- He had missed work several days a week, as he was not able to get out of bed.
- He has been taking more meds than prescribed and that was the reason he would run out of meds earlier than he should.

# ALAN: IDENTIFYING OUD

Patient also shared the following:

- He denied craving or desire to use drugs.
- Unsuccessfully tried to cut down the dose of Morphine in the last months.
- Had difficulties with his partner at home as he was not able to help with the daily chores and was always “crooked” and angry.
- He had stopped going out and visiting friends in the last year.

# Poll #1: Does Alan meet the criteria?

To be eligible for methadone, buprenorphine/naloxone or slow release oral morphine agonist treatment, patients must meet DSM-5 criteria for opioid use disorder.

**DSM-5 Criteria for Opioid Use Disorder**

1 Opioids are often taken in larger amounts or over a longer period than was intended	<p>The presence of at least 2 of these symptoms indicates an Opioid Use Disorder (OUD)</p> <p>The severity of the OUD is defined as:</p> <p><b>MILD:</b> The presence of 2 to 3 symptoms</p> <p><b>Moderate:</b> The presence of 4 to 5 symptoms</p> <p><b>SEVERE:</b> The presence of 6 or more symptoms</p>
2 There is a persistent desire or unsuccessful efforts to cut down or control opioid use	
3 A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects	
4 Craving or a strong desire to use opioids	
5 Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home	
6 Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids	
7 Important social, occupational, or recreational activities are given up or reduced because of opioid use	
8 Recurrent opioid use in situations in which it is physically hazardous	
9 Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids.	
10 Tolerance* as defined by either of the following: a) Need for markedly increased amounts of opioids to achieve intoxication or desired effect b) Markedly diminished effect with continued use of the same amount of opioid	
11 Withdrawal* as manifested by either of the following: a) Characteristic opioid withdrawal syndrome b) Same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms	

\* Patients who are prescribed opioid medications for analgesia may exhibit these two criteria (withdrawal and tolerance), but would not necessarily be considered to have a substance use disorder.

# Poll #1: Does Alan meet the criteria?

## Answer:

He has at least seven (7) of the criteria for OUD and qualifies as a severe case.

# ALAN: PHYSICAL EXAM

- Patient looks anxious and agitated, complains that he is not able to sit down for long but you observe that he is able to do it.
- He complains of back and body pain (6-8/10), stomach cramps and cold chills. Denies N/V or diarrhea.
- His pulse is 95 bpm, no sweating is observable, tremor not observed.
- Nose is stuffy and skin is smooth.
- Pupils look normal size.
- No needle marks.

# COW SCALE

## *See Handout #04*

### APPENDIX 1 Clinical Opiate Withdrawal Scale

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

Patient's Name: _____	Date and Time / / : _____
Reason for this assessment: _____	
<b>Resting Pulse Rate:</b> _____ beats/minute <i>Measured after patient is sitting or lying for one minute</i> 0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120	<b>GI Upset:</b> <i>over last 1/2 hour</i> 0 no GI symptoms 1 stomach cramps 2 nausea or loo stool 3 vomiting or diarrhea 5 multiple episodes of diarrhea or vomiting
<b>Sweating:</b> <i>over past 1/2 hour not accounted for by room temperature or patient activity.</i> 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moisture on face 3 beads of sweat on brow or face 4 sweat streaming off face	<b>Tremor:</b> <i>observation of outstretched hands</i> 0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching
<b>Restlessness:</b> <i>Observation during assessment</i> 0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 unable to sit still for more than a few seconds	<b>Yawning:</b> <i>Observation during assessment</i> 0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute
<b>Pupil size</b> 0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible	<b>Anxiety or Irritability</b> 0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable or anxious 4 patient so irritable or anxious that participation in the assessment is difficult
<b>Bone or Joint aches</b> <i>If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored</i> 0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort	<b>Gooseflesh skin</b> 0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection
<b>Runny nose or tearing</b> <i>Not accounted for by cold symptoms or allergies</i> 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks	<b>Total Score</b> _____ The total score is the sum of all 11 items Initials of person completing assessment: _____

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

This version may be copied and used clinically.

# **Poll # 2: What is Alan's COWS score?**

**Answer: 8**



# SOW SCALE

Patient Focus:  
*What does  
withdrawal mean for  
them?*

**See Handout #25**

The SOWS is a self-administered scale for grading opioid withdrawal symptoms. It contains 16 symptoms whose intensity the patient rates on a scale of 0 (not at all) to 4 (extremely), and takes less than 10 minutes to complete.

Patient Instructions: please score each of the 16 items below according to how you feel right now. Circle one number only.

Item	Symptom	Not at all	A little	Moderately	Quite a bit	Extremely
1	I feel anxious	0	1	2	3	4
2	I feel like yawning	0	1	2	3	4
3	I am perspiring	0	1	2	3	4
4	My eyes are teary	0	1	2	3	4
5	My nose is running	0	1	2	3	4
6	I have goosebumps	0	1	2	3	4
7	I am shaking	0	1	2	3	4
8	I have hot flushes	0	1	2	3	4
9	I have cold flushes	0	1	2	3	4
10	My bones and muscles ache	0	1	2	3	4
11	I feel restless	0	1	2	3	4
12	I feel nauseous	0	1	2	3	4
13	I feel like vomiting	0	1	2	3	4
14	My muscles twitch	0	1	2	3	4
15	I have stomach cramps	0	1	2	3	4
16	I feel like using now	0	1	2	3	4

# What are the patient's goals?

#1. Patient wants to stay on his meds as usual – MS IR 10 mg (12 tabs/d) and promises that he will try and cut down.

#2. Patient admits he has a problem and wants some help in abstaining from substance use completely.

# 1. PATIENT PRE-CONTEMPLATIVE

Remember you are there to help the patient and practice ***harm reduction***.

- Build therapeutic relationship
- Education
- Inform patient of available community resources
- Ensure patient has access to safe supplies and Naloxone

## 2. PATIENT READY FOR CHANGE

- Set **REALISTIC** and **MEASURABLE** goals with the patient
  - Focus on what is important for Alan (job, life at home, friends, etc.)
- Try to assist with **ACHIEVING STABILITY** in Alan's life
- Set **TIME BOUND** goals
  - It is vital to have regular follow up.

# OFFERING TREATMENT

- Ensure your patient is making an informed decision before initiating treatment.
- Consider a written contract. Define the roles and responsibilities of the patient and the treatment team.
- Include written commitments from all parties and the patient's informed consent.
- Focus on communication with other HPs.

*See Handout #06*

# GOAL SETTING

GOALS for the patient:

- Measurable
- Time limited
- Relevant

# **BUPRENORPHINE (SYNTHETIC OPIOID)**

Pharmacodynamics/Pharmacokinetics/Contra  
-Indications/Precautions

# BUPRENORPHINE: HOW IT WORKS

- Acts as a partial agonist at the  $\mu$ -opioid receptors receptor. Heroin, methadone, morphine, and oxycodone are full agonists.
- As a partial agonist, higher doses of buprenorphine can be given with fewer adverse effects compared to higher doses of full agonist opioids.
- Withdrawal syndrome is typically milder than seen with full agonists and may be delayed in onset.
- Has low  $\mu$ -intrinsic activity, meaning its opioid effects are blunted.
- Acts as an antagonist at the kappa-opioid receptor, binding to but not stimulating it into activity. This results in possible antipsychotic and antidepressant effects, although the clinical relevance of these effects remains uncertain.

# BUPRENORPHINE: PARTIAL MU AGONIST

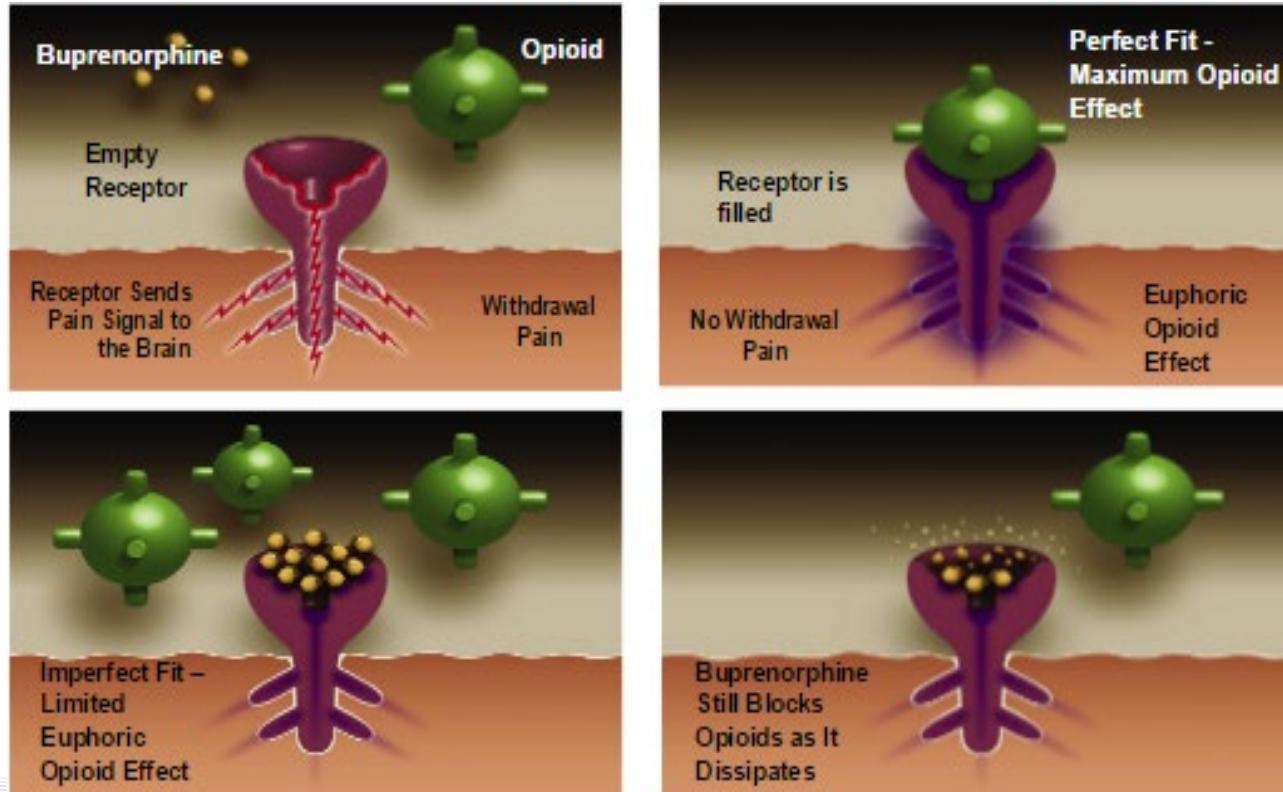
## Advantages

- Fewer adverse effects than full agonist opioids.
- Milder withdrawal profile.
- Buprenorphine has low  $\mu$ -intrinsic activity, meaning its opioid effects are blunted.
- Due to the ceiling effect, buprenorphine produces less respiratory depression. (SAFER)

## Disadvantages

- Doses may be suboptimal for individuals with high opioid tolerance.
- At high doses, may block the analgesic effect of concurrent opioid medications administered for pain.
- Not approved in Canada for the primary purpose of pain control, though moderate evidence of efficacy = OFF LABEL.

# Mechanics of Action: Partial MU-effect (Efficacy vs. Affinity)



# HOW LONG TO WAIT FOR INDUCTION?

Short acting:  
[Heroin/Hydromorphone/Oxy IR]

12-16 hours  
since last use

Intermediate [MS contin; Hydromorphone contin]

17-24 hours  
since last use

Long acting:  
[Methadone/Fentanyl]

30-48 hours  
since last use

# STARTING BUPRENORPHINE

- Do you wait until Alan is in withdrawal (COWS 13)?  
Yes or No?
- Do you start with micro-dosing? Yes or No?

# ALAN: IN WITHDRAWAL

Alan decides to go cold turkey for your next clinic day and returns to see you early during your Monday clinic. He has Morphine you gave him for Friday and Saturday only.

# ALAN: IN WITHDRAWAL

In your clinic, he looks irritable, shifting all the time on his seat.

- Complains that he is nauseous and that he has started to vomit during the morning at home.
- Has severe aches and pains and has a visibly runny nose and teary eyes. Hands are visibly trembling.
- Pupils are dilated 5mm but you can see the iris.
- Has beads of sweat all over the face and his arms have piloerection.
- HR 119bpm and you noticed him yawning twice.

# COW SCALE

*See Handout  
#04*

**APPENDIX 1**  
**Clinical Opiate Withdrawal Scale**

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

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Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

This version may be copied and used clinically.

# Poll # 3: What is Alan's COWS score?

**Answer:**

At least 25. Alan is ready for induction.

# INDUCTION: DAY ONE

- Plan induction for a week day preferably early in the day.  
Reassessment required following morning visit.
- At time of first dose, precipitated withdrawal risk is much lower if COWS is greater than 12. If lower, postpone until afternoon or next day.
- Start with either 2mg or 4mg depending on COW scale.
- Make sure patients have SOWS to do self assessment.
- Patients can self-assess and dose again at intervals of 3-4 hours 1 or 2 more times on day one ***up to a maximum of 12 mg on the first day.***

DAY 1	SOWS Score	DOSE
900 hrs of day 1	14	4 mg
Visit #1		
1200 hrs of day 1	(a) <5 (b) 6-12 (c) >12	(a) 0 (b) 2mg (b) 4 mg
1600 hr of day 1	(a) <5 (a) 6-12 (c) >12	(a) 0 (b) 2 mg (c) 4 mg
		Max Dose Day 1 = 12 mg

# INDUCTION: DAY TWO

**Reassess patient in morning.**

- If patient feels well at 24hrs without sedation or withdrawal:
  - Give total Day 1 dose as single Dose on Day 2.
- If patient is experiencing withdrawal symptoms at 24hrs:
  - Give total Day 1 dose + 2-4mg as first dose on Day 2.
  - Have patient self assess, with SOWS q4hrs and use PRN doses based on guide provided.
  - **Max. dose of 16 mg is currently recommended on Day 2.**

DAY 2	SOWS	DOSE
9:00 hrs of day 2 1 <sup>st</sup> dose	Takes first dose at Pharmacy	Start with total dose of the previous day – max 12mg
1200 hrs	(a) <5 (a) 6-12 (a) >12	(a) 0 (b) 2 mg (c) 4 mg
1600 hr of day 2	(a) <5 (a) 6-12 (c) >12	(a) 0 (b) 2 mg (c) 4 mg
		Max Dose Day 2 = 16 mg

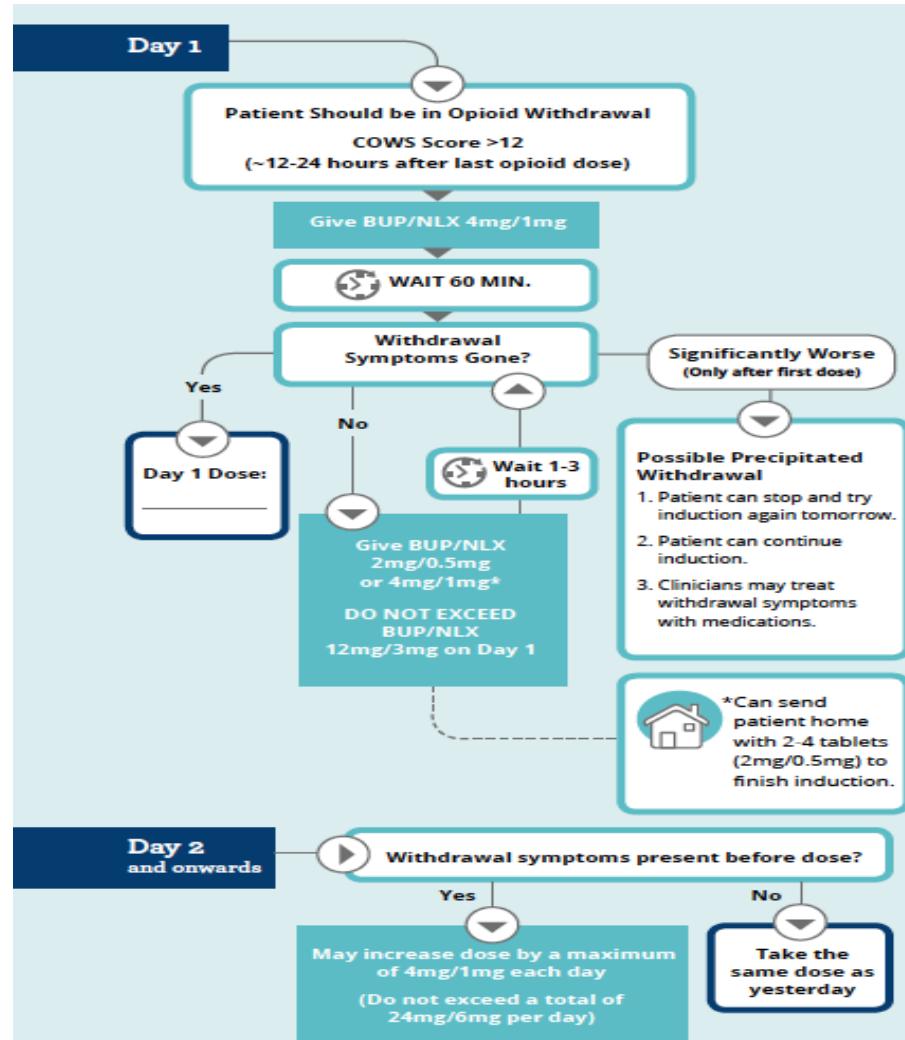
# INDUCTION: DAY THREE AND BEYOND...

- As with Day Two, start off Day Three with the total dose given on Day Two.
- Have the patient self-assess 3-4 hours following the morning dose for signs of persistent withdrawal.
- Dose adjustments may be made in 2-4 mg amounts as required to prevent withdrawal and cravings – **up to a maximum of 24 mg/day.**

# INDUCTION PROTOCOL: SUMMARY

Day One	Day Two	Day Three onward...
Aim COWS for 13-14	Start with total dose	Start with total dose Day 2
<b>Max. 12 mg</b>	Day 1	Increase by 2-4mg
Risk precipitated withdrawal	Rep. self-assessment	increments based upon symptoms
	<b>Max. dose 16 mg</b>	Review Q 1-2 weeks initially
		<b>Max. 24mg dosage</b>

# INDUCTION SUMMARY



# CASE STUDY: ALAN HAD A SLIP UP

- Alan was emotionally triggered at a party and restarted opiates again 1m ago.
- He had successfully tapered down his Buprenorphine treatment as he had been doing well for over a year.
- Now he is back at doing Oxycodone 100 mg/d and wants to regain control of his life.
- He does not want to go through withdrawal to start treatment with Buprenorphine.

# ALAN: I WANT THE EASY WAY

1. No need to stop opioids or be in withdrawal.
2. You can start Buprenorphine the same day you see him.
3. Much easier for the patient and for the family doctor.  
(My opinion)
4. Tablets will need to be cut in  $\frac{1}{4}$  or  $\frac{1}{2}$  at the beginning.

# MICRODOSING (The Bernese Method)

- Start while the patient is on short acting or on long acting opioids.
- Follow the guide from the Canadian Mental Health Association of Sept 2019 (***See Handout #18***).
- Dosing Options for short acting or long acting opioids
  - Once Daily Dosing
  - Twice Daily Dosing
- Microdoses apply to the active component Buprenorphine, not Naloxone.

# OPTION ONE: ONCE DAILY DOSING

## Short-acting Opioid:

Day	Buprenorphine	Opioid
1	0.5 mg daily	Maintain dose
2	1.0 mg daily	Maintain dose
3	1.5 mg daily	Maintain dose
4	2.0 mg daily	Maintain dose
5	2.5 mg daily	Maintain dose
6	3.0 mg daily	Maintain dose
7	4.0 mg daily	Stop short-acting opioid

See the patient on Day 7, after 4mg of Bup/Nlx, and give another 2mg every 1h until comfortable, to a max of 12mg that day. You may instead choose to give an additional 2mg as needed on Day 7, with daily follow-ups thereafter, and increases of 2mg to 4mg/day as needed, until comfortable. Final maximum dose is typically 16mg/day (but often can be less)

## Long-acting Opioid: (Including Fentanyl, Fentanyl Patches, and Methadone)

Day	Buprenorphine	Opioid
1	0.5 mg daily	Maintain dose
2	1.0 mg daily	Maintain dose
3	1.5 mg daily	Maintain dose
4	2.0 mg daily	Maintain dose
5	2.5 mg daily	Maintain dose
6	3.0 mg daily	Maintain dose
7	4.0 mg daily	Maintain dose

If long- AND short-acting opioids, stop short-acting opioids here and maintain long-acting opioid dose.

You may also choose to begin a taper of long-acting opioids at this point, though we have not found it necessary

8	5.0 mg daily	Maintain dose
9	6.0 mg daily	Maintain dose
10	7.0 mg daily	Maintain dose
11	8.0 mg daily	Maintain dose
12	10.0 mg daily	Maintain dose
13	12.0 mg daily	Maintain dose
14	12.0 mg daily	Stop all remaining opioid therapy

Follow-up appointment at Day 7 to monitor progress and outline taper of long-acting opioid if you choose.

See the patient on Day 14, after 12mg of Bup/Nlx, and give another 2mg every 1h until comfortable, to a max of 16mg that day.

# OPTION TWO: TWICE DAILY DOSING

## Short-acting Opioid:

Day	Buprenorphine	Opioid
1	0.5 mg once daily	Maintain dose
2	0.5 mg twice daily	Maintain dose
3	1.0 mg twice daily	Maintain dose
4	2.0 mg twice daily	Stop short-acting opioid therapy

At 4mg Suboxone, the client may fully stop all short-acting opioids without a taper. The Suboxone dose can then be adjusted as needed, adding 2mg every 1h until comfortable, to a max of 12mg that day.

## Long-acting Opioid: (including Fentanyl, Fentanyl Patches, and Methadone)

Day	Buprenorphine	Opioid
1	0.5 mg once daily	Maintain dose
2	0.5 mg twice daily	Maintain dose
3	1.0 mg twice daily	Maintain dose
4	2.0 mg twice daily	Maintain dose

If long- AND short-acting opioids, short-acting opioids can be stopped here.

5	3.0 mg twice daily	Maintain dose
6	4.0 mg twice daily	Maintain dose
7	12 mg once daily	Stop all remaining opioid therapy

Follow-up appointment at Day 7 after 12mg of Bup/Nlx, and give another 2mg every 1h until comfortable, to a max of 16mg that day.

# PITFALLS: PRECIPITATED WITHDRAWAL

- Buprenorphine/Naloxone has poor oral and sublingual bioavailability and is not responsible for the withdrawal experienced.
- Precipitated withdrawal may happen at the time of the first dose.
- It is most likely to occur if the patient takes the first dose of Buprenorphine/Naloxone while affected by another opioid.

# PRECIPITATED WITHDRAWAL: SYMPTOMS

- Vary considerably in severity.
- Sweating, GI symptoms (abdominal cramps, diarrhea, nausea), anxiety, cravings.
- Begin from 30 to 60 minutes after first dose of Buprenorphine/Naloxone.
- Peak within 90 minutes to 3 hours after first dose and then subside.
- May continue after second or third dose.
- ***Not an indication for opioid supplementation.***

# PRECIPITATED WITHDRAWAL: PREVENTION

- To avoid precipitated opioid withdrawal, the patient should show objective signs and symptoms of at least moderate withdrawal prior to induction dosing.
- A useful reference assessment may be a moderate score of withdrawal, >12 on COWS and SOWS.
- Advise patient that further opioid use will not relieve withdrawal symptoms.

# MANAGING PRECIPITATED WITHDRAWAL: TWO OPTIONS

## Option One

- Reassure the patient
- Discourage use of opioids to treat PW
- Continue with induction of Buprenorphine
- Offer non-opioid symptomatic Tx such as Clonidine, NSAIDS, etc.

## Option Two

- Reassure the patient
- Discourage the use of opioids to treat PW
- Offer non-opioid symptom management
- Reschedule induction.

# OPIOID WITHDRAWAL SYNDROME

## Acute withdrawal

Begins within 6 to 24 hours of last opioid use, methadone over 30-40 hours

Peaks in severity within 2 to 4 days

Most physical features resolve within 7 days

Cravings, sleep, and mood disturbances may persist for weeks

## Protracted withdrawal

Withdrawal features persist for weeks, months, or indefinitely

Usually triggered by internal mood lability and/or environmental stimuli

## Precipitated withdrawal

Occurs about 1 hour after first dose of buprenorphine/naloxone, if another opioid is in the patient's system

# ACUTE WITHDRAWAL

## **Early symptoms of Opioid Withdrawal include:**

- Agitation
- Anxiety
- Increased lacrimation, rhinorrhea, sweating
- Insomnia
- Muscle aches
- Yawning

## **Late symptoms of Opioid Withdrawal include:**

- Abdominal cramping
- Diarrhea
- Dilated pupils
- Goose bumps
- Nausea
- Vomiting

# PATIENT LOGISTICS

# WRITING THE RX

- Date
- Patient's full information including MCP number
- Prescriber's information
- Name of Drug
- Dose in alpha/numeric (e.g. four/4)
- Start dates and end dates
- Dosing instructions: i.e. witnessed or carries
- Physician's signature

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**SECURITY FEATURES INCLUDED**

John Doe 10/09/24  
Patient's Full Name Date DD MM YY

**LABEL with patient information**

**Suboxone initiation**

MCP # Rx Start Sept 10 Stop Sept 11  
① Suboxone 2mg x 2 (two) tabs

Day 1 = Suboxone 0.5 mg (½ tab) OD

Day 2 = Suboxone 0.5 mg (½ tab) BID

I certify that I have reviewed the medication profile for this patient provided through their Electronic Health Record.

Dr. NAME XX  
Signature of Prescriber

Name of Pharmacy to dispense ANY NAME

Time: 10:30 AM/PM

License # F00001

VALID FOR CONTROLLED SUBSTANCES

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SECURITY  
FEATURES  
INCLUDED

John Doe

Patient's Full Name

Date DD MM YY

LABEL with patient  
information

MCP #

Rx Start Sept 10 Stop Sept 16  
① Suboxone 8 mg x 0D x ② (seun)  
② Suboxone 2 mg x 11 00 x ⑯ (fanteen)

Total daily Suboxone 12 mg  
(twelve)

I certify that I have reviewed the medication  
profile for this patient provided through their  
Electronic Health Record.

25042478471

Dr. NAME

Signature of Prescriber

XXXX

Time: 10:30  AM/PM

Name of Pharmacy to dispense

ANY NAME

License #: F 00001

VALID FOR CONTROLLED SUBSTANCES

# WORKING UP THE PATIENT

- History of substance use
- Polysubstance use
- Laboratory workup

**DAY TWO**

**BUPRENORPHINE/NALOXONE**

**TREATMENT OF ADDICTION**

**ADVANCED TRAINING**

**PROGRAM**

# PREGNANCY AND OAT



# IMPACTS OF USE OF OPIOIDS DURING PREGNANCY - MATERNAL

- Untreated OUD can be associated with
  - Placental abruption
  - Preterm labor
  - Stillbirth
  - Pre-eclampsia
- Concurrent higher risk of STIBBIs
- Increased psychosocial impact and lower overall support
- Polysubstance use is higher

# IMPACTS OF USE OF OPIOIDS DURING PREGNANCY - FETAL

- Low birth weight
- Neonatal withdrawal syndrome
- SIDS
- Smaller head circumference
- Decreased heart rate - as early as the first trimester

# CASE STUDY #2: ERIN

- Erin is a 23 year old female who just presented to your clinic. You haven't seen her in some time as she's been followed by another physician for her OUD; however, you have been her family physician for several years.
- She says she has noticed some weight gain in the past 2 months and was feeling kind of stomach sick but she thought it was a bug going around.
- She tests positive for pregnancy at the clinic but she can't tell you when she had her last period due to a long history of irregular periods. You discuss her options at this time.
- Erin decides she would like an abortion because she doesn't feel as though she would have the support. You discuss this with her but she decides this is the best option for her at this point.

# ERIN: SECOND VISIT

- The following Monday, you go into clinic and see Erin is booked back in; you assume it's a follow up for her abortion.
- However, when you see her, Erin tells you she was too far along. She was actually 27 weeks pregnant when they were going to do the procedure.
- You discuss with Erin about her next steps and what this entails for routine pregnancy care and OAT. You advise there will be some extra screening with her Buprenorphine.

# ERIN: GOALS FOR SECOND VISIT

1. Routine prenatal bloodwork.
2. Dating Scan/Anatomy Scan.
3. Advise Erin to book appointment with her OAT provider to see if anything should be changed at this point.

# Poll #4: Do you stop the Buprenorphine?

Answer: No

# WITHDRAWAL MANAGEMENT

**Not recommended during pregnancy**

- *High rate of relapse*
  - Up to 90 % in the first month.
  - Already a vulnerable time in their life; opioids used to be the safe haven.
- *High morbidity and mortality following relapse.*
- Fluctuation in use can affect the fetus
  - Preterm labor
  - Miscarriage
  - Long term developmental issues

# STANDARD OF CARE: OAT

- Continuity and suppression of withdrawal is important
  - Withdrawal has adverse effects for fetus and pregnancy.
- Transitioning between different kinds of OAT is not recommended in pregnancy, especially when stable.
- Methadone and Buprenorphine are used most commonly in NL
  - On the mainland there's Buprenorphine, slow release oral Morphine, Naltrexone, Sublocade.

# BUPRENORPHINE DURING PREGNANCY

- Buprenorphine is the first line recommendation if starting during pregnancy.
- As there's an extended half life at baseline, you likely won't need dose adjustment.
- If you are doing induction, you could admit to prevent withdrawal.
- There is a reduced risk of diversion.

# ERIN: WHAT'S NEXT?

So you realize that Erin is continuing with the pregnancy, and at least is getting care.

You speak with her regarding the screening that's been completed and she is to stay in close contact with her OAT provider.

Since you are her regular provider you will also read on the screening for those on OAT to stay up to date.

# Poll# 5: What else would you consider in this population?

***Answer:***

- A. STIBBIs
- B. Concurrent mental health diagnoses
- C. Stable housing
- D. Additional screening
- E. Looking for the effects of methadone on fetus
- F. All of the above***

# SCREENING

1. What other screening questions may you ask in this population?
  - a. STIBBIs
  - b. Concurrent mental health diagnoses
  - c. Stable housing
2. Extra screening during pregnancy
  - a. St. John's would refer to Maternal Fetal Medicine
    - i. Biophysicals every 2 weeks starting at 28 weeks to ensure growth.
    - ii. Looking for the effects of Buprenorphine on fetus.

# BUPRENORPHINE

- Dosing = same as non pregnant (Depends on the trimester).
- In the 2nd and 3rd trimester, hepatic metabolism increases
  - possible increase in dose may be required.
- With increased metabolism, some benefit from BID dosing.
- NOWS (Neonatal Opioid Withdrawal Scale) on delivery.

# MONITORING DURING PREGNANCY

- Monitoring guidelines are based of those developed for methadone
  - Referral to Maternal Fetal Medicine
  - Biophysicals every 2 weeks starting 28 weeks to ensure growth and appropriate development
- Dose monitoring
  - Very patient dependent – some can stay at the same dose, some require increased dose, some can benefit from split dosing.

# IF ON OAT, WHAT CAN I USE FOR PAIN CONTROL DURING LABOUR?

Intrapartum – offer epidural or spinal

- Butorphanol, Nalbuphine, Pentazocine (opioid agonist-antagonist) should be avoided; not used as practice in NL, can precipitate acute withdrawal.
- In general will require higher dose of analgesia if using opioids as management.
- Continue with OAT during labour; you may split the dose at times to help provide some pain management as well.

# CASE STUDY: POSTPARTUM FOR ERIN

- Pain Control
  - Depending on mode of delivery
- In hospital course
  - Typically will be prescribed on discharge at this time
  - Close follow up when discharged
  - Baby will ideally in room with mom
- Buprenorphine dosing
  - Can go back to pre-pregnancy dosing immediately after delivery

# MAINTENANCE VISITS

- Initially Q1-2 weeks.
- Time frame ultimately dependent upon clinical stability.
- Maximum between visits in a highly stable patient should not normally exceed 12 weeks.
- Visits assess clinical stability through interview and UDS.

# STABILITY INCLUDES:

- Substance use i.e. UDS results
- Psychiatric symptoms (depression, mania, anxiety, etc.)
- Employment
- Social relationships
- Participation in recovery activities (counselling/12-Step groups, etc.)

# WWCWYTD?

1. Complete a course on opioid dependency/addiction.
2. Complete a course on Buprenorphine.
3. Seek help from other more experienced prescribers.
4. Continue with CME/CPD.
5. Check with HealthE-NL/Pharmacy Network.
6. Be familiar with CPSNL guidelines for Opioid Prescribing for Opioid Use Disorder.
7. Document discussion of addictions services and counselling.

# MY VISIT STRUCTURE

1. Discuss goal/s (future and past).
2. Review HealthE-NL (last pick-up date of medication).
3. Review total dose of medication.
4. Does it control cravings? Patient's ability to handle triggers?
5. Discuss side effects of medication (constipation, etc.).
6. Are there any other meds that may be interacting with Buprenorphine?
7. Assess misuse risk (early refills, using more frequently than prescribed, seeing other prescribers, etc.).
8. Are there any other dependencies that need to be addressed?

# MAINTENANCE ISSUES

- Urine Testing
- Carries
- Missed Doses
- Tapering
- Acute Pain Management

# URINE TESTING

- Urine testing should be performed (where possible before induction and at regular intervals during maintenance therapy).
- Weekly urines are advised in the initial stages; clinical considerations will dictate frequency in later stages.
- Urine test results help ensure compliance and safety. They provide an opportunity for harm reduction discussions with the patient when needed.
- Point of care (POC) testing may need to be supplemented by confirmatory chromatography if clinically warranted.

# SUMMARY OF UDS

- Immunoassays (POC tests) are open to "detection" errors (eg. benzodiazepines) and cross-reactivity errors (e.g. Naltrexone and Oxycodone).
- If immunoassays are used, all screens yielding unexpected results should be confirmed with chromatography.
- Delay in chromatography results limit utility.

# URINE DRUG SCREEN INTERPRETATION

- Recognize limitations of all UDS testing
- Analyze for presence of prescribed substances
- Confirm absence of non-prescribed prescription medications and illicit substance use

# CARRIES

- Take home doses or “carries” are determined on the basis of clinical “stability.”
- Stability is assessed by means of urine testing and the clinical interview and involves all aspects of the patient’s life.
- Health Canada recommends that no take home doses be given for the first 2 months apart from weekends or holidays when some pharmacies might be closed (a Methadone principle; Buprenorphine guided by clinical stability).

# MISSED DOSES

The pharmacy will contact you if your patient has missed a scheduled witnessed dose. The protocol below can be used to gauge whether the following doses need to be adjusted.

**Table 1: Suggestions for Managing Missed Doses [19]**

Buprenorphine Dose	Number of Consecutive Days Missed	New Starting Dose
> 8 mg	> 7 days	4 mg
> 8 mg	6–7 days	8 mg
6–8 mg	6 or more days	4 mg
2–4 mg	6 or more days	2–4 mg

# TAPERING BUPRENORPHINE

- There is no predetermined time frame for Buprenorphine therapy. If therapy is meeting the goals of the patient and physician it may go on indefinitely.
- Occasionally tapering may be requested by the patient or initiated because the treatment is deemed to have failed or to be unsafe.
- In either case, the recommended taper is no more than 2 mg/maximum and may require more gradual (2 mg/month) approach.

# ACUTE PAIN MANAGEMENT

- Counsel/educate patient on expectations
- Inquire about patient goals with respect to use of full agonist opioids
- Continue regular Buprenorphine dose
- Maximize non-opioid analgesia and non-pharmacological modalities

# BUPRENORPHINE EXTENDED RELEASE

- Monthly SC Injection
- Stable dose of S/L Buprenorphine required for minimum 7 days
- Provider and pharmacy training course required
- ***Unique benefits for patients in NL***
  - Geographic challenges in accessing pharmacy
  - Rotational work

# FACILITATED DISCUSSION

# PROVINCIAL RESOURCES

- Provincial Opioid Dependence Treatment Centre of Excellence
- Project ECHO NL: Opioid Use Disorder

# HARM REDUCTION RESOURCES

- Education re: safer use of sterile syringes/needles and other applicable substance use equipment
- Access to sterile syringes, needles, and other supplies
  - SWAP
  - Local Pharmacy
- Access to Supervised Injection Sites (SIS)
  - No local availability
  - Consider informing patient of NORS
- Take-Home Naloxone kits

# CONCLUSION

- Summary
- Questions
- Discussion