PROBLEMATIC BEHAVIOR

Goal
To prepare providers to provide collaboration and structure to support successful buprenorphine treatment.

After completing this module, participants will be able to:

• Deal with problematic behaviors. Most office-based opioid treatment patients are compliant with treatment, but you need to be aware of problematic behaviors and have a plan for dealing with them.
• Recognize that patients who are taking buprenorphine but still abusing opioids or other drugs may need to be referred to a higher level of care.
• Be prepared to deal with misuse and diversion of buprenorphine by considering missed appointments, lost prescriptions, and inaccurate pill counts as signs that buprenorphine is being misused or diverted.
• Enforcing consequences for negative behaviors including violations of the treatment agreement or practice rules and placing each violation in the context of that individual's condition.
• Consider if more intensive treatment is required such as when serious negative behaviors are grounds for discharge from the practice.
• Interpreting results of urine testing in buprenorphine treatment including the assumption that a negative test means a patient is not taking drugs and that a positive result is not necessarily definitive.

Professional Practice Gaps
Patient-provider agreements, as well as regular patient monitoring, can help to ensure that patients are held accountable while receiving treatment. If patients are aware of this monitoring, it can help reduce the frequency of problematic behaviors, such as diversion or use of illicit drugs. But even with this structure in place, problematic patient behaviors may still be encountered, in which case the protocol described in advance in the patient-provider agreement can be followed.

Patients who misuse or divert their medication should be reevaluated and moved to a more intensive level of treatment if needed. Injectable or implant formulations result in less supply of the medication lying around to be diverted.
Mrs. Copeland schedules her buprenorphine treatment and returns the following week for induction. She will use the buccal film combination formulation of buprenorphine/naloxone, and is started with no problems and stabilized on a dose of 8.4 mg buprenorphine/1.4 mg naloxone per day.

Three months pass without incident. Mrs. Copeland is compliant with treatment and attends all of her appointments with you and counseling sessions. Then one day you receive a phone call from another primary care physician, who says that Mrs. Copeland came to him for a buprenorphine refill. She said that she was not able to get in touch with you to refill her prescriptions. Your office does not have any record of Mrs. Copeland trying to contact the office, and you are unable to reach her by phone.

**Which Of The Following Steps Is An Appropriate Response? (Choose Best Answer)**

1. Discharge her from treatment since she has clearly violated her treatment agreement.

2. Give her a second chance to remain in your office-based opioid treatment program, but increase her requirements.

3. Refer her to a methadone maintenance program.

4. Give her a chance to explain herself before making a decision.
Mrs. Copeland – Starting Treatment Quiz Feedback

(1) Discharge Her From Treatment Since She Has Clearly Violated Her Treatment Agreement,

(2) Give Her A Second Chance To Remain In Your Office-based Opioid Treatment Program, But Increase Her Requirements:
These are not the best answers, but they are both a possible choice. Mrs. Copeland's treatment agreement clearly defined rules regarding prescription refills – all prescriptions were supposed to be written by you only. It is up to your discretion if you want to give her a second chance, or discharge and terminate her treatment at this time. If you do terminate, you should refer her to another waivered provider or program.

(3) Refer Her To A Methadone Maintenance Program.
This is not the best answer, but it is one possible choice. Mrs. Copeland's treatment agreement clearly defined rules regarding prescription refills – all prescriptions were supposed to be written by you only. It is up to your discretion if you want to discharge and terminate her treatment at this time or give her another chance. If you do terminate, you should refer her to another waivered provider or program – a methadone maintenance program is one possible choice.

(4) Give Her A Chance To Explain Herself Before Making A Decision.
Correct. This is the best possible answer. You should first talk to Mrs. Copeland and see if she admits visiting another doctor, and if she has an explanation for her action. Regardless, Mrs. Copeland's treatment agreement clearly defined rules regarding prescription refills – all prescriptions were supposed to be written by you only. It is up to your discretion if you want to discharge and terminate her treatment at this time or give her another chance. If you do terminate, you should refer her to another waivered provider or program.
**Adjusting Treatment for Problem Behavior**

Patients may have inconsistent problems with being compliant or do well with just part of the treatment agreement. However, violation of the treatment agreement does not necessarily mean that treatment needs to be terminated. Instead, your patient's status should be re-assessed and the structure of the treatment or program intensified.

- If behavior suggests diversion: Consider referring to a more structured treatment, such as an Opioid Treatment Program, which may offer buprenorphine along with methadone.
- Consider consultations with a more experienced provider as needed when the best treatment is not clear.
- Consider referral to a specialist for serious, persistent problems.

**PRACTICE TIP**

Some experienced providers have noted that some patients who have been kicked out of other opioid treatment programs have done well in their practice, with appropriate treatment structure.
NON-ADHERENCE WITH TREATMENT AGREEMENT

Most of your patients will comply with office-based buprenorphine treatment programs and remain in good standing, but some might not. Substance use, including non-prescribed drugs, illicit drugs, or alcohol, increases the risk of both relapse and overdose. It is important to be aware of related problematic behaviors and have a plan in place for dealing with them. Common problematic behaviors include:

- Continued opioid use or other illicit drug use
- Intoxication at the office
- Diversion of medication
- Non-adherence to treatment (e.g., missing appointments, not taking medication as directed)

Adjusting Treatment For Problem Drug Use

Modifying Treatment Agreements In Response To Problem Drug Use

Written treatment agreements are put in place at the start of treatment to help prevent problems, such as illicit drug use. If the patient uses drugs despite the treatment agreement, the agreement can be modified by adding further treatment structure.

Basic treatment agreements include a description of the role of both patient and provider, as well as the office-based opioid treatment regulations. For example, typical agreements might include:

- Advise patients that urine and serum medication screenings may be requested at unannounced intervals.
- Describe the number and frequency of prescription refills.
- Describe the reasons for which drug therapy will be discontinued. For example, it might specify that negative urine drug tests and appropriate pill counts are required to continue treatment.

The more risk a patient has of aberrant behaviors or other reasons for treatment failure, the greater the amount of structure necessary in such agreements. Treatment agreements also vary with the individual practice.

PRACTICE TIP

To help avoid setting an adversarial tone in your doctor-patient relationship, be sure to acknowledge and reinforce with praise you patients’ adherence to treatment and any progress made, even if reduction in illicit substance use is only partial. Aside from verbal praise, other rewards for treatment progress may include reducing the frequency of office visits and other reduction in treatment structure, such as eliminating having the patient take their medication in front of you.
CONTINUED DRUG USE

Despite having a treatment agreement in place, it is common for some patients to continue using illicit drugs, such as marijuana or cocaine, during buprenorphine treatment. This is actually fairly common. To address it, you can continue office-based opioid treatment with the contingency that patients increase their involvement in psychosocial therapies. Specifically, require patients to attend groups and/or individual counseling to address other substance use. Also, require patients to come into the office more often, e.g., weekly instead of monthly.

B careful to evaluate patients for sedative use, especially benzodiazepines. According to the FDA

“Health care professionals should take several actions and precautions and develop a treatment plan when buprenorphine or methadone is used in combination with benzodiazepines or other CNS depressants. These include:

- Educating patients about the serious risks of combined use, including overdose and death, that can occur with CNS depressants even when used as prescribed, as well as when used illicitly.
- Developing strategies to manage the use of prescribed or illicit benzodiazepines or other CNS depressants when starting MAT.
- Tapering the benzodiazepine or CNS depressant to discontinuation, if possible.
- Verifying the diagnosis if a patient is receiving prescribed benzodiazepines or other CNS depressants for anxiety or insomnia, and considering other treatment options for these conditions.
- Recognizing that patients may require MAT medications indefinitely and their use should continue for as long as patients are benefiting and their use contributes to the intended treatment goals.
- Coordinating care to ensure other prescribers are aware of the patient's buprenorphine or methadone treatment.
- Monitoring for illicit drug use, including urine or blood screening.”

Continued Opioid Use

Some patients may also continue to misuse opioids during buprenorphine maintenance. If urine drug screens are positive for opioids and negative for buprenorphine, assume that the patient is not taking the buprenorphine and is using other opioids.

In most cases, this is not a reason to discontinue treatment. Continued opioid use may indicate that your patient needs an increased dose or higher level of care.

Clinicians should first take steps to help reduce patient cravings, including the following:

- Ensure that patients are taking their buprenorphine sublingually and are not swallowing the tablets.
- Make sure that patients are taking only one pill at a time.
- Consider whether increasing daily dose of buprenorphine up to a maximum of 32 mg (Suboxone® or equivalent in Zubsolv®, Bunavail™, or generic) is appropriate in the given circumstance.
- Increase the intensity of the psychosocial aspects of your patient's treatment program.
- Decrease dosage of CYP 3A4 inducers medications if possible in the given situation. As always, consult a comprehensive source on drug interactions.

Some patients need the supportive system that methadone maintenance provides; they may struggle with the less intense ("casual") treatment of simply having a bottle of pills and taking them as prescribed.
Illicit Drug Use
Patients in opioid treatment may also abuse other illicit drugs. ASAM practice guidelines (2015) state that:

"The use of marijuana, stimulants, or other addictive drugs should not be a reason to discontinue buprenorphine treatment. However, evidence demonstrates that patients who are actively using substances during opioid use disorder treatment have a poorer prognosis. The use of benzodiazepines and other sedative-hypnotics may be a reason to suspend agonist treatment because of safety concerns related to respiratory depression."

Practice Tips
• Urge your patients to disclose drug use, especially sedating drugs.
• Remain watchful for signs of such use.
• Patients suspected of abusing benzodiazepines require careful evaluation, due to the risk of combining benzodiazepines and buprenorphine.
• Psychosocial treatment may need to be intensified for patients who continue to abuse other drugs while in buprenorphine treatment, especially if it interferes with treatment.
• With patients under the influence of other substances, first ensure the patient's safety and then address the issue at a later date. They may need to be referred to a higher level of care. Be sure to follow-up with patients who have been referred to other treatment settings.
ALCOHOL INTOXICATION

When dealing with patients who arrive at the office in a state of alcohol intoxication:

- Determine how the patient got to the office.
  - If the patient drove to the office, he/she should not be permitted to leave while intoxicated. Keep the patient in the office until he/she becomes sober or arrange other transportation.
  - If an intoxicated patient insists on driving, you should choose to contact the police. No information regarding the patient's status in a treatment program may be disclosed.
- Address the issue of alcohol abuse with the patient at a later date when the patient is no longer intoxicated.
- Do not administer any medication or bring up important decisions while the patient is intoxicated.
- Scheduling morning appointments may reduce the number of intoxication issues that arise.
MISUSE AND DIVERSION

Overview Of Misuse And Diversion
Buprenorphine misuse and diversion do occur in office-based opioid treatment practices. Remember that prior to treatment, many of your buprenorphine patients were misusing opioids for months or years. Misuse is a common and learned behavior and one that can be a hard habit to break. Diversion is also on the rise as the street demand for buprenorphine rises. Continuing medical education (CME) is another approach for reducing buprenorphine diversion and misuse.

- **Misuse** refers to the way a patient takes his/her buprenorphine – in any way different from how it was prescribed.
- **Diversion** refers to any manner in which people obtain buprenorphine other than by how it is prescribed.

Reasons For Misuse And Diversion
Common reasons a patient might misuse or divert drugs include:

- Patient thinks he/she needs a higher dose
- To relieve opioid craving
- To relieve opioid withdrawal
- To get high

Common Reasons for Diversion

- To help addicted friends
- Peer pressure
- To make money

Reasons to misuse buprenorphine specifically also include a lack of sufficient funds to purchase a preferred opioid or a trusted source of preferred opioid not being available.

Signs Of Misuse And Diversion
Signs of misuse and diversion by a patient may include:

- Missed appointments
- Claims that pills were lost, stolen, accidentally laundered, etc.
- Asking for early refills for reasons that cannot be proven, e.g., lost prescription
- Urine screens negative for buprenorphine, positive for opioids
- Physical signs of injection drug use
- Police reports of selling on the streets
- Calls from others to report diversion
- Claims of being allergic to or intolerant of naloxone, and requesting monotherapy
- Problems with keeping appointments or making payments – may signal a relapse
- Positive urine drug toxicology for illicit drugs or negative for buprenorphine
- Continued relationship with drug users not in treatment
- A sudden request for a dose increase after being stable
Misuse and Diversion Frequency

How Frequent Are Buprenorphine Misuse/Abuse And Diversion? What Are The Trends?

Buprenorphine abuse/misuse and diversion is increasing. Analysis of national data involving buprenorphine abuse/misuse between 2005 and 2010 found increases in reports of:

- Poisoning
- Seizure of illegal supplies
- Visits to the emergency room

Awareness among drug users entering treatment that buprenorphine is used to get high and that it is being diverted has also increased in this time period. Of over 8,000 physicians surveyed, in 2009, 81% were of the opinion that it is easier to obtain buprenorphine illegally than methadone (compare 52% in 2005).9

Rate Of Increase In Diversion/Abuse Is Proportional To Increases In Prescribing.

The increase in buprenorphine misuse and diversion holds true for raw numbers and in terms of the million pills prescribed when all forms of buprenorphine are considered. However, diversion of the combination form (buprenorphine/naloxone) has increased proportionally to an increase in unique recipients of a prescription. Pure buprenorphine diversion has increased faster than the increase in prescribing of the medication.

These trends underscore the need for strict adherence to buprenorphine prescribing guidelines especially careful establishment of the right dose, prescribing only the supply needed, and following-up, as well as following the precautions described in this module.12

Managing Misuse And Diversion

Misuse and diversion must be addressed when suspected or verified. If not addressed, the patient's health and safety could be at risk. Additionally, the overall "reputation" of office-based opioid treatment (OBOT) could be damaged. Also, increase in diversion could lead to tighter DEA oversight of buprenorphine—and the oversight is already fairly substantial.

Misuse or diversion should not mean automatic discharge from your OBOT program. However, you should have a policy in place for how you deal with misuse and diversion. For instance, you may want to follow these steps when diversion or misuse occur:

- Reassess treatment plan and patient progress.
- Make changes as needed: alter dose, intensify psychosocial support requirement.
- Reassess the patient again after a short interval.
- Arrange for alternative treatment if needed.
- Injectable or implant formulations result in less supply of the medication lying around to be diverted.

PRACTICE TIP

Reevaluate patients who misuse or divert their medication and consider moving them to a more intensive level of treatment.
DRUG DEALING AND THEFT

Illegal behavior related to drug use by your patients, such as drug dealing and theft from the office, could harm your practice and is also harmful to the patient, their families, and the community. It should be dealt with strictly.

Your practice's credibility and integrity are at stake when your patients engage in illegal activity related to your practice. It is very important, though, that you not overreact to unsubstantiated claims. Direct evidence of drug dealing should elicit severe consequences, but indirect evidence (or rumors) should be addressed more subtly, such as by discussing the issue with the patient.

Drug Dealing
Staff, security personnel, and neighbors might report drug dealing. Red flags for possible drug dealing include the co-occurrence of:

- Loitering
- Frequently lost prescriptions

Stealing From The Office
Small discrepancies in inventories should be taken seriously and responded to with more careful storage and increased review of supplies. Items such as needles, syringes, and prescription pads are easily and commonly stolen.

Preventing Theft:

- Lock such items away and ensure they are not readily available to your patients
- Never leave patients unattended

When you suspect your patient of stealing from the office, the issue should be addressed directly and the necessary actions taken. It is recommended not to allow such acts to pass without consequences.

PRACTICE TIP
Talk to your patients to clear up any misinformation or to confirm rumors. Be direct without making assumptions or being judgmental, while still being firm about clinical structure agreed to in patient-provider agreements.
PREVENTING MISUSE, DIVERSION, & ACCIDENTAL EXPOSURE

Preventing Misuse And Diversion
Simple approaches can be built into an office-based opioid treatment practice that will help prevent buprenorphine misuse and diversion.

- Prescribe a therapeutic dose of buprenorphine. Due to ceiling effects, there is very little clinical benefit to taking more than 16 mg/day. Be sure to question patients who come to the office who say they need significantly higher doses.
- Prescribe what is needed based on careful titration of dose. Don't routinely provide an additional supply "just in case."
- Make sure that the treatment agreement is clear about prescription guidelines—number of doses in each prescription, policies regarding refills, rules regarding "lost" prescriptions.
- Require your patients to use only one pharmacy for filling all prescriptions, buprenorphine and otherwise. Obtain consent for two-way communication with the pharmacist. If your patient doesn't consent, you have to question why.
- Monitor treatment through regular but random urine tests, pill/filmstrip counts in the office between writing prescriptions (if they sold the whole supply of medication immediately, they would not have the right count), state prescription monitoring system, feedback from family members, etc.
- Openly discuss misuse and diversion with your patients so they know that you are aware of the issues and have a plan to deal with these problems if they arise.

Children And Accidental Exposure And Overdose
Accidental exposure to buprenorphine by young children can cause central nervous system depression, respiratory depression, and death\textsuperscript{13}.

A study reviewed a total of 2,380 cases of unintentional exposure of buprenorphine by young children. Researchers found that exposure to the film formulations occurred at a significantly lower rate than to the tablet formulation. Many of the cases involved medication that was stored in sight, accessed from a bag or purse, or not stored in the original packaging\textsuperscript{13}. 
MRS. COPELAND – TREATMENT DECISION

Getting In Touch with Mrs. Copeland

It took a week to get in touch with Mrs. Copeland. When she finally called the office, she was scheduled for the next day. Because Mrs. Copeland has been in violation of her treatment agreement, the provider prescribes a small supply and schedules early follow-up.

Mrs. Copeland: I'm overdue for my buprenorphine refill. You told me that I had to come into the office to get one.

Provider: Yes, but first I would like to talk to you about a phone call we recently received. Another clinic advised us that you asked them for a refill because you couldn't get in touch with us. Our office doesn't have any record of you trying to contact us.

Mrs. Copeland: Well, I was in a hurry, and I didn't think I could get an appointment with you, so I saw a nurse practitioner who was close by.

Provider: Remember that not going to multiple providers was part of our treatment agreement, which you signed.

Mrs. Copeland: I don't think it's all that serious. Besides, I didn't get any medicine from the other provider, which is why I'm here.

Provider: For now, I will give you enough buprenorphine for a week and then I would like to see you back in the office to see how it is going.

Discharge

Mrs. Copeland scheduled an appointment, but she did not show up. A week later the provider sent a letter to her house officially discharging her from the office-based opioid treatment program. It included a list of other buprenorphine prescribers and addiction treatment centers in the local area. The provider did not hear from Mrs. Copeland again.
**RESISTANCE**

The interaction between the practitioner and the patient can produce resistance. For example, when the practitioner assumes the patient is more ready for change than is actually true, the patient may develop resistance to treatment.

**Avoid Building Resistance**
- Keep in mind that the patient is responsible for the decision to change.
- Monitor the patient's readiness for change, and do not push for change prematurely.
- Invite patients to consider a different perspective, but never impose that perspective on them.
- Affirm for patients that they have freedom of choice and self-direction.

**Get Back On Track When A Patient Appears To Be Resistant: Deescalate Resistance**
Refocus on building rapport with the patient by using the basic skills of motivational interviewing, such as showing empathy, seeing the problem from the patient's view, affirming positive patient behavior or qualities, and practicing reflective listening. Re-establishing rapport with the patient will help him or her be open to engaging in a process that will move toward change. For example, a provider might say the following after getting off track:

**Provider:** Let's **back up a second because I'd really like to understand how you are seeing this.**

This could be followed by talking about a less-threatening health behavior, for example, with a heroin user, safe use of needles rather than quitting opioids.

**Work With The Patient's Resistance**
Roll with the patient's resistance; that is, agree with it, rather than trying to counter it

**Example:**

**Patient:** I just can’t quit. I don’t see it ever happening.

**Provider:** It seems to you like you’ll never quit.

**Patient:** Well, I don’t know about ‘never.’

**Provider:** Tell me more about why it might not be ‘never.’ (Reframe the problem in a way that evokes less resistance from the patient.)

**Example:**

**Patient:** I only know my sister and one or two friends who don’t smoke marijuana. Everyone else I know parties all the time.

**Provider:** That’s great that you already know three people who you can be around and count on not being tempted by their using marijuana in front of you.

**CAUTION TIP**
Keep safety in mind, as well as the patient's stability, as you work with these skills. Their use assumes a certain degree of cognitive clarity on the part of the patient and emotional stability. If your sense is that the
patient is not stable or capable of responding well to discourse such as the above, referral to a more structured treatment setting is indicated.
**VIDEO: MANAGING PATIENT RESISTANCE**

**Motivational Interviewing – Managing Patient Resistance**

A video that illustrates the use of Motivational Interviewing in response to resistant patient behavior can be found here: [https://youtu.be/4_q9WPTnO4k](https://youtu.be/4_q9WPTnO4k).

As you watch the video, notice how the provider alternates between skills that engage and connect with the patient and those that elicit his thoughts and feelings. She skillfully uses engaging skills, such as empathy, reflective listening, and agreeing with the patient (rolling with the resistance) in an attempt to diffuse his resistance. In further discussions, the provider would also need to respond to the patient's repeated requests for Vicodin, gathering more information as to whether or not it is actually needed.

What is the patient's risk for opioids? If there is too much risk, the answer may be either alternative pain treatment or a high level of treatment structure.

Is there moderate to severe pain that hasn't responded to first-line treatments? If not, the answer to the patient's request may be "no."

If the patient has opioid use disorder, buprenorphine treatment may be indicated. Sorting through all this complex information is a focus of this and other modules in this learning activity.
PROBLEMATIC BEHAVIORS

Additional problematic behaviors that may not be common will still need rules and guidelines.

**Loitering**
Some of your patients might arrive significantly early for an appointment or stay after they have been seen. Methadone treatment programs report that some patients:
- Arrive hours before time for appointments or
- Remain in the vicinity of the office for hours subsequent to an appointment

Dealing with loitering involves a careful assessment. These patients could be:
- Trying to sell or purchase drugs illegally outside the treatment program or
- Trying to cope with unstructured time and wish to remain in a stable environment

In the latter case, your strategy should be to:
1. Recognize the need of your patient to seek the comfort of a safe place
2. Discuss these feelings and other options with your patient

**Aggressive Actions**
Having a policy in place for aggressive behavior is important, even if it is a rare occurrence. Aggressive actions may be grounds for discharge from the practice, based on the judgment of the individual clinician or practice. Neither vandalism nor threats should be tolerated. These acts are indisputably violations of any reasonable code of conduct. This should be clearly conveyed to your patient during the initial visit while discussing rules and expectations. The consequences must be well-defined and strictly enforced.

**Examples:**
- Threatening or harassing a staff member may lead to termination of office treatment.
- Threats toward other patients and accusations of vandalism should be carefully examined before action is taken:
  - If the threat or action is significant (has a high level of intent), then severe options, such as discharge from the treatment regimen, should be seriously considered.
  - Patients who have otherwise done well in the program yet have had an isolated aggressive incident with another office-based opioid treatment (OBOT) patient could be transferred to another program or rescheduled to avoid overlap of OBOT patients.
  - Actions such as vandalism, for which there is little evidence, should be discussed with your patient. Closer monitoring may be a proportional response.

**Managing Problem Behaviors**
You must not ignore violation of the rules, since ongoing problematic behavior contributes to general disrespect for the rules and your authority. However, aberrant behaviors in many instances do not mean you should automatically discontinue treatment⁴. It should at least prompt a discussion of the risks and consideration of ways to tighten treatment structure. The goal is to form a stronger doctor-patient alliance. The range of your responses to problematic behaviors might include the following⁴:
- Evaluate whether the dose of buprenorphine is sufficient
• Increase the number of office visits per month
• Initiate or increase the intensity (frequency/duration) of psychosocial counseling services or group therapy or peer support programs
• Require supervised medication administration
• Alter the manner in which buprenorphine is provided
• Transfer the patient to more intensive level of treatment, such as an Opioid Treatment Program or a residential program

Evaluate deviance from accepted behaviors for each individual patient as it should not necessarily result in discharge from treatment. For patients who break rules, consider each violation in the context of that individual’s condition.
INTERPRETING URINALYSIS RESULTS

All test results must be interpreted cautiously.

Normal Urine Drug Testing Result
• **Explanation:** The patient is taking buprenorphine as prescribed (see practice tip).
• Continue routine urine drug testing.

Urine Drug Testing Negative for Prescribed Opioid
• **Explanation:** Non-adherence to regular intake of buprenorphine, diversion, or false negative results.
• Repeat the test using laboratory testing for the specific drug of interest. Increase adherence monitoring—monitor pill counts, prescribe fewer pills, discuss future termination of buprenorphine and referral to higher level of treatment if negative UDTs continue.

Urine Drug Testing Positive for Non-Prescribed Opioid or Benzodiazepines
• **Explanation:** False positive, or the patient has acquired opioids elsewhere.
• Repeat the test with immunoassay and confirm with the laboratory. Review the prescription drug monitoring program or call the patient’s pharmacy or other physicians. If the patient had surgery recently, they may have received benzodiazepines as a pre-operative sedative measure.

Urine Drug Testing Positive for Illicit Drugs
• Reiterate the treatment agreement with the patient, and the consequences of continued use (e.g., termination from buprenorphine treatment and referral to higher level of treatment).

With urine drug test results other than what was expected, a non-confrontational approach might be to say,

"We have used the best tests we have and they show that your urine has X (does not have X). That is what we have to work with in deciding next steps. I’m concerned because (state reasons). What are your thoughts?"

Keep in mind that false positives are possible. In cases where a patient strongly denies use of a drug for which they test positive, gather a thorough recent drug history. This includes over-the-counter drugs and other prescriptions. Inform the laboratory about these medications to see if they could be influencing the results.

Multiple variables affect the results of urine testing:\[15\]:
• Cut-off selection
• Pharmacokinetics
• Pharmacodynamics
• Pharmacogenetics
• Laboratory technology
• Subversion or adulteration of urine specimen

Key information to consider for interpretation includes the cutoff level for the test and minimum and maximum detection time in urine. Knowing when the drug is supposed to be detectable will help you determine if the patient's description of their drug use matches test results.

**Positive Results**

**Acting On A Positive Test Result**
When treatment plans include urine testing, they must also describe the consequences of a positive result.
• Office-based opioid treatment patients who have a positive urine toxicology screen are likely to be using opioids and probably need a higher dose of buprenorphine.

• A positive urine test later in the program suggests that more intensive nonpharmacological treatments are needed to address the patient's overall drug abuse.

The class of drug found in the patient's urine also affects the appropriate response:

• Drugs such as benzodiazepines present clear dangers.

• Alcohol and stimulants may indicate necessity for appropriate nonpharmacological treatment.

For the reasons discussed above, avoid stopping treatment as a response to drug test results only. Rather, discuss test results and make subsequent adjustments in the treatment plan with the patient.

**Responding to Patients Who Deny Positive Results**

1. Positive test results from an immunoassay should be confirmed by a laboratory test and consultation with the lab or a provider experienced in UDTs.

2. Indicate to the patient that you called the lab and that the tests are indeed correct.

3. Tell the patient that it is his or her job to provide a suitable sample for the clinic.

4. Refer the patient to the consequences provided in the treatment agreement.

**PRACTICE TIP**

Do not assume a negative test result means a patient is not taking drugs. Nor should it be assumed that a positive result means a patient is taking drugs. Contact your laboratory for help with test interpretation.

**Detection: Sample Integrity Check**

To detect tampering pay attention to the specimen's:

• Temperature (hot or cold) - Within 4 minutes of voiding, with at least a volume of 30 ml, temperature should be between 90 and 100°F

• Volume (small amount)

• Appearance (color) - Look for dilution or concentration

• pH – Range should be 4.5 to 8.0

While a positive drug test is considered part of the disease and may require a higher level of care, tampering with the urine is generally considered more problematic behavior. It raises questions about diversion, and essentially makes the test useless. You can ask the patient for a new sample, collected under supervision, and send both samples to the lab.

If urine sample tampering is suspected, the lab can:

• Check the specific gravity of the sample (to ascertain if water has been added)

• Check the pH of the sample (in case the sample was made more acidic or basic in an attempt to throw off or invalidate the screening assays)

• Perform a creatinine analysis – while urinary creatinine varies with hydration, values less than 20 mg/dL are probably diluted and values of less than 5 mg/dL are not consistent with human urine.


Poll: After learning about Urine drug tests, do you plan to obtain a UDT on every patient before starting buprenorphine induction?

- Yes
- No
- Unsure
- Only some patients
- Does not apply to me

How about you? If you haven't taken the polls yet, follow the link below:
https://bup.clinicalencounters.com/managing-patients-poll/

Case Study Quiz – Ms. Clark

She provided a pill bottle that verifies the codeine prescription. You obtained a urine specimen, and prescribe her next month's supply of buprenorphine.

Two days later, her urine specimen comes back positive for both codeine, which she disclosed to you, and morphine, which she did not.

How Should You Interpret The Urinalysis Results? (Choose One)

1. Ms. Clark appropriately took codeine, and there is no cause for concern.
2. Ms. Clark used morphine or heroin, and there is cause for concern.
3. You should contact the lab and discuss the results of the specimen before making a final interpretation of the test.
Ms. Clark – Case Study Quiz Feedback

(1) Ms. Clark Appropriately Took Codeine, And There Is No Cause For Concern.
This is not the best option. However, this interpretation is possible. Codeine is metabolized to morphine, and both compounds could appear in a urine specimen after ingestion of codeine. The best choice is to contact the lab and see if they can give you the morphine-to-codeine ratio. Although the result may not be completely definitive, a high morphine-to-codeine ratio suggests morphine or heroin use, whereas a low ratio would suggest codeine use alone.

(2) Ms. Clark Used Morphine Or Heroin, And There Is Cause For Concern.
This is not the best option. However, this interpretation is possible. Codeine is metabolized to morphine, and both compounds could appear in a urine specimen after ingestion of codeine. The best choice is to contact the lab and see if they can give you the morphine-to-codeine ratio. Although the result may not be completely definitive, a high morphine-to-codeine ratio suggests morphine or heroin use, whereas a low ratio would suggest codeine use alone.

(3) You Should Contact The Lab And Discuss The Results Of The Specimen Before Making A Final Interpretation Of The Test.
Correct. This is the best option. Codeine is metabolized to morphine, and both compounds could appear in a urine specimen after ingestion of codeine. The best choice is to contact the lab and see if they can give you the morphine-to-codeine ratio. Although the result may not be completely definitive, a high morphine-to-codeine ratio suggests morphine or heroin use, whereas a low ratio would suggest codeine use alone.
**Ms. Clark – Discussing Urine Test Results**

**Provider:** Your lab results show that you have a high morphine-to-codeine ratio in your blood work. That suggests that you may have been using morphine or heroin.

**Ms. Clark:** I had a slip-up and got some heroin from my ex-husband when the codeine wasn't working. But it was just when the pain was really bad. I stopped and now I just take buprenorphine.

**Provider:** Okay. I just want to make sure you are not at risk for a full relapse. Have you had any cravings since you stopped?

**Ms. Clark:** Yes, I still do a little. I'm afraid I might relapse.

**Quiz: Ms. Clark – Treatment Decision**

Ms. Clark has violated her treatment agreement by using illicit drugs while in office-based opioid treatment. She is upset about this misstep and concerned that you are going to kick her out of treatment.

**Now That You Have Heard The Facts From Ms. Clark, How Should You Proceed? (Choose All That Apply)**

1. Congratulate Ms. Clark on her insight and tell her you will re-evaluate at her next scheduled appointment.
2. Encourage Ms. Clark to increase frequency of her counseling sessions.
3. Discharge her from your office-based opioid treatment program and refer her elsewhere.
4. Consider increasing her dose of buprenorphine.
Ms. Clark – Treatment Decision Quiz Feedback

(1) Congratulate Ms. Clark On Her Insight And Tell Her You Will Re-Evaluate At Her Next Scheduled Appointment.
This is not the best option. This clinical situation is urgent and you should intervene immediately. You can start by increasing the frequency of her counseling sessions as needed, which will probably help her stabilize. Also, increasing the buprenorphine dose in this situation is almost essential, both to reduce the cravings and to occupy more mu-opioid receptors so that the effects of heroin would be blunted if Ms. Clark uses it again. Furthermore, her treatment agreement should be reviewed and revised as needed so that it works better to support her in her treatment.

(2) Encourage Ms. Clark To Increase Frequency Of Her Counseling Sessions.
This is a good option. Increasing the frequency of her counseling sessions as needed will probably help her stabilize. Also, increasing the buprenorphine dose in this situation is almost essential, both to reduce the cravings and to occupy more mu-opioid receptors so that the effects of heroin would be blunted if she uses it again. Furthermore, her treatment agreement should be reviewed and revised as needed so that it works better to support her in her treatment.

(3) Discharge Her From Your Office-based Opioid Treatment Program And Refer Her Elsewhere.
This is not the best option. Though she has violated the treatment agreement, she seems sincere about wanting to stay on buprenorphine. There are several changes you can make. You can start by increasing the frequency of her counseling sessions as needed, which will probably help her stabilize. Also, increasing the buprenorphine dose in this situation is almost essential, both to reduce the cravings and to occupy more mu-opioid receptors so that the effects of heroin would be blunted if Ms. Clark uses it again. Furthermore, her treatment agreement should be reviewed and revised as needed so that it works better to support her in her treatment.

(4) Consider Increasing Her Dose Of Buprenorphine. 
Correct. Due to the cravings she has been experiencing, she might benefit from increasing her buprenorphine dose. Also, increasing the frequency of her counseling sessions will probably help her stabilize and should be considered in this case.

Ms. Clark – Next Steps
Together, you decide that Ms. Clark should:

• Increase her generic combination buprenorphine dose to 16 mg
• Increase counseling frequency over the next several weeks in order to have the support she needs to remain abstinent
• Have more frequent office visits or more random urine screens during the next few months while she gets stabilized on her new dose
SELECTING LEVEL OF TREATMENT

Case Study – Ms. Dawson

Name: Ms. Dawson
Age: 20 years old

Reason For Visit: Needs treatment for her heroin use

Patient History: Ms. Dawson is a university student who has been smoking heroin occasionally for 15 months and daily for the past 3 months. She uses 1½ grams per day and requests help to quit.

Relevant History: She reports no prior history of treatment for drug use. She reports no alcohol or other drug use and the latter was later confirmed with urine drug testing.

Remember Ms. Dawson? She is supposed to return to your office for a follow-up appointment.

Follow-Up Appointment

Mrs. Dawson signed the treatment agreement. Because her withdrawal symptoms appeared to be controlled at 8 mg, the provider prescribed a small supply of the same dose and told her to be in touch regarding symptoms. The next appointment was scheduled in just a week because of her erratic behavior and to make sure this relatively low dose is sufficient for her.

Four Weeks Later

Ms. Dawson fails to show up for her follow-up appointment and does not attend a relapse prevention seminar. Without hearing from her for 4 weeks, Ms. Dawson returns during urgent care walk-in hours.

Provider: We haven't heard from you for four weeks. You were scheduled for an appointment 3 weeks ago and for a relapse prevention seminar. Can you tell me what's going on?

Ms. Dawson: It's just been a bad time. I just stopped the bup. I'm smoking more heroin and started dancing at a club on Parker Street so that I can afford it. I couldn't keep up with school, so I dropped out. I feel like I've hit rock bottom.

Provider: I understand. I'd recommend getting back into treatment, but I'd need you to follow the agreement we made, including attending the seminar. What do you think?

Ms. Dawson: I just don't have the time to go to your seminar! Can't you just give me some buprenorphine and help me out?

Provider: If office-based treatment doesn't provide enough structure and support, then maybe it is time to consider the outpatient opioid treatment clinic.

Ms. Dawson: No, please. I can't afford to miss work, and I need the job to pay my bills. I'll agree to do it your way, just please help me here.

Patient Evaluation

You evaluate her mental and physical state and notice that she is in significant withdrawal. She says she last used heroin at midnight the night before, injected into her right arm.
Quiz: Clinical Choice

What Would You Do In Terms Of Ms. Dawson's Treatment At This Point? (Choose Best Answer)

1. Schedule induction for next week.
2. Start buprenorphine now in your office and ask her to come in tomorrow to determine the correct dose for her.
3. Tell her that office-based buprenorphine will not work for her, and refer her to a higher level care.
Clinical Choice Quiz Feedback

(1) Schedule Induction For Next Week.
This is not the best answer. She is now in withdrawal so you can restart buprenorphine immediately and titrate the dose as needed over several days. Before induction, you should require Ms. Dawson to sign a modified treatment contract in which she agrees to modifications providing additional treatment structure. These might include more frequent office visits, attending counseling, and attendance at 12-step meetings, in addition to the structure provided in the original agreement. She will likely also need support and assistance to set-up counseling appointments, finding 12 step meetings and their schedule, and appointment reminders.

(2) Start Buprenorphine Now In Your Office And Ask Her To Come In Tomorrow To Determine The Correct Dose For Her.
Correct if you are a more experienced prescriber and feel comfortable with her level of risk. You could start buprenorphine now and have her return the next day to titrate the dose. If you do decide to go ahead, because she is now in withdrawal, you can restart buprenorphine immediately and titrate the dose as needed over several days. Before induction you should require Ms. Dawson to sign a modified treatment contract in which she agrees to modifications providing additional treatment structure. Modifications might include more frequent office visits, attending counseling, and attendance at 12-step meetings, in addition to the structure provided in the original agreement. She will likely also need support and assistance to set-up counseling appointments, finding 12 step meetings and their schedule, and appointment reminders. If you are a new prescriber, however, or not comfortable with her level of risk, or if you are, but all of these details do not work out, it would be time for referral to the next level of care.

(3) Tell Her That Office-based Buprenorphine Will Not Work For Her, And Refer Her To A Higher Level Care.
Correct for many providers, especially new prescribers. However, if you are a more experienced prescriber and feel comfortable with her level of risk, you could start buprenorphine now and have her return the next day to titrate the dose. If you do decide to go ahead, before induction you should require Ms. Dawson to sign a modified treatment contract in which she agrees to modifications providing additional treatment structure. These might include more frequent office visits, attending counseling, and attendance at 12-step meetings, in addition to the structure provided in the original agreement. She will likely also need support and assistance to set-up counseling appointments, finding 12 step meetings and their schedule, and appointment reminders.

Lessons Learned
The main teaching points from this case are the following:

1. Patients may be very motivated to take a medication, but resist engaging in counseling and groups. This may show up as late arrival, after hours calls, etc. Splitting between front desk, counseling staff, on-call doctors, etc. can result, and the patient receives sub-optimal care.

2. Some users may progress from smoking heroin to IV use in order to save money or to have stronger drug effects.

3. Financial concerns and other effects of drug use may lead to quitting school, adopting a less safe lifestyle, or taking up criminal activity.
4. When a patient who has been non-compliant with counseling relapses, further treatment should attempt to engage that patient in counseling.

5. Before determining that there has been a failure of buprenorphine treatment, make sure that therapeutic doses have been tried.
KEY POINTS

• Use additional treatment structure to support patients having difficulty following instructions. Describe it as additional support rather than a penalty.

• Elements of increased treatment structure include increased frequency of office visits, drug testing, checks of the prescription drug monitoring program, pill counts, and use of formal counseling. If these prove to be insufficient, the patient can be referred to a higher level of care.

• Most office-based opioid treatment patients are compliant with treatment, but you need to be aware of problematic behaviors and have a plan for dealing with them.

• Patients who are taking buprenorphine but still abusing opioids or other drugs may need to be referred to a higher level of care.

• Consider misuse and diversion of buprenorphine by watching for missed appointments, lost prescriptions, and inaccurate pill counts.

• Enforce consequences for negative behaviors including violations of the treatment agreement or practice rules.

• Consider if more intensive treatment is required such as when serious negative behaviors are grounds for discharge from the practice.

• Interpret results of urine testing in buprenorphine treatment carefully and challenge the assumption that a negative test means a patient is not taking drugs. A positive result is not necessarily definitive.
SUMMARY

Dealing With Problematic Behaviors
- Most office-based opioid treatment patients are compliant with treatment, but be aware of problematic behaviors and have a plan for dealing with them.
- Patients who are taking buprenorphine, but still abusing opioids or other drugs may need to be referred to a higher level of care.

Dealing With Misuse And Diversion Of Buprenorphine
- Missed appointments, lost prescriptions, and inaccurate pill counts are among the signs that buprenorphine is being misused or diverted.
- Patients who misuse or divert their medication should be reevaluated and moved to a more intensive level of treatment if needed.
- Injectable or implant formulations result in less supply of the medication lying around to be diverted.

Enforcing Consequences For Negative Behaviors
- Violations of the treatment agreement or practice rules must be addressed
- Place each violation in the context of that individual's condition
- Consider if more intensive treatment is required
- Serious negative behaviors are grounds for discharge from the practice.

Urine Testing In Buprenorphine Treatment
- Interpret results cautiously. Do not assume a negative test means a patient is not taking drugs. Likewise, a positive result is not necessarily definitive.
RESOURCES

A Closer Look at State Prescription Monitoring Programs (DEA FAQ's): These FAQs address common questions regarding prescription drug monitoring programs.

Adherence, Diversion and Misuse of Sublingual Buprenorphine: This 2010 (update 2014) Physician Clinical Support System (PCSS) document written by Dr. Judith Martin discusses types of aberrant behavior associated with buprenorphine and steps that can be taken to reduce the risk of abuse and diversion.

Appropriate Use Checklist: Reminder of the safe use conditions and monitoring requirements for prescribing buprenorphine-containing transmucosal products for opioid dependence.

Behavioral Health Treatment Services Locator: The behavioral health treatment services locator is an online source of information for persons seeking treatment facilities in the United States or U.S. Territories for substance abuse/addiction and/or mental health problems.

Clinical Laboratory Improvement Amendments (CLIA) - Currently Waived Analytes: The following is a list of currently waived analytes that are used in laboratory test systems. The list provides the analyte name as well as a link to the waived test system.

Example of Office-Based Opioid Treatment Policies: Hablando con su médico (Talking to Your Doctor (en Español))

This patient handout sheet discusses the importance of honesty from both the patient and the doctor when talking about drug use and treatment.

Medication Guide: Suboxone Sublingual Film (CIII): Patient information sheet on buprenorphine plus naloxone sublingual film

Opioid Treatment Program Directory: Find Opioid Treatment Programs by state.

Prescription Drug Monitoring Program Training and Technical Assistance Center: PDMO TTAC at Brandeis University provides support and resources for multiple stakeholders regarding PDMPs/

SAMHSA's Buprenorphine Physician and Treatment Program Locator: A directory of treatment programs and physicians authorized to treat patients with buprenorphine.

SAMHSA TIP 43, Chapter 9: Drug Testing as a Tool: This chapter from TIP 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs discusses the use of drug testing as a means of monitoring patient progress and treatment efficacy. This chapter details several methods for implementing drug testing, their effectiveness, and their pros and cons.

Sample Treatment Agreement/Contract (TIP 40 Appendix H): Patient contract that can be used to set expectations and guidelines before beginning buprenorphine treatment.

Talking to Your Provider: This patient handout sheet discusses the importance of honesty from both the patient and the provider when talking about drug use and treatment.

TAP 32: Clinical Drug Testing in Primary Care: Provided by SAMHSA
REFERENCES


12. Lofwall M. Minimizing the Risks of Buprenorphine Diversion and Misuse from Office-Based Treatment. 2011.


