



MOTIVATIONAL INTERVIEWING FOR ADDRESSING VACCINE HESITANCY AMONG PEOPLE WHO USE DRUGS

People who use drugs are at [increased risk](#) of severe illness and death from COVID-19. Vaccine uptake is low among this population, with vaccine hesitancy being a major contributing factor. [One study](#) found that only 10% of interviewed PWUD received a COVID-19 vaccination. Motivational interviewing is a form of communication that promotes participant involvement and respect for and acceptance of the patient’s individual choices. It has proven to be [effective](#) in promoting positive health decision-making and medication adherence among disadvantaged populations. When utilizing MI, health care professionals and outreach workers can assess a patient’s internal motivation for change, identify ambivalence and co-create a new plan of action.

Only **10%** of interviewed PWUD received a COVID-19 vaccination

Motivational interviewing incorporates the transtheoretical, or stages of change, model, which describes a cyclical series of stages an individual passes through (or reverts back to) as they attempt to change a health behavior. Motivational interviewing targets individuals within the precontemplation and contemplation stages, as they consider whether to engage in certain health behaviors but can be used to engage people at any stage in discussion around moving to the next. The stages of change framework has proven to be effective in [assessing vaccine readiness](#) and intervention strategy development.

The [stages of change](#) and [motivational interviewing strategies](#) include:

Stage of Change	Determining an Individual’s Stage	Stage-Appropriate Strategies	Use MI to:
Pre-Contemplation (Not recognized as an issue)	<ul style="list-style-type: none"> Not thinking about change May include denial: does not believe any consequences apply to self Believes consequences are not serious 	<ul style="list-style-type: none"> Explore individual’s beliefs about the issue at hand and related risk, consequences, etc. Educate individuals about health risks and outcomes related to health behavior choices 	Raise awareness
Contemplation (Maybe someday but not today)	<ul style="list-style-type: none"> Aware of the issue and desired behavior change Weighing costs and benefits of behavior or proposed change 	<ul style="list-style-type: none"> Explore both the positive and negative aspects of the lifestyle choice under consideration Utilize reflective listening and empathy 	Resolve ambivalence
Preparation (Plan for action)	<ul style="list-style-type: none"> Intends to act Experimenting with small, incremental changes 	<ul style="list-style-type: none"> Assess the individual’s commitment to change Identify supports and barriers to change 	Plan strategies
Action (Act)	<ul style="list-style-type: none"> Taking definitive action to change Practices desired behavior 	<ul style="list-style-type: none"> Support the individual’s choice to engage in behavior change 	Implement changes
Maintenance (Keep Going)	<ul style="list-style-type: none"> Maintaining new behavior over time 	<ul style="list-style-type: none"> Assist individuals in actively maintaining the changes they have made 	Develop and continue new skills

Example questions to determine an individual's stage of change related to vaccine hesitancy include:

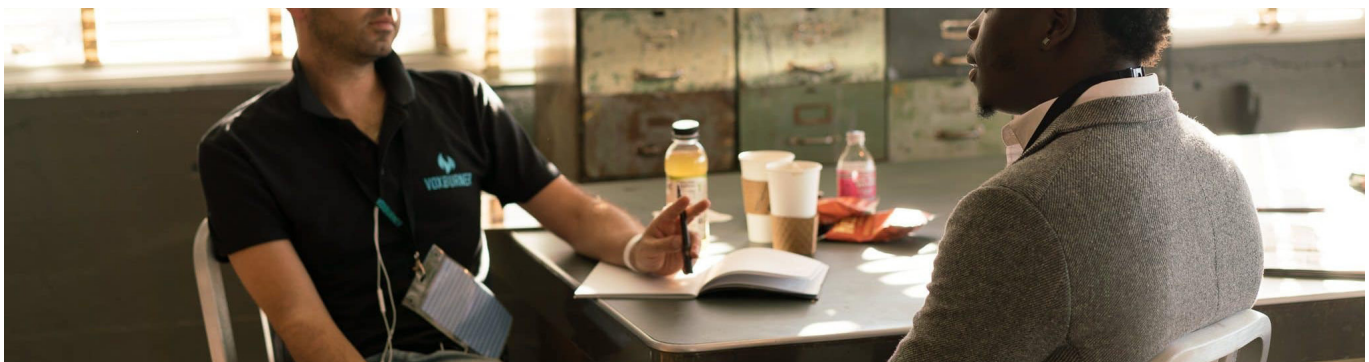
- What are your thoughts on getting vaccinated against COVID-19?
- Tell me a bit about any plans you have made to get vaccinated against COVID-19.
- What help could you use, if any, in making an appointment for vaccination against COVID-19?

Motivational interviewing is especially useful for addressing vaccine hesitancy based on its emphasis on listening, recognizing and helping patients address ambivalence in a nonjudgmental and compassionate way. Motivational interviewing utilizes a guiding style, in which a health care worker can develop rapport and express an aim to understand the participant's viewpoint rather than change their mind entirely about the COVID-19 vaccine. This often allows participants to feel more comfortable expressing their concerns about the vaccine openly. Motivational interviewing allows health care and outreach workers to identify patient concerns and misconceptions surrounding the COVID-19 vaccine and then provide tailored information about the vaccine when the patient is receptive.

Communication skills:

Motivational interviewing involves four communication strategies: open-ended questions, affirmations, reflections and summary, known as the acronym OARS.

- **Open-ended questions** allow participants to discuss their story and concerns related to the COVID-19 vaccine, which allows the participant's voice to be heard. Open-ended questions invite additional information; versus closed-ended questions which can only be answered with a "yes" or "no." An example would be, "Tell me what you know about the vaccine" or "Could you share a little about what concerns you about getting vaccinated?"
- **Affirmations** involve acknowledging the participant's concerns or limitations related to the vaccine. An example is, "I can see that this really concerns you" or "I understand why you're hesitant to get vaccinated."
- **Reflection** involves expressing empathy and sensitivity towards the participant's feelings and concerns regarding vaccination. This can help reduce defensiveness and evoke an individual's own argument for vaccination to address ambivalence. For example, "So you are feeling unsure about getting the vaccine" or "It sounds like you're afraid of becoming ill from potential side effects and experiencing withdrawal."
- **Summary** involves summarizing the conversation between the participant and health care worker in a few sentences, which allows for clarification of information. For example, "What I'm hearing you say is..." or "Does that sound right/have I missed anything?"



[Other skills](#) involved in motivational interviewing are [listening for change talk](#) and helping individuals develop self-efficacy. Listening for change talk involves noting any discrepancy in the conversation with the individual about their perspective on vaccination.

Additionally, helping individuals develop self-efficacy involves discussing previous situations in which the individual was successful. An example for vaccination may be, “I heard you say you receive the influenza vaccine every year. What goal might you set for our next visit when we discuss the COVID-19 vaccine?”.

[Information exchange](#) is another essential component of the motivational interviewing process. This allows a health care worker to provide information in a collaborative and person-centered manner.

[Motivational Interviewing Principles:](#)

[Example](#) open-ended questions for motivational interviewing

1. What concerns do you have about taking the vaccine?
2. What reasons do you see for taking the vaccine?
3. How important is it for you to get vaccinated?
4. How do you see the COVID-19 vaccination benefiting your community?
5. What do you know about the safety of the vaccine?



REAL AND PERCEIVED BARRIERS TO COVID-19 VACCINATION AMONG PEOPLE WHO USE DRUGS

Concerns regarding vaccine side effects

People who use drugs face significant real and perceived barriers to COVID-19 vaccination and have high rates of vaccine hesitancy. One of the [most cited barriers](#) to COVID vaccination among people who use drugs is concern surrounding vaccine side effects. Additionally, many PWUD have expressed concern surrounding how their long-term substance use may have weakened their health.

In [a study of NYC SSP clients](#), participants acknowledged that they faced increased risk from COVID-19 related to their injection drug use but feared that long-term substance use may have weakened their health, making them especially vulnerable to vaccine side effects.

Additionally, [among PWUD in the San Diego-Tijuana border region](#), higher numbers of chronic health conditions were independently associated with vaccine hesitancy. In general, PWUD have increased medical vulnerability and more comorbidities compared to the general population. As a result, [educational interventions](#) to address vaccine hesitancy, including concerns about side effects, should be nested within the experiences of living with chronic illness, such as HIV, HCV and substance use disorder.¹³ Additionally, [community-developed messages](#) for outreach should explain the far greater dangers of COVID-19, especially among PWUD, compared to vaccine side effects.

Fear-based messaging surrounding vaccination and drug use is never encouraged. However, a grounding message providing scientifically accurate information can be a useful mechanism to allow discussion about vaccination. For instance, messaging from the Virginia Harm Reduction Coalition explains this phenomenon, including by describing, “You are over **30,000 TIMES** more likely to die from a COVID-19 infection than from the vaccine.”

Competing priorities

PWUD often have “competing priorities,” including addressing higher order needs like housing and access to food, that may trump COVID-19 vaccination. A [study](#) of perceptions of the COVID-19 pandemic among PWUD in Vancouver found that the pandemic was often viewed as a “lesser” risk amid more immediate concerns of survival, including unstable housing, overdose risk and avoiding criminalization. As a result, attempts to address the health care needs of PWUD and people experiencing homelessness must take into consideration their unmet needs for food, shelter and bathroom facilities as well, for example. Offering these services at your site or providing referrals to community-based organizations providing these services will allow providers to develop trust with their participants and address these unmet needs prior to vaccination.

Stigma-driven [mistrust of the government](#) is a significant factor in shaping PWUD’s perceptions of COVID-related risk, especially when contrasted to the overdose crisis which they had been experiencing — and surviving — for years. As a result, programs should try and address these concerns directly by explaining how drug user health is finally becoming a priority within the public health sphere and [combat misinformation](#) surrounding COVID-19 vaccination. [The Sidewalk Project](#), based in Los Angeles, California, has developed resources addressing COVID-19 misinformation, including mistrust of the government. The [resource](#) explains, “The COVID-19 pandemic has disproportionately affected communities of color in America. We want to acknowledge the great harms of the past while at the same time ensuring access to a lifesaving vaccine that has been proven effective.”

WITHDRAWAL

Marginalized people who use drugs are at an increased risk of experiencing withdrawal symptoms due to lack of housing or transportation access. Meeting the population [directly where they are at](#) in person, including with pharmaceutical interventions for withdrawal cases could boost vaccination rates amongst your clients.

One tool to consider using is the [clinical opiate withdrawal scale](#). This opioid withdrawal measurement tool is designed to be administered by clinicians. It may be beneficial for determining if a client needs access to withdrawal medications or mobile vaccination, so they have access to their maintenance drug dose. It may also improve an individual’s willingness to participate in vaccination discussions.

COWS can be implemented in the field and can include training staff on what sorts of measurements can be pulled from this document. If your SSP/program doesn’t have a clinician available don’t feel the need to measure a participant’s withdrawal. Instead use the COWS as a guide. You can ask participants if their heart is racing, if their stomach has been upset, and some of the more visual cues such as sweating, or tremors and swaying can be observed by your outreach staff. This may be an indicator that this individual is currently experiencing withdrawal and that may be a factor in their reluctance to discuss vaccination or move forward with one.

**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: _____	
Resting Pulse Rate: _____ 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	GI Upset: over last 1/2 hour 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 multiple episodes of diarrhea or vomiting
Sweating: over past 1/2 hour not accounted for by room temperature or patient activity. 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face	Tremor observation of outstretched hands 0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching
Restlessness Observation during assessment 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	Yawning Observation during assessment 0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute
Pupil size 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	Anxiety or Irritability 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
Bone or Joint aches If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored 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	Gooseflesh skin 0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection
Runny nose or tearing Not accounted for by cold symptoms or allergies 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks	Total Score _____ 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.

Recommendations for implementation of mobile/outreach vaccines services for PWUD:

- Partner with your local department of health, federally qualified health center or local community-based pharmacy.
- Work with community-based organizations who provide low barrier vaccinations.
- Identify local low-barrier mobile clinics, or providers who would be willing to partner with your efforts.
- Use COWS to highlight cases of withdrawal amongst PWUD to advocate for yourself, and clients whether for vaccination or outreach purposes.
- If possible, hire direct vaccinators for your program. Check your local and state laws for requirements, restrictions and regulations. Remember to **always** follow Centers for Disease Control and Prevention [guidelines](#).

METHAMPHETAMINE-SPECIFIC MISINFORMATION

People who use methamphetamine are more likely to have negative health impacts from COVID-19 infection. This is because consuming methamphetamine can [compromise your immunity](#) and make it more difficult for your body to fight off infections. When people use methamphetamine, their body kicks into “overdrive,” increasing the potential for damage to organs like the heart and brain, while simultaneously convincing the user they feel fine. This is due to [symptoms](#) such as sensation of pleasure, increased body temperature, as well as increased heart rate and blood pressure. When considering the effects of methamphetamine compared to the symptoms of COVID it is clear as to why participants’ COVID symptoms may be masked by methamphetamine use, and/or they may believe methamphetamine is either preventing or curing their COVID infection:

<u>Symptoms of COVID-19</u>	<u>Methamphetamine Intoxication Symptoms</u>
Fever or Chills	Hot flashes, Sweating (Hyperthermia)
Nausea or Vomiting	Nausea or Vomiting
Diarrhea	Diarrhea
Shortness of Breath/Difficulty Breathing	Shortness of Breath/Difficulty Breathing
Fatigue	Fatigue (from withdrawal)
Persistent Pain/Pressure of the Chest	Chest Pains, Heart Palpitations
Confusion	Psychosis/Confusion



While considering the damage methamphetamine may cause for PWUD, it is important to draw these connections PWUD can make for themselves. If their lived experiences are those listed above, then it might be helpful to implement motivational interviewing or provide information on immunity, methamphetamine, and COVID-19. Note that the [CDC recommends](#) immunocompromised individuals be vaccinated against COVID-19.

Examples of Questions/Topics for Meth-users in Harm Reduction Spaces:

Note: The goal here is to get people to want to learn more information. If they are hesitant or say no, sometimes for the sake of maintaining the relationship with the client, it is better to walk away and revisit the subject later.

- “I was wondering how you’re staying safer when partying out with people now-a-days?”
- “Hey friend, I was wondering what tools you are using to stay safer while using?”
- “How has your experience been with COVID or other illnesses while using meth?”
- “How was your recovery from COVID (or other illnesses) while you were using?”
- “I know you might be feeling great while using meth, but it may be masking your COVID symptoms. If you’re feeling unwell, what kind of testing options are you open to?”
- “I heard you might be feeling sick friend. I know you said you don’t want to get vaccinated. What other options are you interested in for treating COVID?”

Conclusion

Overall, addressing the concerns of PWUD regarding COVID vaccination is a necessary step for the vaccination process. Outreach workers can utilize the motivational interviewing skills in this resource to fully understand and address the concerns of PWUD for vaccination.



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