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Short Commentary

Inpatient Motivational Interventions for Substance Use Disorder

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Abstract

The addiction crisis continues to grow at an exponential rate in the United States. The high concentration of hospitalized substance use disorder (SUD) patients makes the hospital setting a critical opportunity to provide SUD interventions. Inpatient clinicians play an important role in motivating and treating SUD patients. Physicians and advanced practice providers see patients at least daily and nurse clinicians have the advantage of visiting patients several times throughout the day. They can have a significant impact on SUD patients with a few simple strategies shown to enhance a patient's motivation to change. Identifying the patient's stage of change and practicing a handful of interventions relevant to that stage is a great starting point. The goal is to make the most out of each interaction. This introduction to motivational interviewing outlines simple strategies that any clinician can start using immediately to motivate SUD patients to change.

Keywords: addiction medicine, substance use disorder, motivational interviewing, behavioral intervention, counseling, brief intervention

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1 INTRODUCTION

The addiction crisis continues to grow in the United States. In 2020, 40.3 million Americans (14.5%) suffered from a substance use disorder (SUD)[1] and overdose deaths increased by 31% from 2019, to 91,000 deaths[2]. An even larger population of patients with SUDs is concentrated in the hospital. According to national data, 29.1% of hospitalized patients carry diagnoses of SUD, and have a higher likelihood of readmission than other conditions[3]. Given the higher concentration of SUD patients in the hospital, this setting creates a critical window of opportunity to provide interventions in patients with SUD.

Physician-led addiction medicine consult services are designed to seize this opportunity by providing interventions such as bedside motivational interviewing (MI), withdrawal management, and linkage to SUD services upon discharge[4]. Addiction medicine consult services have been shown to reduce hospital readmissions[5], reduce addiction severity, and increase the number of days of abstinence in the first month after hospital discharge[6]. However, specialized addiction medicine services only exist in a minority of hospitals due to the scarcity of addiction-specialized providers[4]. Accounting for this limitation, other initiatives have focused on equipping existing, non-

specialist hospital physicians with the tools they need to provide addiction interventions for hospitalized patients, by using tool kits, protocols, and training from addiction specialists[7]. This type of SUD training and education can and should be provided to all clinicians interacting with SUD patients, including nurse practitioners, physician assistants, nurses, physicians, and social workers.

In the inpatient hospital setting, nurses are often better positioned than other clinicians to provide counseling interventions. For example, in a SUD patient hospitalized for withdrawal, physicians and advanced practice providers order withdrawal protocol sets and meet with them at least daily. Nurses carry out these protocols and will have many scheduled visits throughout the day to assess withdrawal severity, check vitals, review patients' charts, administer withdrawal scales, and administer medications. These nursing visits can be as frequent as every hour, providing ample opportunity for multiple brief counseling interventions[8]. The amount of time any of these clinicians have is more than enough to provide a counseling intervention that is effective. Brief counseling interventions have been shown to be effective with one 15-minute initial contact with at least 1 follow-up[9] and most consist of 4 or fewer sessions[10]. This paper provides an introduction to practical motivational strategies for SUD patients that are easy to integrate into routine inpatient care for any clinician.

2 MOTIVATIONAL INTERVIEWING

MI is a brief counseling style that has been shown to reduce substance use in patients with SUD[11]. The brief nature of this counseling style makes it easy to incorporate into the brief visits of usual inpatient care. MI guides a person through a patient-centered discussion to help them consider change, enhance their motivation, and resolve ambivalence to change[11,12]. It uses a collaborative, non-confrontational, and non-judgmental communication style that is well suited for the clinician and patient partnership.

The communication style of MI (Table 1) includes asking open-ended questions, affirmations, reflecting change talk, and summary statements, in order to explore feelings of ambivalence towards change[12-14]. MI is individualized to the patient and encourages their own decision-making and autonomy. The principles of MI (Table 2) consist of expressing empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy[11-14]. The spirit of MI (Table 3) consists of partnership (in lieu of authority and confrontation), acceptance, compassion, and evocation (i.e. drawing out ideas rather than imposing them on the patient)[12-14].

Inpatient care provides countless opportunities to integrate MI. Returning back to our withdrawal example, the typical treatment for alcohol withdrawal includes the assessment of withdrawal severity every few hours and administration of medications to relieve the withdrawal[8]. As clinicians conduct assessments of withdrawal, they can express empathy for their patient's discomfort and use reflective listening. They can validate and trust the patient's report of symptoms to build a partnership and alliance. Upon administration of medications, the clinician is further validating their symptoms. By relieving the patient's suffering, the clinician is rapidly building rapport[13,14]. In this manner, clinicians can continue to organically integrate the rest of the MI strategies in their visits.

3 MANAGING WITHDRAWAL

Managing withdrawal effectively is necessary for a constructive conversation with the patient[8,15]. In the hospital, it is often a necessary preliminary step for effective MI. Suboptimal treatment of withdrawal is a primary reason SUD patients abruptly leave the hospital against medical advice[15]. If patients do not leave, and their withdrawal is not adequately managed, it leads to severe distress that interferes with the clinician's ability to have a meaningful conversation[13]. On the other hand, if the clinician can appropriately relieve distressful withdrawal symptoms, it can create a strong bond with the patient, almost instantly, in a way that hours of conversation with a skilled psychotherapist may not achieve. This is an important rapport-building strategy in the short opportunity of hospitalization and can set the stage for effective MI.

Clinicians should be careful not to be too conservative in their assessments and undertreat withdrawal because this can lead to an irritable patient who is unwilling to engage due to distressing withdrawal symptoms[8,15]. On the other hand, being too liberal with assessments and overtreating withdrawal can lead to sedating the patient and rendering them too drowsy to have a conversation. Clinicians should be careful of confounding factors that artificially inflate alcohol withdrawal scores, which in turn leads to overmedicating the patient[8]. For example, baseline anxiety or tremors may falsely inflate the withdrawal scores and lead to unnecessary use of medications. When in doubt, the ordering physician should be consulted to help clarify the need for continued administration of medications in overmedicated or sedated patients.

4 ASSESSING STAGE OF CHANGE

Once rapport has been built through the process of relieving the patient's withdrawal, the clinician can begin to assess their stage of change (Table 4). This can be done by asking simple questions such as "How important is it for you right now to cut down on your substance use/drinking", "How confident are you in your ability to stop using drugs" or "How ready do you feel to stay drug- or alcohol-free on discharge[12-14]". This can also be asked using scales, for example, by adding the phrase, "On a scale of 1 to 10, how important/confident/ready are you in…". Another way to assess readiness is to explore their perception of their

Table 1. Communication Style of MI

Term	Explanation
Open-ended questions	Avoid yes or no questions and use questions that encourage further elaboration and consideration. For example, "Tell me more about that."
Affirmations	As the patient talks, provide affirmations of positive ideas and actions that create positive feelings, build rapport, and encourage the patient to continue to open up and talk with you.
Reflections	These are statements that indicate that the clinician has heard and accurately understood the patient. Focus on reflecting change talk, which encourages the patient to explore change.
Summary statements	Periodically list or summarize the basic reflections you previously provided to solidify change talk, strengthen motivation, and build momentum to change.

Notes: The communication style of MI is patient-centered and consists of verbal and non-verbal communication skills that effectively engage patients and is expressed through the acronym OARS: Open-ended questions, Affirmations, Reflections, and Summary Statements.

Table 2. Principles of Motivational Interviewing

Term	Explanation
Expressing Empathy	Clinicians who express empathy and convey understanding increase their chances of building rapport with their patients. Acceptance of the patient as a whole boosts self-esteem and facilitates change. Patient ambivalence is normal and expected. Reflective listening skills are essential to convey acceptance and understanding.
Developing Discrepancies	Taking self-reported discrepancies and presenting them to the patient skillfully and thoughtfully can allow the patient to see that their behaviors conflict with their values and beliefs. These behaviors are not sustainable for the patient's vision of their future. It is most impactful for the patient to present these arguments for change. Change is motivated by the perception of discrepancy between behavior and personal beliefs and values.
Rolling with Resistance	By rolling with resistance, we prevent a breakdown in communication between the clinician and the patient and allow the patient to explore all thoughts related to their present situation and possibilities for their future. Avoid arguing for change and do not directly oppose the patient's resistance. Offer new views, but do not impose. Change is motivated by the patient offering the answers and solutions to their problems. Resistance should signal to the clinician to respond differently.
Supporting Self-Efficacy	The patient must believe that they can change. This dramatically increases their likelihood of change. The patient's belief in change is an important motivator. The patient is responsible for identifying the change and carrying it out. The clinician's belief in the patient's ability to change can become a self-fulfilling prophecy.

Notes: The principles of MI are made up of these 4 major skills.

Table 3. Spirit of Motivational Interviewing

Term	Explanation
Partnership	Motivational interviewing is an opportunity for collaboration between two individuals with much to offer. In this therapeutic relationship, the patient is the expert of their own experiences, views, and choices. They are the source of their answers and solutions. The clinician honors what the patient shares and is there for support and guidance.
Acceptance	The goal is to help patients feel accepted despite their problems through empathic listening. Acceptance does not mean unconditional agreement with the patient and approval of their behavior. Rather, it's a focus on the goals of the patient and meeting them where they are at now. Instead of pressuring patients on why they should change, clinicians evoke from their patients what they think about their own goals and about change.
Compassion	The clinician does not need to witness and "suffer" with the patient to show compassion. Instead, the clinician expresses compassion by promoting the patient's welfare and prioritizing their needs.
Evocation	In counseling situations, the focus is often on identifying what the patient lacks and how to fill that void. With motivational interviewing, the belief is that each individual already has the answers and solutions to their problems. The clinician is there to help bring them out and highlight their importance. It is crucial to avoid criticizing and telling the patient what they lack.

Notes: The spirit of MI is a paradigm that guides your interactions and is expressed through the acronym PACE: Partnership, Acceptance, Compassion, and Evocation.

substance use, for example, "Do you think your substance use is problematic?"

Once the stage of change is identified (Table 4), the MI intervention should be customized to the patient's individual stage of change[13]. This is important because a precontemplation intervention for someone in the preparation stage will waste valuable time that could be used to help the patient organize a change plan. On the other hand, providing a preparation intervention for someone in the precontemplation stage interferes with the clinician's ability to build a counseling alliance, by jumping directly into the planning stage before the patient is ready. This, in turn, may compromise a future opportunity to

Table 4. Stages of Change

Term	Explanation
Precontemplation	In the precontemplation stage, the patient does not recognize they have a problem with substances, are not ready to change their behavior, and may not be open to talking about their SUD. The MI intervention should focus on moving patients to the contemplation stage. Patients with SUD often are readmitted to the hospital, so moving the patient to the contemplation stage can successfully set up further hospitalizations to continue to progress the patient through the stages of change.
Contemplation	In the contemplation stage, the patient begins to acknowledge concerns about their substance use and its consequences, but they are ambivalent about takings steps to change. They are open to exploring the pros and cons of continued substance use but they have not yet developed a plan for change.
Preparation	In the preparation stage, the patient has been learning about treatment options for SUD, but has not started to implement their plan. They are still ambivalent but may have been waiting for an opportunity such as a hospitalization to break the cycle of addiction. This is an excellent opportunity to explore what their next steps would be and help them set their plan into action while they are in the safe, substance-free haven of the hospital.
Maintenance	In the maintenance stage the patient might have been successfully implementing their treatment plan and have months of abstinence.

create a change plan with the patient when they do arrive at the preparation stage. The goal is not to get everyone into treatment, but rather to move them to the next stage of change. Since SUD patients have frequent readmissions[3], getting a precontemplation patient to the contemplation stage can be a successful outcome for a hospitalization, because it could set the groundwork to move the needle forward in subsequent hospitalizations.

5 PRECONTEMPLATION INTERVENTIONS

Once a patient is identified as being in the precontemplation stage (Table 4), clinicians should focus on building the patient's readiness to move to contemplation and explore their ambivalence[13]. Clinicians should remain nonjudgmental about the patient's lack of motivation while focusing on building rapport and a working alliance with the patient. Once adequate rapport is built, clinicians can start by subtly raising doubts and concerns about the patient's plans to continue to use substances on discharge[13,14]. This can include raising the patient's concern of the risks associated with their substance use and agreeing to disagree about the importance of the concern. Clinicians have the prerequisite medical knowledge to help educate the patient on the health risks and consequences of the patient's substance use. These can be obvious such as infections due to injection drug use, but they can also be subtle, like medication noncompliance because the patient was busy using substances.

When appropriate, involving the patient's family and loved ones can help increase the patient's concern about their substance use[13,14]. Some key strategies to move patients towards contemplation include affirming past successes at being substance-free, exploring the pros and cons of substance use, using open-ended questions to explore the circumstances that led to their hospitalization, reflecting change talk, and personalizing feedback about their unique risks and consequences of ongoing substance use[12-14]. Patients may move to the contemplation stage within the same hospitalization or in subsequent hospitalizations after they have had the chance to further process the MI intervention[13].

6 CONTEMPLATION INTERVENTIONS

Patients in the contemplation stage (Table 4) will be open to exploring their substance use[13,14]. They will first need help understanding and resolving their ambivalence. The first step to resolving ambivalence is to normalize it as an expected part of the process[13,14]. Despite being normal and expected, ambivalence is still uncomfortable because it is made up of conflicting feelings about change. For example, patients may feel guilty about their substance use and, at the same time, feel comforted by the idea of returning to it on discharge. As patients move closer to making a decision, they experience increasing conflict and doubt about their ability to change[13,14]. By normalizing ambivalence, clinicians can help the patient acknowledge and tackle the ambivalence head-on, as opposed to avoiding it and not taking action. Clinicians can achieve this by explaining to patients that reservations to continue to use on discharge, doubts in their ability to change, and feeling conflicting motivations is common for many patients in their situation.

Once ambivalence to change is addressed, the next step is to help the patient "tip" their decisional balance towards change[13]. The reasons for change need to be weighty enough to move the patient towards making a change. There are many MI strategies available to help enhance motivation at this stage. One common strategy is to help the patient weigh the costs and benefits of substance use[13,14]. This involves exploring with the patient the benefits of substance use (i.e. the reasons not to change) and the costs of substance use (i.e. the reasons to change). The clinician can start by educating the patient that this is a powerful motivational exercise and invite the patient to write out a list of benefits and costs on a piece of paper between bedside visits[13,14]. This can include both the benefits and costs of continuing to use substances and a separate list of the benefits and costs of stopping substances.

Table 5. Change Talk (DARN CAT)

Item	Explanation
Desire to change	"I want to be a good spouse/parent/child."
Ability to change	"I can quit if I really wanted" or "I can quit if I had more help."
Reasons to change	"I'm getting tired of this type of life" or "It's not fun anymore."
Need to change	"I need to change or they will take my kids" or "I will lose my job."
Commitment: (making a future commitment)	"I scheduled an intake to go to rehab after discharge."
Activation: (movement towards change)	"I'm going to call a few rehabs on the hospital phone to see what they have to offer."
Taking next steps: (past steps taken towards change)	"I have deleted all drug users from my cell phone."

Notes: DARN CAT is an acronym that describes different types of change talk and commitment language. DARN describes the patient's preparation to change. CAT describes a commitment to change. The clinician's discussion should aim to elicit DARN CAT change talk.

While the patient discusses their substance use, the clinician should focus on and reflect their change talk. Evoke change talk that revolves around preparing to change by asking about their desire, ability, reasons, and need to change[13,14] (Table 5). If you feel that the patient is ready to commit to change, start shifting towards evoking change talk that revolves around implementing change by asking about commitment, activation, and taking the next steps[13,14] (Table 5). The goal is to use open-ended questions and all the previous MI concepts to evoke this change talk.

7 PREPARATION INTERVENTIONS

Once the patient has made a decision to put forth the effort to change, they transition from contemplation to preparation (Table 4). The preparation stage revolves around developing a concrete plan of action and solidifying the commitment needed to implement that plan[13,14]. The clinician will want to remain patient-centered and continue to elicit, but not impose upon them, a change plan. Once the clinician helps the patient identify and develop their change plan, they can help them organize small steps to implement their plan. Depending on what services are available in the hospital, the clinician can help get social work, psychiatry, addiction medicine, spiritual care, and primary teams involved to help implement the plan[8]. Ideally, a plan can be developed and implemented within the hospital before discharge[6]. For example, addiction treatment programs can be explored online and called by patients from their hospital bed to schedule intakes. Patients can transition directly from the hospital to residential treatment programs to minimize the chances of substance use.

Resource-limited patients who do not own a phone may need to utilize the hospital phone to schedule intakes before discharge. Patients without housing can enter residential treatment programs which provide shelter and meals along with SUD treatment[8]. Patients without insurance may need to focus on working with social workers to obtain insurance first in order to gain access to resources. Clinicians can identify ways to lower barriers to help patients enter into treatment. If the patient's plan does not sound effective, developing discrepancy and providing feedback compassionately can be helpful[11]. Clinicians can continue to solidify the decision to change by evoking and reflecting change talk that revolves around commitment (Table 5).

8 ACTION/MAINTENANCE INTERVENTIONS

In the action stage (Table 4), patients are taking steps toward change but this change has not stabilized yet[13]. In the maintenance stage (Table 4), the changes made in the action stage are starting to stabilize and patients are focused on preventing relapse[13]. When patients are in the action and maintenance stage, they also may present to the hospital. It is important to help patients maintain their gains and not regress. Clinicians can support the patient by helping them stay motivated through their unexpected detour through the hospitalization. Clinicians can help patients identify what has been working for them to stabilize change and help them develop a plan to continue their engagement in these activities after discharge[13,14]. Patients can also connect to peer support meetings online, such as 12-step meetings, while they are in the hospital to stay supported.

Nurses should ensure that opioids, benzodiazepines, and other addictive substances are not given unnecessarily to patients. When these controlled substances are ordered, clinicians can help patients decide if they are actually required for the as-needed indication. Take for example an opioid use disorder patient that has opioids ordered as needed for severe pain in the hospital. Opioids should not be withheld from patients with an opioid use disorder when they are indicated[12]. Uncontrolled pain can trigger stable patients to use illicit opioids. At the same time, unrestricted access to opioids and using them unnecessarily for reasons other than moderate-severe pain can destabilize a patient's progress. Before administering these medications, patients would benefit from a patient-centered discussion to help them decide if opioids are needed. This can include clarifying to the patient the as-needed indication (e.g., for severe pain) and exploring if the patient meets the criteria for this indication (e.g., asking if they feel their pain is mild or severe).

9 CONCLUSION

Inpatient clinicians play an important role in motivating and treating SUD patients[11]. They can achieve a significant

amount simply by having an encouraging attitude toward their patients. Identifying the patient's stage of change and practicing a few interventions relevant to that stage is a great starting point. The goal is to make the most out of each interaction. This introduction to MI outlines simple strategies clinicians can start using immediately in order to take steps towards this goal. MI manuals exist for clinicians interested in further developing these skills[13,14].

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Conflicts of Interest
The authors declared to have no conflict of interest.

Data Availability
No additional data are available.

Author Contribution
Raheemullah A and Magana M contributed to the manuscript and approved the final version.

Abbreviation List
MI, Motivational interviewing
SUD, Substance use disorder

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