Motivational interviewing: Empowering patients to change behaviors

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Abstract

Objective: To review the history behind motivational interviewing (MI) and the central concepts of MI, explore the "spirit of MI" and how basic elements of changing behavior and addressing ambivalence are foundational in promoting behavioral change, and discuss how implementing MI can lead to improved medication adherence.

Data sources: PubMed from 2000 to 2014 using the search terms motivational interviewing, adherence, changing behavior, and medications; published books on motivational interviewing in health care and treatment adherence.

Study selection: At the authors' discretion based on clinical relevance of the study or article on motivational interviewing and improving medication adherence.

Summary: MI is a collaborative conversation and counseling style centered on an individual person and used to strengthen that person's own motivation for change. A key concept of MI is the exploration and resolution of ambivalence toward changing behavior. This form of counseling works to encourage patients to change from within, which can lead to healthier behavioral changes and medication adherence. Participants will gain knowledge regarding helpful interactions between patients and providers to develop MI skills. Various patient cases and examples will allow participants to practice using different strategies and tools and ultimately decide which strategy to use based on patient attitudes and responses. At the end of the article, participants will gain the skills to help patients change behavior and a tool to use in practice.

Conclusion: MI is an evidence-based, patient-centered strategy that can help improve medication adherence. Pharmacists in ambulatory care and community pharmacy settings have the perfect opportunity to seek out patients who may benefit from MI. Many resources can help pharmacists learn more about MI.

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Learning objectives

- Classify interactions between pharmacists and patients that are both helpful and harmful in developing motivational interviewing skills.
- Apply motivational interviewing–based communication strategies to engage in specific health behaviors.
- Differentiate between various motivational interviewing strategies to select the best approach to improve medication adherence.

Preassessment questions

Before participating in this activity, test your knowledge by answering the following questions. These questions will also be part of the CPE assessment.

1. **Which of the following best describes motivational interviewing (MI)?**
   a. It is a "tough love" approach to changing a patient's behavior.
   b. It is designed to encourage a patient's intrinsic motivation to change.
   c. It is used to persuade patients to change as you see fit for their health.
   d. It is a way to help patients make the right decisions about their health.
2. **What is the reported rate of adherence for patients with 10 different diseases?**
   a. Fewer than 1%
   b. 10–20%
   c. 30–40%
   d. More than 50%
3. **The spirit of MI focuses on which three parts?**
   a. Evocation, preparation, success
   b. Collaboration, evocation, and autonomy
   c. Change, collaboration, maintenance
   d. Convincing, authority, change

Motivational interviewing and medication adherence

The late Surgeon General C. Everett Koop once stated, "Drugs don't work in people who don't take them." Nonadherence to prescribed medications has a negative impact on the health and well-being of patients and costly financial implications. Approximately three out of four people in the United States do not take their medications as prescribed.[1] An estimated $300 billion of avoidable health care costs in the United States annually are due to nonadherence, representing 3% to 10% of total U.S. health care costs.[2] Medication nonadherence has resulted in nearly 125,000 deaths in the United States and has been linked to an estimated 33%–69% of hospital admissions and 23% of nursing-home admissions.[3,4]

Medication adherence rates fluctuate depending on the study methodology and disease, but literature reports an average medication nonadherence rate of 40%–50%.[5,6] Claxton and colleagues reviewed adherence rates for patients with 10 different diseases and found a range from 51% to 80%.[7] Isetts et al. found that nonadherence was related to an overall 10% of drug therapy problems identified out of 637 in Minnesota.[8]

To address this pervasive problem, health care providers must partner with patients to improve medication adherence, especially as greater emphasis is placed on quality metrics that focus on long-term therapeutic and outcome goals. Pharmacists have unique opportunities to collaborate with patients and influence the modification of behaviors related to chronic diseases. Improving adherence can have a substantial impact not only on health care costs but also on overall patient outcomes, including reduced mortality and morbidity.[9]

The nonjudgmental term "adherence" is defined as the degree to which a person's behavior, such as taking medications or following directions, corresponds with medical advice.[4] The term also assumes a collaboration between the patient and health professional on the patient's health-related decisions and care.[10] Unfortunately, changing health-related behaviors can be difficult because many factors can affect a patient's adherence to behavior change. These factors include motivation, ambivalence about making the change, the amount of effort or time required to implement the change, lack of information, emotional factors, and other causes.[4,5,10]

Although many strategies can help patients change health behaviors, motivational interviewing (MI) is one approach that is well studied and has been shown to improve patient outcomes.[2,4,6,10] As part of the health care team, pharmacists can empower patients to implement healthy lifestyle behaviors, including adhering to medications.

Objectives

The purpose of this article is to review the history of MI and its central concepts, explore the "spirit of MI" and how basic elements of changing behavior and addressing ambivalence are foundational in promoting behavioral change, and discuss how implementing MI can lead to improved medication adherence.

Search methodology

Relevant literature was identified by performing a PubMed search from 2000 to 2014 using the search terms motivational interviewing, adherence, changing behavior, and medications. Published books on motivational interviewing in health care and treatment adherence also were included.

What is motivational interviewing?

MI is a method to lead behavior change and strengthen an individual's mindset toward a specific goal by exploring the person's own arguments for change.[11] This theory-based communication skill set was initially used in the substance abuse and addiction fields in the context of psychotherapy sessions and helping patients change difficult addictive behaviors. More recently, increases in medication nonadherence and other health determinants have introduced MI to different health care settings. The positive impact of MI and improvements in patients' medication adherence has been documented in other health professional literature, including nursing and medicine, for a variety of medical conditions (e.g., mental health, asthma, and HIV/AIDs).[12–15]

Literature has shown that interventions made to improve medication adherence, including MI, have resulted in an increase of 4%–11% in adherence rates.[4] Throughout the United States, many pharmacy schools are training future generations of pharmacists to engage in this active form of communication to help patients optimize their medications. In the ambulatory and community pharmacy settings, pharmacists who are able to participate in this collaborative goal-oriented method of counseling are more likely to evoke a patient's

ideas about change and start them down this path. This form of communication emphasizes the patient's autonomy and allows pharmacists to work together with patients to reach health goals.[11]

Transtheoretical model for change

To help generate a foundation for MI and its use in medication adherence, we believe it is important to first discuss the transtheoretical model for change (TMC). Patients can be categorized into one of five stages of readiness based on the TMC, and MI is applicable to all stages.[16] Before patients adopt and maintain any change, they often cycle through these five stages of change. During the first three stages, known as precontemplation, contemplation, and preparation, patients think about the change and ponder the pros and cons of making the change. It is also during these first three stages that patients consider whether they have the resources and skills to make the change. Counseling strategies such as MI, which can help patients resolve ambivalence, are critical during these stages. In the last two stages—action and maintenance—the patient creates and implements a plan. Health professionals, including pharmacists, must identify a patient's level of change and adjust the intervention to match the patient.

However, in clinical practice, it may not always be practical or timely to categorize patients based on the TMC. Therefore, a more practical approach involves supporting self-efficacy for the patient to move to a state of change by nonjudgmentally exploring resistance and ambivalence with the pre-action patient. Self-efficacy is a person's belief that he or she has the ability to change. This process is at the root of MI. See Table 1 for more details on behavior change stages and associated characteristics.

Case study

Mark, a 52-year-old African American, is a patient who uses your community pharmacy to fill his prescriptions. He is returning to the pharmacy to pick up his prescriptions. You (the pharmacist) notice that he has not picked up his furosemide prescription for the past 2 months. You also recall that he is enrolled in the automatic refill program, but you keep restocking his prescriptions almost every other month. Today you decide to discuss this with Mark.

"Hi Mark, how can I help you today?"

"I am just here to pick up my prescriptions. What's new?"

"Well, Mark, I wanted to talk to you about your medication today. Do you have a minute?"

"Sure, I had to take the afternoon off from work for my doctor's appointment earlier, so I don't have to rush anywhere."

"I wanted to see how you are doing with taking your medications and how they are fitting into your life. I have noticed it has been a few months since you've picked up your furosemide."

In the case study, Mark explains that he is frustrated with all the medications he is taking and that it's hard for him to differentiate between them because he doesn't understand how they work. In addition, he explains that he sees three different providers who all make changes without communicating with one another, making it even more difficult for him to keep track of what medications he should be taking. He explains that he does not know why he is taking the furosemide and that it doesn't really seem to make him feel better. He also complains that he has to use the bathroom frequently when he takes the medication, which is inconvenient while he is at work. He reports that the automatic refill program has not been helpful in allowing him to manage his medications. He states that automatic refill has led to more frustration, given the constant reminder calls from the pharmacy to pick up yet another medication. Last, he reports that he is tired of always having to come to the pharmacy and of juggling all of his provider appointments.

You recognize that the patient is frustrated and having difficulty taking his medications. This is a perfect opportunity to use MI and partner with Mark to see what you both can do to help him with his medication adherence.

Introduction to MI

Developed by William R. Miller to help motivate behavior change in persons with alcoholism, MI has been used since the 1980s. Over the years, the definition of MI has evolved; the most current definition (2009) is "a collaborative, person-centered form of guiding to elicit and strengthen motivation for change."[11] MI has expanded to other diseases beyond addiction and in many areas of health care, such as diabetes management, smoking cessation, and medication adherence. It is used by various health professionals because of its effectiveness in eliciting change in individuals, and research has shown its efficacy. It steers away from the typical coercive techniques, in which one might force or demand patients to change; instead, it helps draw out an individual's intrinsic motivation and goals.

To a layperson, MI can be described as a collaborative discussion that will strengthen one's own motivation and commitment for change. One of the most important things to remember when discussing behavior change is that no patient is ever completely unmotivated. The aim is to find out what goals are important to the patient and collaborate to reach those goals. This patient-centered practice helps to improve patient outcomes, especially related to medication adherence.

The spirit of MI focuses on three components: collaboration, evocation, and autonomy. Collaboration entails a trusting, working relationship between the provider and patient. It moves from the provider directing the patient through certain stages to a joint decision-making process. The goal is to elicit experiences from the patient to find his or her reasons for certain behaviors.[11] This does not mean that you always have to agree with everything a patient is telling you; rather, the goal is to understand and embrace evocation, in which the provider respects the patient's point of view and helps to draw out the patient's own motivation toward behavior change. This includes determining the patient's personal goals, his or her aspirations, and who and what the patient cares about on a day-to-day basis. During this process, the

provider only wants to understand the patient's perspective. Though patients may not always do what providers would like them to do or what is best for them, by embracing autonomy, patients are the decision makers. By letting patients know they have the freedom to make their own decisions, change is often possible. Many times, patients will have mixed or contradictory feelings when it comes to making any changes to their behaviors, known as ambivalence.

A crucial part of MI is to identify when ambivalence is present, examine what is causing that ambivalence, and help to resolve it. To identify the presence of ambivalence, one strategy is to listen for patients to use "but" statements. For example, *"I want to quit smoking, but it really helps relax me"* or *"I know checking my blood sugar is important, but my readings are always good, so I don't understand the value."* There are several important skills that can help pharmacists coach their patients through ambivalence; thus, ambivalence should be seen as a natural occurrence and not as a barrier.

In the spirit of MI, you are now collaborating with Mark to find a plan that will work for him. Your first step is to find out what makes it hard for him to take his medications and realize his goals. Through this exploration, you also discuss his daily schedule and find out more about his health. You discover that Mark works 50–60 hours a week and is visiting one of his physicians at least once a month. He has a primary care physician, cardiologist, and nephrologist. He is taking 10 different medications and feels as if they are all filled at different times, which means he has to come to the pharmacy more than three times a month. His busy work schedule makes it hard to take medications during the day. He also gets confused when there are medication changes among his providers. He sometimes just stops taking his medications because he is not sure how he should take them or why they are important for his conditions. Now is a good time to draw out some of the patient's motivation to change his current behaviors.

"Mark, it sounds like you have a busy schedule, and this makes it really hard to take your medications."

"Yes, I forget my medications at least 1–2 times a week, especially the ones I need to take in the afternoon. I really have no idea why I am taking the furosemide. My heart doctor just told me today I needed to start taking it again."

"Well, first, is it okay if I tell you a little bit about furosemide?"

"Yes, I would like that."

"Furosemide is a diuretic, or a water pill. Do you ever feel short of breath or have swelling in your legs, ankles, or stomach?"

"Yes, I have a lot of swelling. My doctor told me this is fluid overload from my heart failure."

"Well, the furosemide will help to get rid of the extra fluid in your body. It is important to take it every day, because if you get too much fluid on your heart this makes it harder for your heart to pump. This can lead to hospitalization. What is the value of these medications to you? What do you think will happen if you were to not forget your medications?"

"I want to take my medications regularly, but my job makes this difficult, and I usually end up forgetting to take them while I am there. I work 10- to 12-hour shifts Monday through Friday. I always remember my medications on the weekend. I feel like I am trapped by my medications, especially because I am told to take them multiple times a day, but I don't understand how they are helping my body. I think I would feel better if I didn't forget to take most of my medications, because I know they are supposed to help me stay out of the hospital.

Mark has shown some ambivalence. He wants to take his medications every day as prescribed, but he feels that his job is getting in the way. He also explains that he "feels trapped" by his medications but thinks that he would feel better if he took his medications daily. See Table 1 for other steps to take to help Mark adhere to his medication therapy.

Principles of change[11]

MI seeks to identify where patients are in their transition to change and then assists their progress by eliciting their internal desire for change. Four general principles of MI help the health professional inspire this change. The first is building a rapport with the patient by establishing an understanding that the effort and energy of the encounter focus on the patient's benefit. We will refer to this as "expressing empathy."

This aspect is the building block of the MI encounter and lays the groundwork for the therapeutic relationship. Here the pharmacist works to demonstrate that he or she understands the patient and the patient's situation and furthermore expresses acceptance. For example: *"It can definitely be challenging to fill medications on time each month"* or *"It can re-*

Table 1. Behavioral change stages and associated characteristics

Stage	Characteristic	Example statement from patient
Precontemplation	Individual does not intend to change behavior in the next 6 months.	"I just don't think I am ever going to make that *change*." "That *change* always sounds easy enough, but I don't think it's right for me."
Contemplation	Individual is strongly inclined to change behavior in the next 3–6 months.	"Someday I will be able to walk away from this old habit." "*Changing* is so hard, but I know I can't keep going like this, so I need to do something."
Preparation	Individual intends to act in the near future, generally in the next month.	"I think if I get myself in a better situation at home then I could make this *change*." "Once I don't have to worry about *X*, then this change will become a lot easier."
Action	Individual is taking initial steps toward incorporating behavior change.	"I've been successful at this *change* whenever I do *X*." "I am beginning to appreciate the benefits of this *change* each time I keep doing it."
Maintenance	Actions have already happened over a sustained period.	"I have not had any slips or gone back to my old habits for a while now." "It's funny that I don't need to focus all of my energy on making that *change*, but instead it feels very natural to do."

ally seem confusing to take medications without understanding how they are working." The goal here is to avoid judgment and criticism and instead demonstrate an appreciation of the person's situation or ambivalence. This does not mean that the pharmacist should approve of, agree with, or endorse the patient's particular situation, but instead allows the patient to find some normality in his or her current perspective or feelings. This way, the patient's circumstance is framed as a "tough situation" versus a pathological state or intractable position.

Helping a patient past a difficult situation can be aided by framing the problem in a new way. The next principle in MI is "developing discrepancy," in which the pharmacist highlights the patient's current behavior and then matches it to that patient's broader goals and values. An example might be to compare a young person's new smoking habit to a personal aspiration to excel in sports. The objective is to have patients clearly understand where they are now and compare it to where they would like to be. Patients benefit from using their own words to describe how far apart the two states of being are from each other. It allows them to explore the true cost of the undesired behavior and how it conflicts with the values and personal goals they want to set. Describing a current situation in the context of how the behavior may decrease goals such as one's personal happiness, family wealth, and positive self-image can inspire change to occur. It is key that the goals are specific to the patient. The pharmacist should be cautious about projecting his or her own goals or values onto the patient.

"Rolling with resistance," the third general principle in MI, is rooted in the concept that arguments between patients and health care providers are unproductive and erode the therapeutic relationship. Furthermore, once an argument has been started, the patient may move even further away from the desired behavior change. Therefore, a good place to begin is to anticipate the patient's reflex of starting an argument or debate. When people are stuck in a difficult cycle, they may be prompted to defend or protect their situation. The level to which this is expressed depends on the patient, but the key is not to be caught off guard when this happens. The more productive reaction to this potential point of conflict is to sidestep the conflict altogether. Rolling with resistance takes this one step further than conflict avoidance. When the pharmacist can avoid an argument with a patient, there is a chance to shift this energy toward discussing the behavioral change. Try to find a way in the discussion to view the problem from the patient's point of view: *"You know, if I were in your shoes, I would react the same way"* or *"I think your frustration with this situation is completely appropriate, and I think it would be hard to make this change as well."*

Another technique to avoid a patient's resistance is to use statements that leave little room to argue. In the scenario with Mark, if we instruct him to create a rigid system to improve his adherence, we could potentially create a situation in which Mark would shoot down each idea, one after another. Instead, use a statement to offer a suggestion for him to use only if he wants to avoid a disagreement.

"Mark, this situation is difficult. Let me suggest an idea that you could use or apply as you see fit. If it works, then great, but if not, feel free to leave it…" The 'take it or leave it' statement is a simple but elegant way to engage and move the conversation toward an action statement. The goal is to allow the patient to continue to round out the plan to motivate him or herself toward behavioral change.

MI revolves around the principle of self-efficacy and the belief that patients realize they have the ability to change, and the best predictor of successful change is if the patient believes he or she is capable of making the change. The role of MI is to identify the patient's belief in change and then work with the patient to improve his or her confidence to make the change. Allowing patients to identify smaller changes that were successful, or to take credit for work they have already done, is very important. As a pharmacist, you can demonstrate appreciation for past success. When a provider reinforces the patient's confidence, a positive feedback loop is created to support the patient's future efforts. The choice to change must be the patient's own; the pharmacist supports the change through MI and, when appropriate, will step in to help remove any barriers toward achieving that change. In the case study, no one else but Mark can improve his medication adherence, but the pharmacist can encourage Mark's belief that this is a doable task and, when possible, offer a service or suggestion that helps him make progress with the plan.

It is important for the pharmacist to reserve helpful advice or suggestions for the appropriate time in the conversation. Too often, providers will start the discussion with solutions, but in MI these should be suggested only when the patient is ready to use them or ready to ask for help. In the best-case scenario, a provider's solution would not be necessary, as the patient will find his or her own way toward a solution.

Timing and recognizing the patient's current state are key skills in MI. This recognition gives the pharmacist the ability to meet patients where they are in the change process and move in tandem. Recognizing the patient's own language as an indicator of self-motivated change is referred to as "change talk" in MI.[14] Change talk can be identified when the pharmacist hears the patient begin to discuss a situation and argue for change. This may be seen as stating what he or she would really like about making the change, or describing what the patient really worries about if things were to remain the same. These types of conversations should signal to the pharmacist that the patient is trying to explain that he or she understands there's a reason for the change and has possibly become less defensive about the discussion. The pharmacist's ability to recognize this can foster the patient's discussion and reinforce the patient's self-directed transition toward change.

In the example of Mark's furosemide, if Mark begins to talk about how he really does not like the swelling caused by not taking his medication, this would be an example of his

Table 2. Example statements of a patient resisting change and pharmacist's response

MI skill	Patient initial comments	Pharmacist response
Rolling with resistance	"It's impossible to keep track of all of these medications, and each visit I get prescribed something new. If the doctor or you tells me to take one more pill, I feel like I am going to scream."	"I think I would feel the same way you do now if the roles were reversed."
Reflection/empathy	"No one can understand how taking all of these medications makes me feel."	"Going through all of this is hard, and it can also feel lonely."
Affirmation/rolling with resistance	"I don't see what the big deal is. I take the medication when my body reminds me to take it."	"Well, I think it's good that you are trying to understand what is healthy for your body from what you sense. In that way, we are both working toward the same goal."
Summary	"When I wake up in the morning, I need to take three tablets, when I eat lunch I need to take two more, with dinner it's another story. Sometimes these are with food, some are without food. How am I expected to do this perfectly if I can't even remember the routine right now?"	"You have a lot to keep track of. Remembering all of these details is understandably hard, especially when the medications are connected to your meal choices. I think most of us would have trouble remembering at first."

Source: Reference 11.

disappointment with the status quo, a form of change talk. Two other types of change talk occur when a patient (1) expresses willingness for change or (2) directly uses language demonstrating the intention to change. Once patients begin to become excited about a change, the provider must not get in the way by finding holes in their plans or shooting down ideas early in the conversation. Instead, recognize the shift in the patient's position and encourage the openness to change. Returning to our example with Mark, if he begins to describe his daily activity and uses examples of what he will do differently to remember to take his medications, note that as a signal that he is preparing himself for the change.

Mark: *"Well, when I hit snooze on my alarm clock, I could just as easily reach over to pick up my first medication bottle. I am usually on auto pilot at that point in the morning anyways, so adding this to my routine will likely make me more consistent in taking my medications."*

Despite whether you agree with this plan or not, the point is to recognize that the patient has volunteered a plan and is open to change. Table 2 offers more examples of a patient's statements resisting change and ways in which the pharmacist can respond to help motivate the patient to adhere to the medications.

Skills of MI[11]

A strategy to use MI in your practice can be as simple as asking an open-ended question. This is a rather simple skill to use, yet using this type of question purposefully for MI can be challenging. Open-ended questions in MI are mainly intended to elicit change talk, in which we attempt to provide an open door for patients to volunteer their own thoughts and feelings about a behavior. Starting the conversation with an open-ended question such as *"How can I help you with your medications today?"* is a great way to start. Perhaps as your conversation continues, you find your patient is having a difficult time describing why he or she is unable to take medications every day. An appropriate open-ended question may be, *"Can you tell me more about why you would like to take your medications every day?"* Closed-ended questions are likely to be less helpful when the patient is unsure or resistant to change but are sometimes necessary at different points in your conversation. For example, asking, *"Do you miss your medications occasionally during the week?"* can lead you to a subsequent open-ended question.

The recommendation is to interchange open-ended questions with closed-ended ones and avoid the question-and-answer cycle in which we often find ourselves when we are collecting data. MI is not about the data but instead focuses on the individual. Another good strategy is to measure who is doing most of the talking during the conversation: you or the patient? Ideally, the patient is doing the talking, and we are facilitating and drawing out the patient.

Affirmation is another simple yet powerful skill for providing encouragement and increasing the patient's confidence. We often provide affirmation during our conversations with patients—for example, *"Thanks for speaking with me about this today"*—a technique that can be helpful. Affirmation can also occur through body language such as nods to let the patient know you are engaged. Directly affirming the patient's personal achievements, however, will likely be more powerful. For example, the following engages the patient and lets him or her know you are listening: *"I really appreciate your honesty. It's apparent you have thought a lot about this."*

Take care to provide appropriate and sincere affirmation, as overly effusive affirmations can make patients uncomfortable and untrusting. An appropriate affirmation would be one that allows you to acknowledge the patient's accomplishment without necessarily agreeing or disagreeing with the behavior or outcome. However, this does not mean that you cannot educate a patient about a misconception you feel needs to be addressed. In this situation, carefully ask your patient if you can provide some education on the topic. For example, if the patient tells you that he only smokes in the basement so his kids aren't exposed to the smoke, you may want to say, *"I am glad to hear that you have made some big changes to when and where you smoke in the home; I am sure that was a*

lot of work. Is it okay if I share with you some things I know about secondhand smoke?" This allows the patient to feel in partnership with you (instead of conveying an "I know this and I am going to tell you how it is" attitude), while still allowing effective health education to occur.

Reflection is one of the most challenging strategies used in MI, mainly because reflection requires true active listening. How many times do we talk to patients while considering our next question about their medications or medical conditions or thinking about how many more prescriptions we have to fill? Reflection signals to the patient that you are engaged and can elicit change talk. There are different types of reflection; for example, consider the following responses.

Mark: *"It's so hard to remember to take all these pills when I get busy at work—I don't think I can do it!"*

1. Repeat one element of what the patient said: *"It sounds like it is so hard to remember."*

2. Rephrase what the patient said with a slight alteration but still using similar words: *"I am hearing you say it's difficult to remember to take your medication, especially when you are busy at work."*

3. Paraphrase by restating what the patient said with the same intent but new wording: *"Taking your medicine regularly is a challenge when things get busy."*

4. Paraphrase an emotion: *"I hear you saying that you are feeling frustrated and losing your confidence."*

Paraphrasing an emotion can be the most difficult as you try to accurately capture the emotion and/or subtext of what the patient is expressing. Avoid simply repeating verbatim what the patient said, as this can be dismissive and less helpful to the conversation. Reflection is also a great check of your understanding because it gives the patient a chance to hear what you heard and correct you when you are off track. The hope is that it will provide patients with a deeper understanding of themselves, especially as a form of self-check (e.g., *"Now that I hear that out loud, it really does sound ridiculous to keep smoking just because I don't like people trying to make me quit").* Reflection can also be challenging because it can feel natural to inadvertently insert a solution or assessment into your reflection. This can be leading (e.g., *"It sounds like you are having a difficult time remembering to take your medication and haven't tried to use a pill organizer yet").* Note that tone and body language are critical when mentioning a strategy; the goal is to convey a partnership and nonjudgment.

Summaries are an excellent way to recognize the work that has been accomplished during your conversation. There are three types of summaries: collecting, linking, and transitional. Collecting summaries highlights the change talk that has been explored so far in the conversation (e.g., *"Overall, I hear you saying that you feel better on some of your medications, and you feel pretty confident you can make that change once you are ready").* Linking summaries can provide cohesion to the various topics that were discussed in conversation (e.g., *"In summary, many things are keeping you from taking your medications, but your copays are the most concerning to you and your family, which is also adding to financial concerns with seeing your physician regularly."* Transitional summaries are a useful way to move from one area of exploration to another (e.g., *"So we've covered a lot of ground as to why you would like to start taking your medications regularly, including your health and keeping your family from worrying. Would it be okay if we starting talking about what challenges you face with remembering to take them?"*

Another way of remembering these MI skills is the acronym OARS: open-ended questions, affirmation, reflection, and summary. When used well, all of these skills can provide an opportunity to elicit change talk from your patient. Even in small amounts and with time constraints, you may begin to unearth seeds that can germinate at any time.

Scaling is another simple technique that can be very insightful for you and the patient. Since change is often marked by the level of importance associated with the behavior, along with the patient's confidence that making the change will be beneficial, we ask both importance and confidence on a scale of 1 to 10. The most helpful part of using scaling can be comparing their number to another number. This might occur for patients who state that their importance for taking their diabetes medication is a 10/10 and their confidence is a 3/10. You could ask a patient, *"What makes you a three and not a one?"* if you wanted to elicit motivation for change. If you wanted to elicit barriers to change, you would ask a patient, *"What makes you a three instead of a five?"*

An additional helpful activity is to ask the patient to list two to three of both the pros and cons of taking medications every day.

Mark: *"Well, I believe that taking my pills regularly will make my family happy since they want me to be healthy. It would also make my physician happy, too. But I could get behind at work for taking so many breaks, not to mention paying more copays for all my medications. If I don't take my pills regularly, everyone will be upset with me and I will probably end up in the hospital again. But I wouldn't have to worry about taking my pills all day long or take the long walk to my locker where I keep all my pills at work."*

There may be some overlap, but that is a positive step. This is a tool to help the patient articulate the pros and cons, especially when the patient is ambivalent or in the contemplation stage. This may also be a useful homework assignment for a patient who needs more time to explore a change.

Summary

While perhaps a new form of communication for some pharmacists, MI is an evidence-based, patient-centered strategy that can help improve medication adherence. We have introduced you to the foundations of MI and have given you an example to show the power of MI. Practically speaking, as goals are created for patients to help move them toward a state of change, goals can be created for the pharmacist to make changes in practice behavior. Starting out with smaller changes, such as making an effort to listen and express empathy, can help practitioners gain confidence before adopting more advanced techniques.

Another way to gain these necessary skills before applying them to practice is to learn from experts and par-

Table 3. Motivational interviewing references for pharmacists

Motivational Interviewing in Health Care: Helping Patients Change Behavior (Applications of Motivational Interviewing), by Stephen Rollnick, William R. Miller, and Christopher C. Butler (2007)
www.motivationalinterviewing.org/
Motivational Interviewing: Helping People Change, Third Edition, by William R. Miller and Stephen Rollnick (2012)

ticipate in formal training. Pharmacists in ambulatory care and community pharmacy settings have the perfect opportunity to seek out patients who may benefit from MI. This includes patients like Mark, who have trouble remembering to pick up their medications. Many resources are available that can help pharmacists learn more about MI. See Table 3 for other recommended readings to help you understand how to incorporate this evidence-based approach into any health care setting.

We encourage you to try this collaborative, empathic style in your individual practice and think creatively about how health care systems can further advance this patient-empowering approach to care to ultimately improve medication adherence for patients.

References

1. Script Your Future. National Consumers League. 2012. www.scriptyourfuture.org. Accessed December 15, 2013.
2. Peterson AM, Takiya L, Finley R. Meta-analysis of trials of interventions to improve medication adherence. Am J Health Syst Pharm. 2003;60(7):657–65.
3. American Hospital Association. Uncompensated hospital care cost fact sheet. January 2015. http://www.aha.org/content/15/uncompensatedcarefactsheet.pdf.
4. Osterberg L, Blaschke T. Adherence to medication. N Engl J Med. 2005;353(5):487–97.
5. DiMatteo MR. Variations in patients' adherence to medical recommendations: a quantitative review of 50 years of research. Med Care. 2004;42(3)200–09.
6. Haynes RB, Montague P, Oliver T, et al. Interventions for helping patients to follow prescriptions for medications. Cochrane Database Syst Rev. 2000;(2):CD000011.
7. Claxton AJ, Crammer J, Pierce C. A systematic review of the association between dose regimens and medication compliance. Clin Ther. 2001;23(8):1296–310.
8. Isetts BJ, Schondelmeyer SW, Artz MB, et al. Clinical and economic outcomes of medication therapy management services: the Minnesota Experience. J Am Pharm Assoc. 2008;48(2):203–11.
9. Aurel IO, McGuire MJ. Adherence and health care costs. Risk Manag Healthc Policy. 2014;7:35–44.
10. Ho PM, Bryson CL, Rumsfeld JS. Medication adherence: its importance in cardiovascular outcomes. Circulation. 2009;119(23):3028–35.
11. Rollnick S, Miller W, Butler C. Motivational interviewing in health care: helping patients change behavior (Applications of motivational interviewing). New York: Guilford Press; 2008.
12. National Pharmaceutical Council. Noncompliance with medication regimens. An economic tragedy. Emerging issues in pharmaceutical cost containing. Washington, DC: National Pharmaceutical Council; 1992:1–16.
13. Miller WR, Rollnick S. Ten things that motivational interviewing is not. Behav Cogn Psychother. 2009;37(2),129–40.
14. Compendium of evidence-based interventions and best practices for HIV prevention. Motivational interviewing-based HIV risk reduction. Centers for Disease Control. http://www.cdc.gov/hiv/prevention/research/compendium/rr/mihrr.html. Accessed July 2014.
15. Borrelli B, Riekert KA, Weinstein A, et al. Brief motivational interviewing as a clinical strategy to promote asthma medication adherence. J Allergy Clin Immunol. 2007;120(5):1023–30.
16. Zimmerman G, Olsen C, Bosworth M. A 'stages of change' approach to helping patients change behavior. Am Fam Physician. 2000;61(5):1409–16.

CPE information

To obtain 2.0 contact hours (0.2 CEUs) of CPE credit for this activity, you must complete the online assessment and evaluation. A Statement of Credit will be awarded for a passing grade of 70% or better on the assessment. You will have two opportunities to successfully complete the assessment. Pharmacists who successfully complete this activity before August 1, 2018, can receive CPE credit. Your Statement of Credit will be available upon successful completion of the assessment and evaluation and will be stored in your 'My Training Page' and on CPE Monitor for future viewing/printing.

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CPE Assessment

Instructions: This assessment must be taken online; please see "CPE information" for further instructions. The online system will present these questions in random order to help reinforce the learning opportunity. There is only one correct answer to each question.

1. **R.S. is a 54-year-old woman who comes to the pharmacy to pick up her levothyroxine. You notice that she is over a month late in refilling it. Which of the following questions is representative of MI?**
   a. Did you take this medication as prescribed?
   b. Why are you late in picking up this medication?
   c. How are you doing with this medication?
   d. Don't you know it's dangerous to miss your medication doses?

2. **Which of the following best describes MI?**
   a. It is a "tough love" approach to changing a patient's behavior.
   b. It is designed to encourage a patient's intrinsic motivation to change.
   c. It is used to persuade patients to change as you see it for their health.
   d. It is a way to help patients make the right decisions about their health.

3. **What is the reported rate of adherence for patients with 10 different disease states?**
   a. Fewer than 1%
   b. 10–20%
   c. 30–40%
   d. More than 50%

4. **What is the correct order of the transtheoretical model for change?**
   a. Precontemplation, contemplation, preparation, action, maintenance
   b. Action, precontemplation, maintenance, preparation, contemplation
   c. Contemplation, maintenance, action, precontemplation, preparation
   d. Action, contemplation, preparation, maintenance, precontemplation

5. **K.W. comes to the pharmacy and tells you that he does not want to pick up his medication because it is not working for him. You respond by saying, "I understand you feel the medication is not working for you. Tell me more about why you don't think the medication is working." Which of the following MI communication principles best describes your interaction?**
   a. Rolling with resistance
   b. Reflecting
   c. Scaling
   d. Affirmation

6. **What type of reflection used in MI is matched with the correct definition?**
   a. Simple reflection, simple acknowledgment.
   b. Rephrase reflection: repeat the most important part of what the patient said.
   c. Paraphrase reflection: repeat what the patient said using new words.
   d. Paraphrase emotion reflection: act out the emotion the patient is expressing.

7. **What is an important component of using affirmation during MI?**
   a. Always be sincere when using affirmation.
   b. Always encourage the patient, but only for those actions that are appropriate.
   c. Always let the patient know when you approve of the things he or she is doing.
   d. Always refrain from using body language.

8. **What type of summary used in MI is matched with the correct definition?**
   a. Collecting: summary of the highlights.
   b. Linking: summary that provides cohesion on topics discussed.
   c. Transitional: summary of how the patient has changed.
   d. Complete: step-by-step summary of what the patient stated.

9. **What type of scaling is used in MI?**
   a. Confidence and ambiguity
   b. Importance and readiness
   c. Importance and confidence
   d. Confidence and desire

10. **The acronym OARS represents the skills used in MI and stands for which of the following?**
    a. Observation, affirmation, repeat, and summary
    b. Observation, affirmation, repair, and summary
    c. Open-ended questions, apologetics, reflection, and summary
    d. Open-ended questions, affirmation, reflection, and summary

11. **Creating a rapport with the patient and establishing a sense of acceptance is an example of which MI principle:**
    a. Reflection
    b. Expressing empathy
    c. Rolling with the situation
    d. Change talk

12. **Which of the following statements from the pharmacist to the patient is an example of developing a discrepancy in a patient talking about smoking?**

a. "I understand that smoking makes up a big part of your social life."
b. "I think smoking is fine in the right situation, but it would be good to quit, too, isn't that right?"
c. "When you are ready to quit, there are lots of resources available for you to reach out to."
d. "It sounds like you love to exercise, but you also know that smoking is keeping you from improving."

13. A patient becomes frustrated and sharp when discussing a behavioral change with you. The reactions to your suggestions demonstrate that he or she is likely in the precontemplative mode for behavior change. Which of the following MI principles would work in this situation to continue the conversation and further discuss the behavior change?
a. Evoking change
b. Expressing empathy
c. Rolling with resistance
d. Developing discrepancy

14. Which of the following situations is an example of change talk from a patient?
a. "I think it's frustrating when everyone is on my case about quitting smoking."
b. "I suppose it is really easy coming from a pharmacist to tell someone to quit smoking, but there is a lot more to it than just not buying one more pack. Have you ever smoked?"
c. "Sometimes I think that I have smoked this long, maybe I will just keep smoking for the rest of my life. What is the difference?"
d. "When I smoke, I spend half the time thinking about not smoking. If I would just take some of those thoughts and apply them to not smoking, I bet I would go farther in quitting."

15. In talking to you about his blood pressure medications, Mr. X says, "This whole medical system seems to be a scam sometimes. My doctor is excited to prescribe five different blood pressure medications, and I don't see why he can't just pick one that works. Then I come to the pharmacy and am told that I don't come in enough to pick up my medications. Seems to me like the pharmacist is the one profiting from my disease." Which of the following choices are an example of rolling with resistance?
a. "I think it seems reasonable for you to think five medications to treat one disease is unbalanced, so it's good of you to ask questions and make sure it makes sense to you."
b. "I think if we spend time going through your med list we can find a way to improve the medication regimen."
c. "Hypertension is a serious issue that requires all of us to do our part to improve your health."
d. "The more you take these medications, the healthier you will be. Isn't that your ultimate goal?"

16. A patient states, "I heard this medication can make me gain weight. I am already having trouble losing weight, and I don't need that." Which of the following responses is most consistent with MI principles?
a. "Some patients may gain weight, but this is nothing to worry about. At most, you'll only have a 5% increase in body weight."
b. "It sounds like you're worried that this may cause weight gain. May I share some information with you to address your concern?"
c. "Yes, there are many adverse effects from this medication, but there are also many patients who are able to tolerate the adverse effects."
d. "The benefit from the medication is much higher than any adverse effects it may cause."

17. R.S., a 65-year-old woman, comes to the pharmacy to pick up her Spiriva inhaler for COPD. As she is getting her wallet out, you notice a pack of cigarettes in her purse. You ask her if she has a minute to talk about her smoking, but she says that she is not really interested in stopping today. Which of the following best describes R.S.'s stage of change?
a. Contemplation
b. Preparation
c. Maintenance
d. Precontemplation

18. C.Z., a 70-year-old woman, is coming to the pharmacy to pick up six medications. As your intern starts processing her prescriptions at check-out, you hear her say, "I never used to take this many medications. I hate that I am getting older." What is the best way for you, the pharmacist, to respond?
a. "A lot of young people take medications, too."
b. "Don't worry! You are relatively healthy."
c. "What concerns you the most about your medications?"
d. "At least you aren't taking more medications!"

19. The spirit of MI focuses on which three parts?
a. Evocation, preparation, success
b. Collaboration, evocation, and autonomy
c. Change, collaboration, maintenance
d. Convincing, authority, change

20. A patient comes to the pharmacy to talk about smoking cessation. After you speak with her, she tells you that her confidence is a "6 out of 10" that she can stop smoking, and her importance is "8 out of 10." What is the name of this method of MI from this example?
a. Rolling with resistance
b. Scaling
c. Reflection
d. Change talk