Motivational Interviewing and Chronic Care Management Using the Transtheoretical Model of Change

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The number of Americans living with chronic health conditions has steadily increased. Chronic diseases are the leading causes of death and disability in the United States and cost the healthcare system an estimated $4.1 trillion dollars a year. The role of social workers in assisting patients in the management of their chronic diseases is vital. The behavioral health changes often required of chronic care management (CCM) patients require support and intervention by professionals to help the patient improve self-management of their chronic health conditions. Motivational interviewing (MI) is an evidence-based practice that helps people change by paying attention to the language patients use as they discuss their change goals and behaviors. Applying the principles and strategies of MI within the stages of change model (transtheoretical model of change) can help social workers better understand and assist patients receiving CCM. This article outlines specific strategies the social worker can use to address motivation at different stages of change.

KEY WORDS: *behavior change; chronic care management; health coaching; motivational interviewing; stages of change*

Over the previous decades, public health statistics have documented a steady increase in the number of Americans living with chronic health conditions including congestive heart failure, chronic obstructive pulmonary disease, diabetes, and chronic kidney disease (Centers for Disease Control and Prevention [CDC], 2022). Currently the National Center for Chronic Disease Prevention and Health Promotion estimates that 60 percent of adults in the United States have at least one chronic health condition, and 40 percent have two or more chronic health conditions (CDC, 2022). In addition, chronic diseases are the leading causes of death and disability in the United States. Last, chronic diseases are the leading driver of annual health costs: an estimated $4.1 trillion (CDC, 2022)

In many cases, individuals with chronic health conditions are unsuccessful in the self-management of their health, frequently resulting in multiple acute care admissions and readmissions into the hospital (Leavitt et al., 2019; Press et al., 2021). The need for effective case management with the chronic care population is clear.

CHRONIC CARE MANAGEMENT

Current approaches to the management of chronic diseases involve a system of healthcare delivery intended to improve health outcomes for the patient and economic outcomes for the healthcare system, including insurance carriers. Chronic care management (CCM) is an "organized, proactive, multi-component, patient-centered approach to healthcare delivery that involves all members of a defined population who have a specific disease entity or a subpopulation with specific risk factors" (Norris et al., 2003, p. 480). CCM recognizes that many who suffer from one disease may also have comorbid conditions. Thus, care must be integrated across the continuum of a disease, preventing and managing symptoms and complications (Norris et al., 2003). For example, in CCM for diabetes, screening for and managing hypertension and hyperlipidemia would be targeted along with preventing end-stage renal disease and managing complications of peripheral neuropathy.

The role of social workers in disease management is seen across multiple healthcare settings. Social workers are employed in clinics like dialysis centers,

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cancer treatment, and multisite, multipractice healthcare centers as well as in hospitals, assisting with complicated discharges and continuing care placements. In all of these roles, we interact with patients (and their family members) to assess their needs, provide supportive counseling, and link them with resources. While this is a significant and important role for social workers, addressing the behavior change aspect of CCM is not always at the forefront of an on-site assessment. No matter the condition or conditions requiring care, behavior change is likely an important component of self-management, and traditional disease management programs have not consistently integrated behavior change components (Linden et al., 2010).

Motivational interviewing (MI) is an effective intervention for increasing self-efficacy and better lifestyle management (Linden et al., 2010). MI is applicable in a multitude of settings in which social workers may be found. MI may be used as a stand-alone intervention or in combination with many other frameworks or interventions. In particular, to "work where the client is," understanding the stages of change model is helpful.

MI AND THE STAGES OF CHANGE

Miller and Rollnick (2009) state that MI is not intended to be a comprehensive model of change. The approach does, however, fit well within the stages of change model. MI focuses on eliciting and responding to client language: the language of change. Miller and Rollnick (2013) describe several types of change talk where clients may express a desire to change ("I would like things to be different"), confidence in their ability to change ("I think I can do that"), reasons for change ("My family is worried about my health") and the cost if they *don't* ("I don't want to take insulin shots"), and perhaps a *need* for change ("I *have* to do this"). These types of change talk reflect *preparatory change talk* and fit with the contemplation stage of change. These individuals may be thinking about change but haven't made a commitment to change behavior.

Ultimately, we want to hear commitment language ("I am willing to eat healthier") that indicates the readiness to take action. The priority placed on getting ready to change indicates the *preparation* stage of change. A patient may also describe steps taken to begin the behavior change process ("I've cut back on eating carbohydrates"). This level of commitment is associated with the *action* stage of change.

Yet, some patients may use language that reflects the flip side of change talk: sustain talk. Sustain talk is the reverse of the types of change talk. Instead of desire for change, the individual may express a desire to *not* change, a lack of confidence in their ability to change, reasons to not change, and even a commitment to not change. In this case, the patient is most likely in the *precontemplation* stage.

Evoking and evaluating the types of change talk (or sustain talk) heard from the CCM patient (and their loved ones) can help identify what stage of change the patient is in, and therefore help the social worker to work more accurately from "where the client is." Using the stages of change as a guide, MI strategies can provide social workers in CCM tools to help patients and their loved ones more successfully follow through and implement behavioral changes toward improved self-management.

The transtheoretical model (TTM), also known as the stages of change model, is one of the most used models of behavior change (Prochaska & DiClemente, 1983; Prochaska et al., 2009). Practitioners working with patients with chronic illness have utilized this model when trying to engage patients to develop self-management goals for their conditions (see, for example, Hyllore et al., 2022; Kimura et al., 2022; Wang et al., 2022).

TTM uses an integrative framework to explain how individuals adopt and/or modify behaviors that lead to better optimal health (Prochaska et al., 2009); it is a model of intentional change, postulating that individuals, in most cases, begin by thinking or considering change before actually taking formal steps to change. Thus behavior change unfolds over a series of stages (Prochaska et al., 2009): precontemplation, contemplation, preparation, action, maintenance, and termination.

Precontemplation

Individuals in the precontemplation stage have no intention to change or modify a behavior in the next six months. In general, these individuals are considered to be underinformed about the risks associated with their current behavior or demoralized about their ability to change their current behavior due to multiple failures. Frequently, these individuals are viewed as noncompliant, resistant, and/or unmotivated (Prochaska et al., 2009).

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Table 1: Motivational Interviewing Strategies with Patients in Precontemplation

Patient Characteristic	Goals	Techniques
Patient is not currently interested in changing	Develop trust with your patient	*Do not give advice; do not try to fix the problem*
Patient is uninformed about the behavior or demoralized about changing	Validate the patient's experience	Validate patient feelings (accurate empathy)
No intention of changing behavior in the next six months	Help patient develop a reason for changing	Support autonomy
	We want to move the patient from "NO" to "I'll think about it"	Ask patient what they know about their condition
		Affirm the patient's knowledge (ask permission from the patient to share or clarify information)
		Evoke patient concerns
		Ask patient what they have done in the past to address their condition

The goals when working with individuals in precontemplation are to develop trust, validate their experience, and help them develop a reason for changing (see Table 1). We want to move from "no way" to "I'll think about it." Expecting a person to come full circle in one meeting is often unrealistic. There are several strategies that are useful toward meeting the goals of the intervention. In the precontemplation stage it is vital to validate the patient's experience using accurate empathy. Reflect your understanding of their perspective ("Change can be overwhelming"). Also, clearly support their autonomy. State that the choice or decision is in the patient's hands. "I'm not here to tell you what to do. You're in the driver's seat."

Contemplation

The contemplation stage is characterized by individuals who are intending to change their behavior in the next six months. These individuals are aware of the pros/benefits of changing their behavior. They are also acutely aware of the cons/costs of their behavior. This push-and-pull between pros and cons can lead to ambivalence and extended, chronic contemplation about changing the needed behavior. For an individual to make a commitment to change, the perceived benefits of change must outweigh the perceived cost of change (Prochaska et al., 2009).

The goals when working with individuals in the contemplation stage are to again validate their experiences and also clarify their perceived benefits of change, concerns if they do not change, and perceived barriers to change (see Table 2). Focusing on evoking change talk is vital for individuals in this stage of change. Using the principle of evocation, ask questions about the possible benefits of change (this can include accepting physician recommendations for continued care) and the possible consequences or costs of not changing ("If you were to follow through with physical therapy, what do you think the benefits would be?" "What might it 'cost' if you didn't go to physical therapy?") Evoking using the Importance Ruler helps to identify the patient's values. The benefits of changing and the costs of not changing are only meaningful if they connect with the patient's value system. For example, ask the patient, "On a scale from 1 to 10, with 1 being not important at all and 10 being nothing is more important, how important is going to physical therapy?" Based on the number they give, follow up by asking why they chose their number and not a lower number. "Why are you a 4 and not a 1?"

Preparation

Individuals with a clear intention to change their behavior in the next 30 days have reached the preparation stage of change. Typically, these individuals have "tested the waters" regarding their behavior change goals. They may have taken small steps or experimented with different approaches. In general, these individuals are prepared to develop a specific plan with some concrete goals that would lead to

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Table 2: Motivational Interviewing Strategies with Patients in Contemplation

Patient Characteristic	Goals	Techniques
Ambivalent about change: “sitting on the fence”	Validate the patient’s experience	*Do not give advice; do not try to fix the problem*
Not planning to change their behavior in the next 30 days	Clarify the patient’s perceived benefits of change, concerns if they do not change, and perceived barriers	Validate patient experience (accurate empathy)
Patient is weighing pro’s and con’s of action		Support autonomy
For the patient to consider changing their behavior, perceived benefits of change should outweigh the perceived barriers	We want to move the patient from to “I’ll think about it” to “It’s important that I do this”	Evoke benefits of change
		Evoke using Importance Ruler
		Affirm the benefits
		Acknowledge barriers

Table 3: Motivational Interviewing Strategies with Patients in Preparation

Patient Characteristic	Goals	Techniques
Patient has made decision to do something in the next 30 days	Assist patient to identify barriers and problem solve strategies to address them	*Do not give advice without permission from patient; do not try to fix the problem*
Patient may begin “testing the waters”	Encourage small steps	Affirm patient’s decision to change behavior and evoke change possibilities
For the patient to consider changing their behavior, the perceived benefits need to be addressed with a tangible and doable plan	Ensure the patient has the “skills” to meet the “task”—new behavior	Evoke using Confidence Ruler
	Assist the patient to identify social support	Evoke past successes
	Prioritize behavior change opportunities	Evoke and support autonomy
		Encourage small steps
		Assist patient to identify social support

measurable improvement in the quality of their health (Prochaska et al., 2009).

The goal for individuals in the preparation stage of change is to develop the plan of action by prioritizing behavior changes, identifying and problem solving barriers, encouraging small steps, and pooling resources (including support systems; see Table 3). Start by affirming the patient’s decision to change behavior and evoke change possibilities (“It’s great that you have decided to track your blood sugar more carefully. What thoughts do you have on how to go about doing this?”). Check their confidence level by using the Confidence Ruler. As with the Importance Ruler, ask them to rate their confidence in their ability to follow through on the prioritized steps on a scale from 1 to 10 (“On a scale from 1 to 10, how confident are you that you could consistently track your blood sugar levels?”). Follow up by asking them why they rated themselves the number they chose and not a lower/higher number. Evoking past successes can help build confidence in their ability to make the change as well as elicit possible ideas for actionable, small steps (“I know you’ve watched your blood sugar closely in the past. I’d be interested to hear what worked the last time”).

Action

The action stage is characterized by individuals who have taken concrete steps to modify their lifestyles and these efforts have yielded tangible health benefits in the past six months. For an individual to be in the action stage, their lifestyle changes must meet the criteria designated by their healthcare provider to reduce the risks related to their chronic health condition. These individuals are aware of triggers that may lead to relapse of the old behaviors (Prochaska et al., 2009).

The goal for individuals in the action stage of change is to confirm the personal goal or goals for change and continue to develop the change plan

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Table 4: Motivational Interviewing Strategies with Patients in Action

Patient Characteristic	Goals	Techniques
Patient has begun change process	Assist patient to identify barriers and problem solve strategies to address them Encourage small steps Ensure the patient has the "skills" to meet the "task"—new behavior. Guard against relapse Assist patient identify social support	*Do not give advice without permission from patient; do not try to fix the problem* Affirm patient's progress and evoke next steps Validate patient experience (accurate empathy) Evoke successes Assess for new barriers Continue to evoke benefits

Table 5: Motivational Interviewing Strategies with Patients in Maintenance

Patient Characteristic	Goals	Techniques
Patient continues change process.	Assist patient to identify barriers and problem solve strategies to address them Encourage small steps Ensure the patient has the "skills" to meet the "task"—new behavior Guard against relapse Help patient identify social support	*Do not give advice without permission from patient; do not try to fix the problem* Affirm patient's progress and evoke next steps Validate patient experience (accurate empathy) Evoke successes Assess for new barriers Continue to evoke benefits

(see Table 4). Strategies for the social worker include affirming the patient's progress and evoke successes ("You've done a great job following up with your doctor visits. What has helped you do that?"). Identifying supports and resources as well as troubleshooting any known barriers will help the patient stay focused and take small steps ("What's been the most helpful to you in managing your illness at this point?").

Maintenance

Individuals reaching the maintenance stage have been able to maintain their new lifestyle behaviors for at least six months. Typically, there is a reduction in the temptation to fall back into old patterns of behaviors, while self-efficacy and confidence in their ability to maintain the new behavior has increased. It is estimated that the maintenance stage may last up to five years (Prochaska et al., 2009).

The goals for individuals in the maintenance stage of change are to support persistence in their efforts toward change and revisit the plans implemented in the action stage of change as needed (see Table 5). Most commonly, the plan might need to be revised—new small steps might need to be considered to build on the changes already made ("Putting your medications in a daily pill container was working for you although you still may occasionally forget to take them. What else can you do to help you remember?"). Sometimes reminding is helpful when commitment to the goal is wavering. This does not mean the social worker tells the patient what was previously discussed. Instead, "re-evoke" their reasons for the change and/or their confidence in their ability to change (Miller & Rollnick, 2013; "Tell me again what led you to make the changes you've made. What were your goals?").

Termination

The final stage is termination. In this stage the individual would have zero urges to return to their world behaviors and be confident in their ability to maintain their new lifestyle regardless of relapse triggers. In

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reality, it may be impractical for most individuals to reach this stage. A more realistic goal might be a lifetime of maintenance (Prochaska et al., 2009).

IMPLICATIONS AND RECOMMENDATIONS FOR SOCIAL WORK PRACTICE

MI provides a foundational approach for social workers in chronic care or disease management roles. The principles of MI (partnership, acceptance, compassion, and evocation) follow social work ethical guidelines. MI also uses skills and strategies that have demonstrated improved outcomes for clients treated in a variety of clinical settings. For example, Miller and Moyers (2021) identified eight therapeutic skills of highly effective therapists, which include the following concepts found within the principles of MI: accurate empathy, acceptance, and evocation. Additionally, MI specifically addresses the mixed feelings many patients have around the behavior changes often recommended by providers to self-manage various medical conditions.

The co-occurrences of chronic diseases are becoming more commonplace, especially among the large group of aging baby boomers. Patients have more difficulties managing multiple chronic conditions, and people may be at different stages of readiness to manage the different combinations of diseases. When meeting with a patient, we might assume they are either interested or not interested in our help. This might include a desire to follow doctor recommendations (so our help is welcome) or the need to resist the doctor's recommendations (so our help may be met with some opposition). It is best if we approach the patient with acceptance and partner with them to achieve their desired outcome. It can be frustrating when medical staff expect the social worker to "convince" a patient to accept a medication, referral, or make some other healthcare decision recommended by the physician. While coercion often leads to poor outcomes, applying partnership, acceptance, compassion, and evocation (along with giving relevant information) can help the patient make a decision to which they are able to commit. **HSW**

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