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Promoting Healthy Behaviors in Pediatrics:
Motivational Interviewing

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Objectives   After completing this article, readers should be able to:

1. Describe the spirit and principles of motivational interviewing (MI).
2. Know indications for using MI in the pediatric setting.
3. Apply MI to support behavioral change in pediatric patients at all stages of development.

Case

Figure 1. Click here to see a video of a 10-minute primary care office visit, illustrating the motivational interviewing principles discussed in this article. (The full transcript of the video is available at http://pedsinreview.aappublications.org/content/33/9/e57/suppl/DC1.)

Background

Most pediatric clinicians realize that well-intentioned clinical plans can sometimes fall flat or backfire. Everyday practice is rife with times when one might wonder about which prescriptions go unfilled, whether home safety advice is being "tuned out," or whether families will return for recommended follow-up visits. In pediatrics, in which "the family is the patient," ensuring positive changes in health behaviors is daunting, especially in the face of perceived barriers such as lack of time and reimbursement for counseling.

The true obstacles to high-quality care often are interpersonal and can include how practitioners deal (or fail to deal) with their feelings of discouragement or discomfort when faced with particularly "resistant" patients. Integrating motivational interviewing (MI) into one's practice can be a very satisfying way to overcome some of these barriers. MI allows the clinician to stay more connected in a therapeutic relationship with patients by helping them identify how, when, and what behaviors they can change to improve their own health.

Abbreviations

MI: motivational interviewing
MINT: Motivational Interviewing Network Trainers

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Motivational Interviewing: What It Is, and What It Is Not

MI is a supportive counseling style that guides patients toward positive health-related behaviors by helping them resolve ambivalence toward changing. (1) MI seeks to enhance the self-efficacy of patients to facilitate these changes, helping patients move through the continuum of change proposed in the Transtheoretical Model of James Prochaska and Carlo DiClemente, progressing from not yet interested in change (*precontemplation*), to the *contemplation* of change, to making *preparations*, to taking *action*, to the *maintenance* of change, to dealing with *relapse* into old behaviors. (2) MI is not a form of psychotherapy or even a set of techniques; it is a style of communication that is patient-centered.

In MI, the clinician is a guide or coach who brings expert knowledge of healthy behaviors into a healing relationship, while patients bring their own expertise about their lives, perspectives, goals, values, and beliefs. Clinical expertise is conveyed to the patient, with permission, in an authoritative manner that is tailored to patients' individual readiness and willingness to understand how their health interacts with their attitudes, beliefs, and behaviors. When expressed with empathy, this communication conveys to patients the message that they are responsible for and capable of solving their own problems by overcoming barriers to change.

Approaches that are authoritarian ("You should…" or "You must…") or overly permissive without direction ("Whatever you feel is best…") can undermine the efficacy of communication for the clinician or patient. Generally, directing the patient in a more authoritative manner is most appropriate in times of crisis, such as when hospitalization is needed or a patient is suicidal. Permissively following along with a patient's thoughts and feelings may be needed at times when patients need to "vent" to someone who is nonjudgmental, such as during acute loss and grief. MI is the most effective approach for the gray zones that exist between these situations, in which one of many possible options would be appropriate, scenarios that are much more typical in our everyday clinical encounters when we want to guide lifestyle behavioral changes effectively.

The foundation of MI is the "spirit" in which we approach a clinical encounter. Cultivating our interpersonal styles to be more empathetic, supportive, flexible, and affirming provides the bedrock on which patients feel empowered to change. Patients often feel somewhat ambivalent about changing their behaviors as they weigh their options for leading healthier lives: wanting to do something different to change, while also wanting to stay the same, or not entirely confident in their ability to change. The clinician's task is to support and guide patients as they work to resolve their own ambivalence.

Traditional care often focuses on the clinician's impression about what the patient "should" do or needs, whereas the spirit of MI encourages collaboration. It is the patient, not the physician, who decides ultimately what health behaviors and outcomes are acceptable, given individual and cultural preferences, tolerance for risk, and knowledge base. MI sessions turn to patients to identify which health outcomes they hope for, which health goals they are aiming for, the advantages and disadvantages of obtaining these goals, the concrete actions they can take to work toward these goals, and what barriers they can imagine might prevent change.

In a typical pediatric encounter, the clinician might ask parents of a preschool-age child who has asthma to describe their understanding of how asthma causes problems for their child; how they picture poorly controlled versus well-controlled asthma would look for their child; or what they wish would be different about their child's asthma. The purpose of these open-ended questions is to continue a therapeutic conversation that engages the family's strengths and resources, helping them create change from within.

Continuing the example of asthma, the family might think that asthma medications are confusing and hard to administer to their preschool-age child, and at the same time they might have a very good understanding of asthma triggers. In this case, the clinician could collaborate with the family to identify how these triggers affect the child, and how each prescribed medication functions regarding those triggers. The family, in turn, might come up with a new plan to administer controller medications more often during certain times of the year, when seasonal allergen triggers would be more prevalent. This type of collaboration is likely to improve adherence and longitudinal follow-up.

When to Use Motivational Interviewing

MI is most useful when patients are unsure or ambivalent about change. A hallmark of readiness to change is "change talk." These communications include statements that demonstrate a patient's readiness or intentions to change and may reflect patients' desires, abilities, reasons, or needs to change, as well as their commitment to change. For example, a third-grade child who is failing at school owing to attention-deficit/hyperactivity disorder might say, "I really *want* to get my homework done, but I just can't," or the parent who refuses a vaccine for her newborn might state that she knows her child

should get vaccinated. A clinician who hears change talk can use MI to help the patient move toward commitment to change and to take steps to do so. Change talk is elicited through open-ended questions that evoke patients' values, aspirations, and goals and through reflective listening to demonstrate the clinician's understanding of the patient's perspective.

Although change talk often can be positive, and MI can proceed smoothly into helping patients formulate goals and action plans, patients often verbalize ambivalence or apparent resistance to change. This type of expression often occurs within the same sentence as a change statement, such as, "I know I should remember to check my blood sugars more often, *but* it's really hard to do it at school when everyone's looking at me." At these times, the clinician must resist the "righting reflex" that seeks to "fix" the patient's or parent's problems; instead, MI can be used to explore the patient's or parent's views of the advantages and disadvantages of working to change. MI is effective for "rolling with" resistance, by using strategies that include focusing on areas of common ground; refocusing the conversation toward patient and parent autonomy; and by using complex reflections (see the section, *Incorporating Motivational Interviewing into Pediatric Practice*).

As an example, parents in an outpatient weight-management clinic might discuss a number of nutritional factors they have tried to change for their child, and then list reasons these changes have not worked. If a clinician in such a scenario were to counter with new solutions, more dietary information, or objective data on weight gain, parents likely would express even more reasons why changes "can't" occur. During discussions in which the clinician is the only one arguing in favor of change, patients and parents easily can become even more entrenched in *not* changing, because they are literally "talking themselves into" unhealthy behavioral patterns or reasons change cannot occur. Instead, the principles of MI can be utilized to help patients and parents "argue with themselves" to resolve ambivalence. In the case of weight management, the clinician could use MI to help families recognize their own individual reasons for changing nutritional intake, clarify their goals, determine a reasonable plan that includes their own ideas for solutions to barriers, and anticipate additional barriers to changing these factors and ways to deal with these impediments if they arise.

Natural opportunities to incorporate MI into an encounter can occur when the clinician provides patients and parents with suggestions and advice, education, prescriptions, care coordination, referrals, therapies, home remedies, self-monitoring techniques, and follow-up. For example, during a typical pediatric inpatient visit for a child recovering from dehydration, a clinician may decide that the child needs to increase oral intake before discharge. Before proceeding with such advice, no matter how correct it is, the practitioner might ask an open-ended question to understand better what the caregivers or child thinks are the current criteria for the child going home or might ask the family or child permission to discuss further how they plan to ensure the child gets adequate oral intake at home. Such an approach could easily lead to the formulation of mutually acceptable goals to measure progress toward discharge.

MI has few contraindications. Absolute contraindications include immediate risk of harm to self or others, including cases of suspected child abuse and neglect, homicidality, or suicidality. MI also has no role in medical conditions that alter the patient's level of consciousness or necessitate acute hospitalization or emergency treatment (such as severe asthma in an acute exacerbation). Some conditions, including moderate-to-severe cognitive impairments, also may preclude the use of MI. Similarly, a child's developmental level always must be taken into account; most texts on MI focus on children who have achieved at least "operational" thinking (ie, age ≥7 years).

The spirit of MI exists, however, even when we engage empathetically with infant-parent dyads or use techniques of redirection and physical play with toddlers. We believe that MI principles can be used to help children at any age, through developmentally appropriate adaptations of MI, and by targeting caregivers as agents of change on behalf of the younger, pre-verbal child (see the section, *Case Studies in Motivational Interviewing: Developmental Considerations*).

The Efficacy of Motivational Interviewing in Pediatrics and Adolescent Health

Office-based "anticipatory guidance" in pediatric primary care typically has been delivered in a directive, practitioner-centered style. This model of counseling may not be particularly effective, and there is little evidence-based support for didactic counseling in this manner. For example, it remains unclear how well this traditional style works for bicycle helmet promotion, poisoning prevention, child abuse and domestic violence prevention, passive smoke exposure mitigation, sexually transmitted infection prevention, pregnancy prevention, or physical activity promotion. (3)

In contrast, several studies of pediatric populations demonstrate that MI can effectively change several health behaviors. (4) Most of the studies to date have focused on adolescents. (5)(6)(7)(8) More than 10 randomized

control trials and more than six quasi-experimental studies show that MI probably is efficacious for counseling youth about decreasing tobacco use; (6) decreasing substance abuse; (7)(8) improving glycemic control in type 1 diabetes; (9) promoting dental care; (10) and improving rates of follow-up for clinically indicated mental health referrals. (11) Other common pediatric problems, such as childhood obesity, medication adherence, sexually transmitted infections, eating disorders, and the use of alcohol and other drugs, also seem to be addressed successfully by using MI, although these studies have been smaller and less rigorous. The success of MI with youth may depend on how well the clinician incorporates the spirit and principles of MI into the encounter. (12) Few studies of MI in the pediatric setting have examined other topics of anticipatory guidance counseling, but clinical experience suggests that MI usually is more effective in these cases than routine didactic advice.

Incorporating Motivational Interviewing into Pediatric Practice

Effectively using MI involves practicing principles that foster collaborative, patient-centered problem solving. These principles include asking permission, using open-ended questions, affirming the patient, reflective listening, and summarizing (Table 1). Neutrally eliciting patients' concerns about the current state of the problem often assesses the patients' current stage of change best; for example, asking the parents of a 5-year-old with delayed toilet training, "We discussed this a few months ago, and it was something that you thought might get better when he started kindergarten. What, if anything, concerns you or bothers you about how his toilet training is going now?" The practitioner can then provide information tailored to parents' or patients' readiness to change, followed by either a reflective statement or question based on the principles of MI to elicit more responses that refine parents' or patients' goals. This model of "elicit-provide-elicit" thus informs the way that the principles of MI will be applied within that visit (Table 2).

Asking a child or parent for permission to talk about behavior change immediately helps to establish trust and conveys respect for his or her autonomy. Children's appropriate sensitivity to being talked *about*, instead of talked *to* or *with*, can be addressed well in this way. When an opportunity to use MI presents itself (eg, during a discussion of sleep hygiene in a school-age child who experiences insomnia) the clinician can ask the child, "Would it be all right if we talked more about your sleep?" or "I'd like to hear

Table 1. Motivational Interviewing Skills

Open-ended questions	• *Tell me about how bedtime goes.* • *What does your family like to do for exercise?*
Affirmation	• *You have great ideas about how you can eat healthier.* • *You understand more about cystic fibrosis than lots of doctors do.* • *It took a lot of courage to share with me what you really have been doing, and I respect your honesty.* • *You really seem to care about your health, and it shows by how much you have read about your treatment options.*
Reflection	Example: Patient says, "I don't want to take my medicine anymore." • Simple reflection *You don't plan to keep taking it in the future.* • Reflection of emotion *It makes you angry when your mom tells you to keep taking your medicine.* • Reflection of meaning *Your medicine has too many negative adverse effects and not enough positive benefits.* • Double-sided reflection *You don't want to take your medicine anymore, and you also worry about how not taking it might affect your school performance.* • Amplified *You would rather stop taking your medicine, even if it might result in your getting sicker.*
Summary	• *So far we've talked about eating healthier and exercising more. You wish you could do both, and it's been hard to do both so far. Some of the plans you've made in the past didn't seem to work, and I'm wondering what kinds of new ideas you will come up with today to change that.*

more about your sleep. Would you prefer to talk to me about it with your mom in the room or with your mom out of the room?"

If a patient or parent declines this invitation to further discussion, then he or she is likely to be in the precontemplation stage of change, and the clinician could ask if it

Table 2. Using "Elicit–Provide–Elicit" to Improve the Exchange of Information or Advice

Scenario	Elicit: What Patients or Parents Understand and Their Perspectives and Concerns	Provide: Affirm Patient or Parent; With Permission, Supply New Information or Advice	Elicit: Reflect or Understand Additional Concerns
Quarterly management visit for a 13-year-old boy taking a stimulant for attention-deficit/hyperactivity disorder	Clinician: *What are some of the good and not-so-good things about the medication?*	Clinician: *You're the expert on how the medication affects you. Some people find that the adverse effects get less noticeable over time. Others find the good parts outweigh the adverse effects. Would it be okay if I told you some additional ways we can adjust the medication to better suit you?*	Clinician: *We could either decrease the medication dose, or switch to a different medication, or maybe you have another idea. What do you think?*
	Patient: *It takes away my appetite and makes me no fun. One good thing is that I get most of my homework done at school now.*	Patient: *I guess.*	Patient: *I wish I could just stop taking it for a while and see what happens.*
Follow-up for a 5-year-old girl who has diabetes and her parent	Clinician: *Help me understand how you decide when to check your daughter's blood sugars.*	Clinician: *You've learned how to tell when your daughter's sugars might be high or low from how she acts. It's great that you've learned those signs. Would it be okay if I suggested some other ways that you could decide when to check your daughter's blood sugar?*	Clinician (after giving some suggestions): *So what do you think of those suggestions?*
	Parent: *If she seems low or high, then I'll check.*	Parent: *Sure.*	Parent: *I never thought of those before. I might try that.*
Vaccination refusal by parents of a 12-month-old boy	Clinician: *What are your thoughts on these vaccines?*	Clinician: *So you think he might be at higher risk. Some people choose to do an alternate vaccine schedule, and others prioritize which ones their child gets. I'd be happy to discuss with you what I know and understand about this issue, if you'd like.*	Clinician: *It sounds like you've done good background work on this already. How do think you'd like to proceed with future vaccinations?*
	Parent: *We think that they can trigger autism in some children, and he does have a cousin with autism.*	Parent: *That's all right. We're just going to skip these ones for now.*	Parent: *We'll have to find more about what's in those. Do you know where to find good information about them?*

would be better to discuss another topic entirely. Another strategy could include reflecting that the patient or parent is not ready yet to discuss this topic and then to reinforce that it is up to the patient or parent to decide when he or she might like help with this issue and to arrange a time in the near future to return and check in to discuss it (eg, how well he or she is sleeping).

Open-ended questions serve to elicit patients' and parents' internal motivations for behavior, whereas closed-ended questions are more useful for data gathering, hypothesis testing, and asking permission to give information or advice. Closed-ended questions are those that result in a response of "yes," "no," or a simple fact (such as timing or severity of a symptom). Clinicians often fear that open-ended questions will take too long for patients or parents to answer; however, experience with MI has shown that time usually is *saved* by asking open-ended questions, because open-ended questions elicit the core issue and agenda for the visit more quickly and fully than multiple clinician-driven, closed-ended questions. Open-ended questions also may be perceived as less threatening to children, who may otherwise feel defensive or interrogated when asked too many closed-ended questions in a row.

The simplest open-ended questions begin with "what," "how," and "when…then." Some phrases that generally are more useful with children than "why" to determine their understanding of the problem, motivational level, and readiness to change include "Tell me about…," "How come…," "Describe for me…," and "I wonder…." Another approach is to ask the child to "Walk me through…," or "Tell me the story of a time when [the specific problem behavior occurred]…and please tell me lots of details, like I'm watching a really good movie or reading a great book." The clinician can keep such fruitful conversations going by saying, "And then…?" and "Tell me more." A rich level of detail often is revealed very quickly through these conversations, which also can evoke change talk.

A specific type of closed-ended question used frequently in MI, often referred to as a "ruler," can help assess different aspects of change. After gathering data about the presenting problem and the patient's or parent's perceptions of it, the clinician can introduce the idea of a "ruler" or scale for readiness, importance, confidence, and commitment to making a specific behavior change; with children, it can be helpful to illustrate this concept (ie, as a simple number line) or to use a "prop," such as an examination room tape measure or ruler.

For preoperational children or more "active" learners, the clinician can use his or her hands to represent the scale's magnitude, and the child can "adjust" the hands up or down to self-rate his or her stage of change accordingly. After discussing this idea, the patient or parent is asked, "On a scale from 0 to 10 [or whatever he or she imagines the maximum to be on his or her own scale], where 10 is the most [ready/important or confident/committed] and 0 is the least, where would you say you are now?"

The clinician can then "probe lower," so that the patient or parent "argues for" his or her number (and thus argues *in favor of change*), by asking an open-ended question such as, "I wonder why it's an *xx* [their chosen number] instead of a *yy* [their chosen number minus 1 or 2]?" The clinician can then ask, "What else?" until the patient or parent says, for example, "That's all I can think of." (Note that it is important to *not* ask why the chosen number is low; ie, why the number is a five and not a 10, because this approach encourages the patient or parent to argue in favor of the status quo and *against* positive change.)

After summarizing all of the stated reasons for the number being as high as it is, elicit possible solutions to perceived barriers by "probing upward" and asking, "What do think it would take to *increase* the number from an *xx* to a *yy* [where *yy* is 1 or 2 points higher]?" again fully eliciting all of the patient's or parent's ideas, then summarizing these ideas to begin to develop a "menu" of self-generated solutions. Use of scales and rulers in this manner can help to operationalize the stage of readiness to change, generate solutions, and affirm change over time (eg, "When I saw you last month, you thought that you were a five in terms of how confident you were that you get your grades up, and now you're a seven. That's great; how did you do that?").

Affirmations are statements that provide positive feedback about goal-oriented behaviors or personal characteristics or strengths, reinforcing autonomy and self-efficacy. Such statements can be as simple as genuinely telling a harried parent, "I really appreciate that you came in today, and it shows how important your child's health is to you, because it probably took a lot of effort and planning to get here!"

Children are especially open to sincere affirmations, because their developmental tasks include mastering a variety of new skills. Complimenting a teenager's new shoes and asking, "Did you pick those out yourself? Wow! You have great taste in shoes," or noticing how a kindergartener proudly dresses him- or herself "just like a grown-up," are the kinds of statements that can enhance confidence and competence. Affirmations can compliment a behavior, such as taking steps toward change, or a personal characteristic, such as honesty, timeliness, resourcefulness, inquisitiveness, or openness.

Reflections are statements that demonstrate that the clinician understands the patient's or parent's thoughts and feelings. Simple reflections include repeating and rephrasing the patient's or parent's statement. Repeating what the patient or parent has said can be useful initially, but if this repetition is done too frequently, it may sound shallow or halt dialogue. It is somewhat more helpful to rephrase or restate (eg, "In other words…") what the

patient or parent has said in a manner that communicates understanding or clarifies meaning.

Complex reflections are the best way to demonstrate the clinician's understanding and can include reflections of emotion or meaning. Reflections of emotion can express empathy and understanding and may require that the clinician infer meaning. Complex reflections can include amplifying (eg, "You're really not sure what else you can do, and you're at your wit's end!"). One can employ single-sided reflections ("you wish things would change") and double-sided reflections ("On the one hand, you're feeling pretty upset about it, and on the other hand, you're uncertain about whether or not you can do anything to change it").

Reframing is a method of reflection that utilizes any implicit change talk buried within the patient's or parent's statement to create a more specific, positive, and change-oriented statement. For example, if the parent of an obese child says, "Nothing we do seems to help…and he's getting teased now, too, so then he gets depressed and just eats more," then the clinician could reframe this statement as, "His self-esteem is important for his well-being, and you're ready to go to any length to help him change things for the better." Reframing works especially well when the patient or parent makes a negative statement, because the reframing can help transform apparent "resistance," hopelessness, or helplessness into momentum toward positive change and enhance self-efficacy in the process.

Summarizing statements by clinicians are succinct and strategic integrations of the conversation between patient or parent and clinician. They serve to clarify mutual understanding, as the clinician gives and gets feedback from the patient or parent on what has been discussed. Summarizing can be a useful way to move the interview forward, transitioning from assessment to planning and closing the visit. Summarizing also can be a way for the clinician to make explicit any ambivalence and use it to develop discrepancies that make the positive value of change more concrete.

For example, the clinician could summarize the patient's or parent's goals, values, and beliefs, and the "parts" of the patient or parent that are oriented toward positive future goals and change; the clinician could then contrast these positive orientations with the current status or behaviors, helping the patient or parent to determine how his or her present behaviors are in conflict with his or her goals, values, or beliefs.

Finally, summaries can help marshal the attention of a patient or parent who tends to talk excessively or become tangential, while telling that person that the core "story" he or she is telling is being heard and comprehended. Clinicians can begin summaries with phrases such as, "I think it would be useful to summarize what we've talked about so far," or "So far, we've talked about…Next, tell me more about…," or " Let me make sure I understand what you have said so far…."

For patients or parents moving from the "planning" to the "action" stage of change, summary statements also can be used to discuss "menus" of therapeutic options, any of which could help the patient or parent reach his or her goals. For example, after having a conversation with a child that reveals that she is highly motivated and committed to stop chewing her fingernails, the clinician could summarize, "This has started to bother you, and I know that you can quit now that you're ready. There are lots of ways to do that. Some kids like to work with me on learning some new skills, like relaxation exercises; others find it helpful to talk with a counselor who helps kids get rid of bothersome habits. Maybe you've had some other ideas about what you think would help. What do you think will work the best for you?" For patients or parents who are in the "precontemplation" or "contemplation" stages of change, summary statements similarly can be useful to provide options about further education, ideas for follow-up, goals, or whatever they think is the right next step for them.

There are several developmental adaptations for using MI with latency-age children and younger adolescents. One is to use the "open-closed-open" sandwich in which an open-ended question is followed by several closed-ended questions and ends with another open-ended question. For example, rather than asking, "What do you think you want to do about your diet?" the clinician could ask, "What do you want to do about your diet? Do you want to eat more vegetables, or have fewer snacks, or change your drinks to no- or low-calorie ones? What makes the most sense to you?" It is also helpful with younger or less developmentally mature children to use fewer open-ended questions in general, as well as to use more affirmations. Children and younger adolescents may respond better to reflections of emotion than to reflections of meaning.

When starting a conversation with children and younger adolescents, it may help to begin with a limited number of choices when using open-ended questions; for example, you might ask, "Would you like to talk about how to be more physically active, ways to eat more healthily, or how to get enough calcium in your diet today?" while always ending with an open-ended question, such as "…or maybe there is something else you would rather discuss? What do you think?"

Asking permission, using open-ended questions, affirming the patient or parent, reflecting, and summarizing

are integrated easily into a typical pediatric encounter, as the preceding examples illustrate. The result is a very efficient style of communication that usually saves time during a visit. This style of interpersonal interaction uses the principles of MI: *expressing empathy* toward patients or parents and meeting them where they are; *developing discrepancies* between how patients or parents think their health is now and how they want to be in the future; *supporting self-efficacy* and the utilization of patients' or parents' own resources and solutions for self-care; and *rolling with resistance* to meet patients or parents where they are in their readiness to change. These principles are practiced with patients or parents in a *spirit* that *evokes* and makes explicit their internal motivations and commitment to behavior change, *encourages* their developmentally appropriate autonomy, and *collaborates* with them to meet mutually agreeable goals (Table 3).

Incorporating MI into pediatric practice does not present any barrier to appropriate coding and billing. Visits that include face-to-face counseling, including MI, for >50% of the total visit time can be billed as such (instead of on "elements"), and the record should state, "Greater than 50% of this xx-minute visit was spent counseling and educating about…." Common Procedural Terminology Evaluation and Management codes 99213 (15–25 minutes' total time), 99214 (25–40 minutes' total time), or 99215 (>40 minutes) usually would be most appropriate, and a prolonged visit code (99354) can be added to the latter if the visit is >70 minutes.

Codes that are or may not be reimbursed reliably by insurance companies yet, but that are applicable when MI is used, include 96150 (Initial Health & Behavior Assessment), 96151 (Health & Behavior Reassessment), 96152 (Health & Behavior Intervention– Individual), 96153 (Health & Behavior Intervention–Group), 96154 (Health & Behavior Intervention–Family with Patient), and 96155 (Health & Behavior Intervention–Family without Patient). Clinicians should check with payers to find out if these codes are reimbursable at this time.

Case Studies in Motivational Interviewing: Developmental Considerations

Infancy and Toddler Age (Prenatal–Age 2 Years)
Emily is a 28-year-old first-time mother whose 2-month-old boy, Luis, has been breastfeeding exclusively until the past 2 weeks, when she returned to work full-time as a schoolteacher. She is now giving him 2 bottles of formula daily in addition to breastfeeding ≥6 times daily. When asked how long she would like to keep breastfeeding, she states, "I don't think I can do it much longer, but I wish I could. It seems like I'm too stressed out, and my supply is less than it used to be. I tried to pump at work, but most days I'm too busy and there's not really any place that I can do it there, anyway." Luis is growing well and is fast asleep in her arms.

Emily is ambivalent about continuing to breastfeed Luis. She has tried various strategies to continue breastfeeding and has been confronted by a number of barriers to breastfeeding that challenge her commitment to continue. To assist Emily in enhancing her commitment to breastfeeding, a clinician could ask Emily open-ended questions about what she currently knows about the advantages of continuing to breastfeed for both herself and Luis, reflecting her comments and providing, with permission, additional information if needed regarding the benefits of breastfeeding.

Then the clinician could explore the disadvantages of breastfeeding for both Emily and her son and reflect, in a double-sided reflection, the disadvantages followed by the advantages, and end with asking, "What do you think would work the best for you and Luis at this time?" During this conversation, it is important to empathize with Emily regarding the challenges of breastfeeding by using complex reflections, and to support her self-efficacy by pointing out, with an affirmation, that she is wise to be taking her own needs and stress level into account, and that it is clear, from how healthy Luis is, that she is doing a wonderful job.

A clinician also could ask Emily, "What would you need to happen for you to continue breastfeeding?" and to explore solutions to past barriers to breastfeeding. This inquiry could be followed by an autonomy statement, such as telling Emily, "You are the best judge of what is best for yourself and your baby, and I will support you in whatever choice you make regarding continuing to breastfeed or not."

Preschool-Age (2–6 Years Old)
Keisha is a 5-year-old girl whose kindergarten evaluation is unremarkable except that her parents note on the office's "safety checklist" that she refuses to wear a bicycle helmet. During the visit, while her parents describe their failed attempts to get Keisha to use her helmet by pointing out how Keisha's friends always use helmets and by disallowing her to ride her bike unless she wears a helmet, Keisha interrupts them to proclaim loudly, "I don't want to ride my bike!…but when I'm 6, I'll use my helmet 'cause then I'll be bigger."

Keisha's parents and Keisha are mismatched in their readiness for Keisha to use her helmet and ride her bicycle. Their preschool-age daughter is expressing developmentally normal statements of resistance. Keisha's parents' continued attempts at getting her to be like her friends

Table 3. **Integrating Motivational Interviewing Into Pediatric Encounters**

Guiding Principles and Spirit of Motivational Interviewing	Examples
Expressing empathy	*You've worked hard on this problem and it's frustrating you that it's not much better yet.*
Developing discrepancies	*You do not want to quit smoking yet because most of your friends smoke, and at the same time, these asthma episodes are telling you that quitting now might improve your health.*
Rolling with resistance	*You're not yet ready to talk more about your marijuana use with me, because you feel angry and believe that your parents invaded your privacy by bringing their concerns to me without telling you first.*
Supporting self-efficacy	*You've solved problems like this before, and you might already have some ideas about what might work.*
Spirit of collaboration	• Create a partnership that respects patient's or parent's unique perspective. • Focus on interpersonal interactions and rapport. • Create a mutually agreed-on agenda. • Use verbal and written summaries.
Spirit of evoking motivations and commitment to change	• Ask open-ended questions. • Use the Elicit-Provide-Elicit model of gathering and sharing information. • Explore patient's or parent's reason for and against change. • Listen for "change talk" indicative of ambivalence. • Listen reflectively. • Use readiness and confidence "rulers."
Spirit of encouraging autonomy	• Convey that responsibility for making change resides with the patient or parent, who must decide if, how, and when change will occur. • Offer affirmations and acceptance. • Encourage self-direction. • Avoid the "righting reflex," direct persuasion, and confrontation. • Check for understanding. • Present a menu of options and choices.

by wearing a helmet are unlikely to be successful because Keisha is not yet at a developmental age where peer identification is a motivator. Also typical of 5-year-olds, Keisha seems interested in "rules" but has some definite independent ideas of her own about how and when the rules should be followed.

Capitalizing on this mind-set, her parents' disciplinary strategy (no bike riding without a helmet) could be affirmed as a "good rule." The clinician also could reflect on Keisha's statements by suggesting to her parents that they roll with their child's natural resistance, pointing out that Keisha seems to be saying that she *can* ride a bike and probably *will* when she is *ready*, which certainly will be when she is a little bit *older*.

Keisha is at an age that might preclude a strict application of MI; however, she verbalizes an apparent ambivalence about helmet-wearing (ie, she says, "…but…"), and she is quite verbal; so a developmentally tailored

approach to using MI with her could help her continue making small steps toward her goal of being "bigger." She has preoperational thinking: she cannot yet mentally deduce logical relationships, instead learning best through physical means and imaginary play. One approach would be to point out the discrepancy between her goal of independent bike riding and her sense that she's not yet "grown up" enough by drawing or physically demonstrating just how much she's grown in height in the past year.

The clinician could then summarize Keisha's attitudes and beliefs, utilizing her egocentric thinking and drive toward self-mastery by pointing out that she is already bigger than she used to be and wondering how proud she will feel when she starts to get on that bike and follow those big-kid rules *on her own*. Finally, the clinician could suggest a menu of options or choices for how and when to change, including waiting until she is a lot older and taller in a few

months, or a little older and taller in a few days or weeks, or whether she will be with her mom, dad, friends, or by herself when she notices that she is *big enough* to wear her helmet *and* ride her bike.

School-Age/Preadolescence (6–12 Years Old)

Bill is a 10-year-old boy with chronic constipation and encopresis. He has experienced a successful remission for the past 6 months, after monthly visits over the past year to a gastroenterology clinic, where he received education about constipation, an initial bowel clean-out regimen at home, a high-fiber diet, instruction on the importance of sitting on the toilet for 10 minutes after meals, and learning how to self-monitor his bowel movements on a chart that he keeps in his room. In the past month, he has soiled himself twice a week and was hiding dirty underwear in his closet until his parents found them. His parents have grounded him for 1 week for hiding his soiled underwear, and they explain, "He's just been lazy about this ever since school let out for the year." Bill looks ashamed while his parents speak, avoiding eye contact and seeming to be on the verge of tears.

Bill has relapsed by returning to his old patterns of behavior after some initial success in controlling his gastrointestinal function. His parents, too, have relapsed into a pattern of blame, shame, and punishment that *they* had previously successfully changed after being educated about the medical causes of soiling (as opposed to viewing encopresis as a character defect such as "laziness").

The parents' negative comments and Bill's negative affect could be reflected, reframed, and summarized with empathy; by saying to Bill's parents, "You're wondering why this has happened now, because you know that Bill can do some really effective things to solve this problem." A clinician could say to Bill, "It is frustrating to you to want to be in good control of your bowels and to feel like your parents believe you are being lazy." The clinician also might reflect the feelings of discouragement and failure that everyone in the family seems to be expressing.

The clinician also could reflect on the parents' implicit but loving wish that they could make everything better for Bill or somehow solve this problem for him, by saying, for example, "Like all parents, you love your son so much that you wish you could make his problem disappear; so, since Bill's problem came back a little bit, it's natural to feel discouraged, because you know now that this is a problem that only Bill can solve." This statement supports Bill's self-efficacy, and the clinician could further emphasize Bill's growing autonomy by giving him and his parents the option to meet with the clinician separately.

As a school-age child, Bill is in the concrete operational stage of cognitive development, so he can deduce outcomes from multiple facts and follow rules of logic. Children at this age can be become involved more actively in changing their own behavior through planning, action, and maintenance. MI can be used more directly with the child at this age. Bill should be given a measure of latitude to problem-solve with the clinician independent of his parents. Bill feels ashamed and would benefit from statements that support his self-efficacy and self-acceptance, while re-educating him about the physiology of encopresis and constipation, such as, "You've done a great job so far, and I know a lot of kids who *used to have* accidents like you did, who had the exact same thing happen to them after they started getting better, and they all got better even faster after it happened again…because they already knew so much more than they knew before. And like them, Bill, you already know a lot about your body's problem with poop and getting constipated, and how that caused these accidents, and how getting unconstipated again will prevent future accidents."

The clinician might ask Bill which parts of the plan were not working well for him, or what got in the way of doing the parts of the plan that worked for him the best in the past. Also, it would be worth readdressing Bill's treatment goals and asking him if the previous goals that he had achieved are the same goals that he would like to achieve in the future. Bill could then be asked what new ideas he has about how to reach those goals, and if he cannot come up with any, the clinician can ask, with permission, if he would like some suggestions for things to do. Finally, assessing Bill's confidence in carrying out whatever revised plan comes out of that discussion by using a confidence ruler could help him adhere better to his new plan of action.

Adolescence (12–18+ Years Old)

Clarissa is a 14-year-old girl who is being seen in an emergency department without a guardian present to receive sutures after getting into a fight with another girl after school. She has no identified primary care source, and the medical record shows that she has not been seen by a physician since a sports physical at age 12. She says, in an angry tone of voice, that this incident is the first time such a thing has happened but that she is "getting really sick of all these girls who are always talking bad about me to everyone so I have to do something to defend myself, and if they try to start something tomorrow then I'll do it again."

Establishing rapport to build a therapeutic alliance with Clarissa is critical to assess the risk she poses to

herself or others, and MI is absolutely indicated in this type of scenario. If, during the assessment, Clarissa is found to be cognitively altered by the use of alcohol or drugs, or if is she is suicidal, homicidal, or does not have a safe place to stay, MI might not be the best counseling style to use until she is stabilized.

Assuming that she poses no active risk to herself or others, Clarissa is resistant at this point to making any behavioral changes, because she does not describe ambivalence and directly states her preference to continue the same behavior. She is entering the formal operations stage of cognitive development, so she is beginning to think in the abstract and use facts to induce hypotheses, which she can then test behaviorally. Adolescent social-emotional development hinges on the formation of an identity in relation to peers, and Clarissa seems to be suffering because she perceives that her peers are rejecting or defaming her. She also seems to be a typical adolescent in that she may minimize her personal vulnerability to high-risk behaviors, seeing herself as immune to negative outcomes.

A useful way to establish rapport with her initially could be to offer a complex reflection that validates her feelings but does not endorse her behavior, such as saying, "Those girls made you feel angry and you thought fighting with them was the only way you could defend yourself. At this point, there's nothing else that you can think of to do the next time they tease you." This statement also serves to amplify her resistance to change, which might allow her to begin to express more ambivalence about her plan to fight with them again. The amplified reflection "there's nothing else you can think of to do" might elicit from her new ideas about additional ways to manage teasing from peers.

Helping Clarissa reflect on her identity, perhaps by asking about her current interests, might lead to the development of a discrepancy between her ideal self and how she is acting. The clinician might ask, "I saw that your last medical visit was for a sports physical when you were 12. Tell me more about that season…and what's life been like for you since then?" The clinician could explore hypotheses with Clarissa by helping her list the advantages and disadvantages of her current behavior, focusing on how she sees herself and how she wants others to see her, and on how she will appear if she continues to fight with her peers.

Finally, if Clarissa cannot generate her own ideas about how else she can handle conflict, with permission, a clinician can provide her with a menu of options and ask her which of these ideas might work for her in the future. Together they can come to an agreement on a reasonable short-term goal for recovery from her acute injury, such

as seeing a primary care provider for a "wound check" in 1 or 2 days, or getting a follow-up telephone call from the treating physician or nurse to help ensure that she receives ongoing psychosocial support.

Next Steps in Learning Motivational Interviewing

Introductory-level training in MI frequently can be obtained in sessions at the American Academy of Pediatrics National Conference and Exhibition, or through various adolescent medicine–focused continuing medical education opportunities. Several reader-friendly and practical books on MI can be useful in continuing to expand one's communication repertoire (see Suggested Reading). The day-to-day practice of pediatrics is ripe with opportunities to use MI with patients and families, and the principles of MI can be put into action immediately without formal training.

For example, the effective use of reflective listening and summary statements to check for understanding give the tuned-in clinician cues as to how well he or she is incorporating the spirit of MI into practice (Table 3). Whenever patients or parents spontaneously use "change talk," it behooves the clinician to note silently what principles of MI were in action in that clinical encounter. When preparing to dispense educational guidance or therapeutic suggestions, using the "elicit-provide-elicit" framework helps clinicians tailor their message based on what the patient or parent already knows or has already tried.

Clinicians who are committed to refining their use of MI are encouraged to attend workshops that incorporate practice sessions and role-playing of specific skills. For example, workshops sponsored by the Motivational Interviewing Network of Trainers (MINT; http://motivationalinterviewing.org or www.motivationalinterview.net) are held around the United States and in many parts of the world. Proficiency in MI is gained through systematic feedback and skill-building with someone fully trained in MI (eg, through video or audio review of one's clinical interviews); MINT maintains one such list of qualified trainers. The MINT Web site also has practical information on MI for practitioners at all levels of proficiency.

Summary

- **Motivational Interviewing (MI)** is a counseling style that guides patients and parents toward resolving their ambivalence about behavior change to enhance their self-efficacy and improve their own health.

- The evidence base concerning MI in pediatrics is growing, with strongest support for its use in adolescents. (4)(5)(6)(7)
- Opening strategies for enhancing rapport by using MI include asking permission to provide information and advice; using open-ended questions and "rulers" for assessment; affirming autonomy and self-efficacy; testing hypotheses and actively listening with reflective statements; and using summarizing statements to integrate findings and to discuss menus of options.
- Developmentally tailoring MI in the pediatric setting includes focusing more on parents when dealing with the pre-verbal child and taking cognitive level into account when dealing with children older than preschool age.

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