CARE FOR KIDS
Early & Periodic Screening, Diagnosis & Treatment
Volume 20 • Number 2 • Summer 2013

Motivational Interviewing to Promote Healthy Body Mass Index (BMI)

Linda Snetselaar, PhD, RD, LD
Karen Smith, MS, RD, LD
Donna Hollinger, MS, RD, LD
University of Iowa College of Public Health Nutrition Center

Pediatric obesity threatens our children's health. Not only are children with excess weight at risk for immediate concerns such as elevated blood sugars, lipids, blood pressure, and a decreased quality of life, excess weight often tracks into adulthood and increases the likelihood of many chronic diseases. Primary care providers see families on an ongoing basis and are therefore uniquely positioned to play an integral role in reducing the incidence of childhood obesity. They successfully treat a variety of illnesses and injuries; yet a traditional diagnosis/treatment approach falls short in conditions which require long-term behavior change, such as preventing and treating obesity. Telling families they need to change their lifestyle or behavior rarely works and tends to discourage people.

For this reason the paradigm for the best way to help people eat and live more healthfully is shifting from providing health education and advice to actively engaging families in the behavior-change process. A patient-centered approach fosters this kind of ongoing partnership. Motivational Interviewing (MI) is "a collaborative conversation style for strengthening a person's own motivation and commitment to change," (Miller and Rollnick 2013). While MI has its origins in treating addiction, accumulating evidence supports its usefulness in a wide range

(continues on page 2)

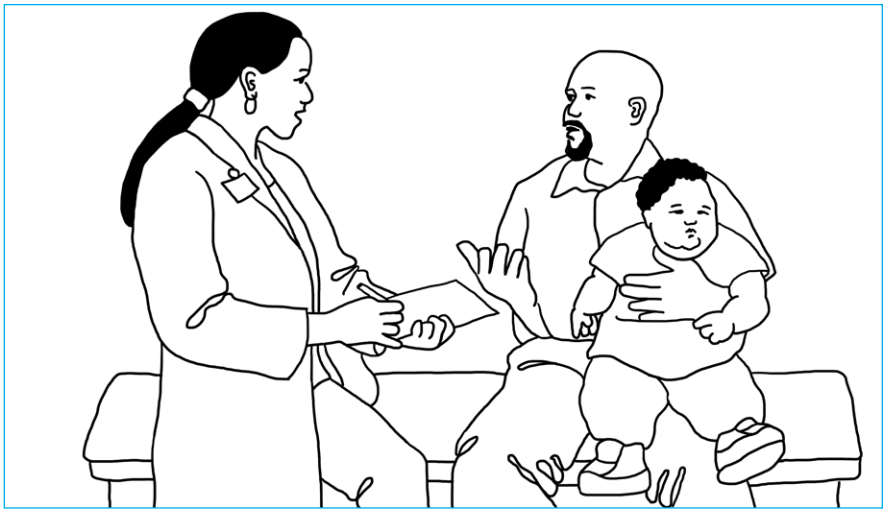
Motivational Interviewing
(continued from page 1)

of health care settings where behavior change is a focus. The act of talking about ambivalence, exploring the meaning of a change, and offering hope can help to move people forward.

A recent review by DiLillo and West suggests that MI can be beneficial in enhancing weight loss efforts and supporting weight loss maintenance. An office-based feasibility study to prevent childhood obesity featuring MI sessions delivered by pediatricians and registered dietitians concluded that MI showed promise for addressing pediatric weight issues.

Building upon the feasibility study results, a large scale randomized controlled trial, "Brief Motivational Interviewing to Reduce Body Mass Index (BMI^2)," is currently underway involving 42 pediatric practices from the Pediatric Research in Office Settings (PROS) network. Children ages two to eight with a BMI ≥85th and ≤ 97th percentile were enrolled in the trial for a two-year time period.

Practices were randomly assigned to one of three groups. Group One practitioners provided the standard care. Group Two practitioners provided four MI counseling sessions to parents within the two-year study time frame. Group Three practitioners also provided



four MI counseling sessions to parents within the two-year study time frame. In addition, each Group Three site included a registered dietitian (RD) who provided six MI counseling sessions during the course of the study.

Brief MI is a form of MI that has been developed specifically for the health care field to maximize impact within limited time constraints. The American Academy of Pediatrics (AAP) recommends that pediatricians use this MI approach when counseling families on healthful lifestyle habits for obesity prevention.

The fundamental counseling skills that are used during Brief MI sessions seem intuitive. However, even in research studies, taped patient encounters show that knowing about these skills usually does not readily transfer to using a MI communication style with patients. MI goes against a provider's natural instinct to immediately draw on their expertise to fix the problem. First patients must internalize "why" it is important to make a lifestyle change before they can consider "how" to change and set goals. MI training equips practitioners with a set of skills that enables families to explore their unique situation and discover for themselves how this change can help them reach their full potential.

To become proficient in MI, the skills must be learned and then practiced with supervision that includes regular feedback. The transition period when using MI can be demanding—then it evolves into a time efficient, rewarding way to help patients make meaningful change.

Practitioners interested in acquiring MI proficiency can find MI trainers via the Motivational Interviewing Network of Trainers (MINT) website at: **http://motivationalinterviewing.org/trainer-listing**.

(continues on page 7)

Iowa Lagging in Adolescent Vaccination Rates

Anita Moonjely, MD
University of Iowa Children's Hospital, Department of Pediatrics

Since 2005, the Advisory Committee on Immunization Practices (ACIP) has expanded the routine adolescent vaccination schedule with administration of the following vaccines at age 11 or 12 years: meningococcal conjugate (MenACWY), two doses; tetanus, diphtheria, acellular pertussis (Tdap), one dose; human papillomavirus (HPV), three doses; and influenza, one dose annually. The Healthy People 2020 targets for vaccination coverage of adolescents ages 13-15 are 80% for > or = 1 dose of Tdap, > or = 1 dose of MenACWY, > or = 3 doses of HPV (among females), and 90% for > or = 2 doses of varicella vaccine.

The Center for Disease Control recently analyzed data from the National Immunization Survey (NIS)–Teen. The NIS-Teen collects vaccination information for adolescents ages 13-17 in the 50 states, the District of Columbia, selected areas, and the U.S. Virgin Islands. Vaccination coverage varied widely among states. Iowa sadly lagged behind compared to many other states. According to the survey, among Iowa adolescents ages 13-17 in 2011, only 74.7% had received > or = 1 Tdap, 60.5% had received > or = 1 MenACWY, 53.5% of females had received > or = 1 HPV, and 40.7% of females had received > or = 3 doses of HPV. Recent Iowa Medicaid Immunization rates are even more concerning. Adolescents who turned 13 years old during the measurement year and had specific vaccines by their 13th birthday were looked at in 2011 and 2012. Only 20-22.8% of these individuals had received the meningococcal vaccine and 22.6-26.5% had received the Tdap/Td.

Given this data, it is imperative that providers enhance their ability to vaccinate Iowa's adolescents. In 2010, the University of Iowa became involved in a national study entitled, "Adolescent Vaccination in the Medical Home (AIM Hi)-Implementation of Intervention Strategy." The population targeted in the study is adolescents ages 11-18. A total of 26 practice sites are participating in the study through the New York Greater Rochester Practice Based Network and Continuity Research Network (CORNET). The purpose of the study is to implement strategies to improve receipt of adolescent vaccinations at every clinic visit. Half of the participating practices implemented a strategy while half were controls and continued usual care. Some of the intervention practices implemented a nurse prompt and some implemented an electronic medical prompt over a 12-month intervention period.

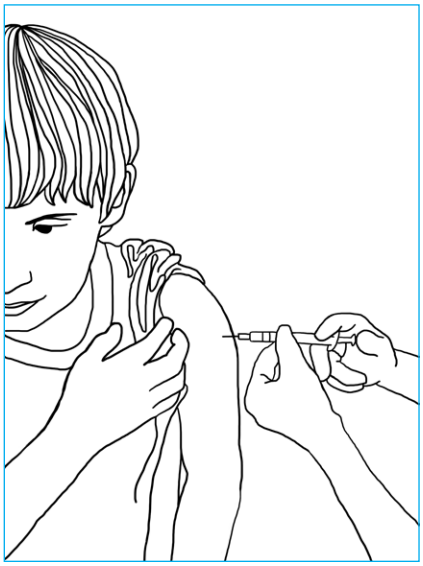
(continues on page 4)

Adolescent Immunization
(continued from page 3)

The University of Iowa implemented a nurse prompt for the first five months of the intervention period. Every morning, a designated medical assistant reviewed the entire clinic schedule for the next day, including the acute care clinic, resident continuity clinics, and faculty clinics. Any adolescent patients (ages 11-18) who were due for HPV, Tdap, MenACWY, or influenza vaccines were determined. For these patients, the medical assistant would attach the appropriate vaccination information sheet (VIS) to the patient's billing sheet. This sheet served as a prompt to the health care provider that the child was due for a specific immunization.

Although this was a useful intervention, there was one major obstacle. Due to nursing staff constraints, the medical assistant assigned only had about 15 minutes before clinic started to review the clinic schedule for the next day. There was no time to review the schedule at any other time. Charts of adolescent patients added on to the schedule throughout the day were not reviewed and vaccination opportunities were missed. This mainly impacted the patients seen in the acute care clinic, as those patients seen for well child care were already routinely being assessed for their vaccination status by their health care provider.

After five months into the intervention period, the UI was asked to transition from the nursing prompt to the electronic medical record prompt. This coincided with an upgrade of the electronic medical record system. With this upgrade, the "Health Maintenance Tab" enabled providers to know at a glance which vaccinations were due. All the faculty and residents were educated about the Health Maintenance Tab. They were asked to access the Tab at every clinic visit to determine which vaccinations were due and offer the appropriate vaccinations. This provided a uniform approach of review of the medical record for all clinic visits. However, some errors were found within the Health Maintenance Tab. For example, if a dose of a vaccine is given one day earlier than the recommended interval, the dose is not counted by the Health Maintenance Tab and is shown as due. Although not a perfect prompt, it gives the health care provider a quick glimpse of what vaccinations may be due.



Of the two prompts, the electronic prompt worked better at the University of Iowa. Prior to the 12-month intervention period, a 175-chart review was conducted at each of the participating sites. The chart review determined the immunization status for HPV, MenACWY, Tdap, and influenza vaccines in adolescents between the ages of 11 and 18. A similar chart review is currently underway after the intervention period.

Recently, the Iowa Department of Public Health, Bureau of Immunization has implemented the requirement of Tdap for students enrolling in seventh grade. This rule will be implemented beginning with the 2013-2014 school year, and will contribute to increased vaccination rates for the Tdap vaccine. Iowa has a long way to go to increase adolescent vaccination rates. Hopefully, with a combination of public health care measures and primary health care physicians taking every vaccination opportunity, Iowa will be able to achieve the Healthy People 2020 targets for vaccination coverage of adolescents.

For more information about the 2013 Birth-18 Years & "Catch-up" Immunization Schedules for the United States, go to: **http://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html.**

Effective Communication Techniques to use with Families

Eat and Play the 5-2-1 way

Who do you communicate with?

2-5 years old

- Communicate with parent; child in room

6-12 years old

- Communicate with parent or both
- The first encounter consider taking parent to your office to discuss in private first

Over 12 years old

- Communicate with teen or both
- The first encounter consider having parent leave exam room first

Brief Negotiation skills

For Contemplative / Ambivalent Patients

- Ask open-ended questions
- Reflective listening
- Summarize
- Clinician style: empathic, accepting, collaborative

Cognitive Behavior Skills

For patients ready and willing to make change

- Develop awareness of eating habits, activity, and parenting behavior
- Identification of problem behaviors
- Problem solving and modification of problem behaviors
- Weekly goal setting for children and parents on dietary activity and self-esteem / parenting goals
- Positive reward system
- Record keeping and weight checks

1. Lifestyle Advice

Well Child / Urgent Visit

< 1 minute; Children not currently overweight or obese

Eat and Play the 5•2•1 Way Every Day

5 *helpings of fruits or vegetables*

2 *hours or less screen time*

1 *hour physical activity and play*

0 *sugar drinks and more water and low-fat milk*

2. Brief Focused Advice

<3 minutes; Children who are overweight or obese

Step 1 **Engage the Patient / Parent**

- *Can we take a few minutes to discuss your health and weight?*
- *How do you feel or what do you think about your health and weight?*

Step 2 **Share Information (optional)**

- *Your weight is increasing faster than your height.*
- *Your current weight puts you at risk for developing heart disease and diabetes. What do you make of that?*
- *What are your ideas for working toward a healthy weight?*

Step 3 **Ask Permission / Give Key Advice**

Statement: Do you mind if I share the recommendations with you?

Step 4 **Arrange for Follow up**

- *Would you be interested in more information on ways to reach a healthier weight?* AND / OR
- *Let's set up an appointment in ___ weeks to discuss.*

3. Brief Negotiation and Cognitive Behavior Skills

10+ minutes: Single or multiple sessions; Children who are overweight or obese

Step 1 Open the Encounter

Ask Permission

- *Would you be willing to spend a few minutes discussing your health / weight?*
- *Are you interested in discussing ways to stay healthy and energized?*

Ask an Open-Ended Question - Listen - Summarize

- *What do you think / how do you feel about your health / weight?*
- *What have you tried so far to work toward a healthier weight?*

Share BMI / Weight / Risk Factors (optional)

- Your current weight puts you at risk for developing heart disease and diabetes.
- Ask for the patient's interpretation. *"What do you make of this?"*
- Add your own interpretation or advice as needed AFTER eliciting the patient's / parent's response.

Step 2 Negotiate the Agenda

- *There are a number of ways to achieve a healthy weight. Some ideas include:* **Eat & Play the 5-2-1 Way.**

  5 ***helpings of fruits or vegetables***

  2 ***hours or less screen time***

  1 ***hour physical activity and play***

  0 ***sugar drinks and more water and low-fat milk***

- *Is there one of these you'd like to discuss further today? Or perhaps you have another idea that isn't listed here?*

Step 3 Assess Readiness

Importance / Confidence

- *On a scale of 0 to 10, how ready are you to consider _____?* (option just chosen)

  Straight question: *Why a 5?*

  Backward question: *Why a 5 and not a 3?*

  Forward question: *What would it take to move you from a 5 to a 7?*

Step 4 Explore Ambivalence

- Ask a pair of questions to help the patient explore the pros and cons of the issue.

  What are the things you like about _____?

  AND: *What are the things you don't like about _____?*

  OR: *What are the advantages of keeping things the same?*

  AND: *What are the advantages of making a change?*

- Summarize Ambivalence: *Let me see if I understand what you've told me so far.* (Begin with reasons for maintaining the status quo, end with reasons for making a change.)
- Ask: *Did I get it all? / Did I get it right?*

Step 5 Tailor the Intervention

Stage of Readiness	Key Questions
Not Ready 0-3	
● Raise Awareness ● Elicit Change Talk ● Advise and Encourage	◆ *Would you be interested in knowing more about reaching a healthy weight?* ◆ *How can I help?* ◆ *What might need to be different for you to consider a change in the future?*
Unsure 4-6	
● Evaluate Ambivalence ● Elicit Change Talk ● Build Readiness	◆ *Where does that leave you now?* ◆ *What do you see as your next steps?* ◆ *What are you thinking / feeling at this point?* ◆ *Where does _____ fit into your future?*
Ready 7-10	
● Strengthen Commitment ● Elicit Change Talk ● Facilitate Action Planning	◆ *Why is this important to you now?* ◆ *What are your ideas for making this work?* ◆ *What might get in the way? How might you work around the barriers?* ◆ *How might you reward yourself along the way?*

Step 6 Close the Encounter

- Summarize: *Our time is almost up. Let's take a look at what you've worked through today.*
- Show Appreciation / Acknowledge willingness to discuss change: *Thank you for being willing to discuss your weight.*
- Offer advice, emphasize choice, express confidence: *I strongly encourage you to be more physically active. The choice to increase your activity is entirely yours. I am confident that if you decide to be more active you can be successful.*
- Confirm next steps, arrange for follow up: *Are you able to come back in one month so we can continue to work together?*

keep ME healthy 5 2 1 0

Iowa Department of Public Health

**Adapted from Regional Health Education: Kaiser Permanente Northern California and Maine Youth Overweight Collaborative

Prochaska & Di Clemente: Transtheoretical Model of Behavior Change

References:

DiLillo V, West D. "Motivational interviewing for weight loss." *Psychiatr Clin N Am*. 2011; 34:861-869.

Freedman D, Mei Z, Srinivasan S, Berenson G, Dietz W. "Cardiovascular risk factors and excess adiposity among overweight children and adolescents: The Bogalusa Heart Study." *J Pediatr*. 2007; 150:12-17.

Miller W, Rollnick S. *Motivational Interviewing: Helping People Change*. 3rd edition. New York: Guilford Press; 2013; 413.

Resnicow K, McMaster F, Woolford S, Slora E, Bocian A, Harris D, Drehmer J, Wasserman R, Schwartz R, Myers E, Foster J, Snetselaar L, Hollinger D, Smith K. "Study design and baseline description of the BMI^2 trial: reducing paediatric obesity in primary care practices." *Pediatr Obes*. 2012; 7:3-15.

Schwartz RP, Hamre R, Dietz WH, Wasserman RC, Slora EJ, Myers EF, Sullivan S, Rockett H, Thoma KA, Dumitru G, Resnicow KA. "Office-based motivational interviewing to prevent childhood obesity." *Arch Pediatr Adolesc Med*. 2007; 161:495-501.

Examples of Using MI in a Clinical Setting

Ways to initiate conversation

- Some parents are concerned about their child's weight while others are not—what about you?
- How, if at all, do you think Jeremy's weight affects him at school?

Discuss ambivalence

- You seem torn between not wanting to trigger an asthma attack yet wanting your son to be more physically active.
- On one hand you don't feel there is much you can do about Jill's weight but on the other hand you worry about her being teased.

Explore meaning of change

- Finding the time to eat together as a family is going to be difficult, but if you could do it what might it mean for you and your family?

Providing Information/Advice in a MI Way

Elicit – Provide – Elicit

Elicit . . . . . What do you know or have you heard about the relationship between screen time and children's weight?

Provide . . . . It turns out that the time children spend watching TV or playing computer games has an influence on body weight—the more screen time the higher the weight.

Elicit . . . . . What are your thoughts on that?

CARE FOR KIDS
Early & Periodic Screening, Diagnosis & Treatment

University of Iowa Children's Hospital
Center for Disabilities and Development
University Center for Excellence on Disabilities
100 Hawkins Drive
Iowa City IA 52242-1011

What's in this issue

The ***EPSDT Care for Kids Newsletter*** is published three times a year, in print and online, as a joint effort of the Iowa Prevention of Disabilities Policy Council, the Iowa Department of Human Services, the Iowa Department of Public Health, and the Center for Disabilities and Development, which is nationally designated as Iowa's University Center for Excellence on Disabilities. The goal of this newsletter is to inform Iowa health care professionals about the EPSDT Care for Kids program, to encourage them to make use of this important resource, and to provide them with information about a wide range of developments in the field of health care.

Please send correspondence concerning **content** to:

Ellen Link, MD
University of Iowa
Health Care
Iowa River Landing
Office 2627
105 9th Street
Coralville, IA 52241

Please send **change of address** information to:

Amy Mikelson
University of Iowa
Children's Hospital
Center for Disabilities and
Development Room S263
100 Hawkins Drive
Iowa City, IA 52242-1011