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Prevention, Recognition, and Treatment of Pediatric Obesity in the Ambulatory Care Setting

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PREVENTION, RECOGNITION, AND TREATMENT OF PEDIATRIC OBESITY IN THE AMBULATORY CARE SETTING

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By

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ABSTRACT

The World Health Organization (WHO) in 1995 described obesity as a chronic disease and one of the most important public health threats and in 2000 reported obesity as a "global epidemic." The numbers of obese children are increasing in society; moreover, the onset of obesity is occurring at even a younger age than in the past. The prevalence of pediatric obesity is staggering and interventions need to be developed to decrease the risk for chronic and related psychological diseases.

The objective of this project was to provide education on utilization of a tool kit to increase the nurse practitioner (NP) participants' knowledge base in regards to pediatric obesity prevention, recognition, and treatment. As the pre-intervention, a questionnaire was distributed to the participants to measure their knowledge of childhood obesity. An educational session was provided and then the participants utilized a tool kit in their clinical practice. After a two-month period the Project Director met with the participants and distributed the same questionnaire to determine if participant knowledge, skills and perceptions changed after adopting the tool kit principles into their practice. Data analysis was completed utilizing an analysis of both the mode and median for each question to determine whether or not there was a change in the pre and post-intervention responses. An analysis of pre and post-frequency distributions was completed to determine the direction and extent of that change. Statistical significance of each change was tested utilizing the Mann-Whitney U-Test. Mode, median, and statistical significance were calculated utilizing Excel. Post-intervention participants reported that children would not outgrow being overweight, and identified that a significant barrier to pediatric obesity treatment was not the patient, but lack of preparation on the part of NPs. The results supported that increased knowledge did translate into improved treatment practices in the

ambulatory care setting. As more NPs are prepared to recognize, prevent, and treat pediatric obesity, the health of our children will improve significantly.

Introduction

Nature of the Problem

There are 23 million children and adolescents in the United States (US) alone that are either obese or overweight (Green, Riley & Hargrove, 2012). Surveys from 144 countries suggest that as many as 43 million preschool children are overweight and obese and 92 million are at risk for becoming overweight (De Onis, Blossner, & Borghi, 2010). Raj (2012) reports that the worldwide prevalence of overweight and obese children increased from 4.2% in 1990 to 6.7% in 2010, and that this trend is likely to continue with the prevalence expected to reach 9.1%, or 60 million children by 2020.

Obesity is a disorder that has various underlying causes, including genetic, environmental, nutritional, and cultural factors (Grundy, 1998). The Health Policy Tracking Service (2008) found that there are a greater percentage of adolescents from families living in poverty that are obese (23%), compared with those families of a higher socioeconomic status (14%). Studies suggest that childhood obesity has increased due to the changing lifestyles of families; children are spending increased hours of inactivity due to television, video games, and computers, which is replacing outdoor games and other social activities (Singh & Sharma, 2005; and Sobko et al, 2011). Research has also shown inadequate sleep patterns may also play a part in the obesity epidemic in children (Snell, Adam, and Duncan, 2007; Patel & Hu, 2008; and Taveras, Rifas-Shiman, Oken, Gunderson, & Gillman, 2008).

Background of the Problem

Pediatric Obesity

Childhood obesity poses a serious threat to the health status of the nation. An increasing emergence of sedentary lifestyles and diets of convenience, often with poor nutritional value, are thought to be causing this rapid decline in pediatric health. The WHO (2012), reports that obesity rates among children of all ages are dramatically higher than

they were a generation ago and the number of obese and/or overweight youths have more than tripled has since 1981.

Physical activity and a low fat, high fiber diet remain the cornerstones of obesity prevention and management for America's youth. Obese youth are less physically active than their non-obese peers and spend more time in sedentary pursuits such as watching television and using other electronic media (Hills, Anderson, and Byrne, 2011). Green and Reese (2006) discussed the current status of physical education programs across the nation: only 3.8% of elementary schools, 7.9% of middle schools, and 2.1% of high schools provide daily physical education. In contrast, The National Association for Sport and Physical Education (2005) recommends that school aged children should be required to take part in 150 minutes of activity per week and middle and high school students children should be required to take part in 225 minutes per week of physical education.

Approximately one-third of the youth aged 2-19 years are overweight or are at risk for becoming obese (Ogden, et al, 2006). The widespread prevalence of pediatric obesity is a great social concern given that overweight youth are at risk for a wide range of problems, as well as difficulties in psychosocial functioning. Studies found that on average, youth who are overweight have a lower health-related quality of life (Schwimmer, Burwinkle, & Varni, 2003) and often these youth have lower self-esteem compared to children of normal weight (Epstein, Meyers, & Anderson, 1996).

Family Involvement

With the increase in the pediatric obesity rate there has been an interest in the role of parents in the etiology and prevention of this complex issue. Studies of weight loss in childhood concluded that strong parental support is essential for successful weight loss and parental adherence to the treatment regimen was a significant predictor of weight loss in the obese child (Barlow & Dietz, 1998; Blom-Hoffman, 2004; and Rich, 2004). In addition,

an association between parental involvement in treatment of pediatric obesity and initial weight loss was found (Kirschenbaum, German, & Rich, 2005; and Steele, Steele, & Hunter 2009).

Ihmels, Welk, Eisenmann, and Nusser (2009) developed the Family Nutrition and Physical Activity (FNPA) screening tool, which assessed the family environmental and behavioral factors that influence the children's risk for becoming overweight. The FNPA screening tool is an instrument that considers a variety of behaviors, such as diet, physical activity, inactivity, sleep patterns, and family structure. The analysis identified 10 primary factors that were positively associated with children becoming overweight or obese. These included: 1) breakfast and family meals, 2) modeling of nutrition, 3) high calorie beverages, 4) restriction and reward, 5) parent modeling of physical activity, 6) child's physical activity, 7) screen time, 8) television in the bedroom, 9) sleep, and 10) a routine schedule.

Behavioral Modalities

Clinical practices for the treatment of pediatric obesity include reduced caloric intake, increased physical activity, behavioral modification, attention to motivation and readiness to make changes in lifestyle. Successful behavioral strategies include reward systems, telephone and email based behavioral interventions, and multi-focus treatment that included behavioral counseling, nutrition education, encouraging greater physical activity, and parent training focused on child health behaviors (Luzier, Berlin, and Weeks, 2010).

Epstein, Paluch, Beecher, and Roemmich (2008) developed the Traffic Light Diet. This model calls for children to consume between 1,000 and 1,500 calories per day. They are encouraged to eat many "green" foods, such as fruits and vegetables, which are high in nutrient density and low in energy density. Participants are cautioned to consume only moderate amounts of "yellow" foods, which are slightly higher in energy density, including

grains, dairy, and proteins. Finally participants are encouraged to abstain from "red" foods (fats, oils and sweets), which are high in fat and sugar, high energy density, and low nutrient density foods.

During review of behavioral treatment modalities, children who were encouraged to eat healthy foods were more successful than those that were discouraged to eat unhealthy foods (Epstein, Paluch, Beecher, and Roemmich, 2008). Research also demonstrated that obese children lost more weight when they were reinforced for positive behaviors, such as, eating healthy foods and becoming more active (Luzier, Berlin, and Weeks, 2010).

Significance of the Problem

Significance of Pediatric Obesity to Advanced Practice Nursing

Unfortunately, many NPs often do not know how to initiate sensitive conversations about weight with their young patients and families. Many times these conversations do not occur until the child develops complications from obesity. Hessler and Siegrist (2012) found that 51% of nurse practitioners surveyed believed that children sometimes outgrow their overweight/obesity. However, historical studies reported that being overweight or obese in childhood leads to obesity as an adult (Goran, 2001) and the most reliable predictors of overweight at age 11 was being overweight at age nine (Dwyer, et al, 1998). It is apparent that treatment of pediatric obesity needs to begin as early as possible, as soon as overweight is recognized in the child.

Occasionally the provider's own personal bias may delay the early interventions that are necessary to prevent health deterioration. Jay, et al, 2009 found that 45% of physicians agreed that they had a negative reaction to the appearance of obese individuals and only about half felt they were qualified to treat obese patients. However, 90% of these respondents felt that obesity was a treatable condition. This study found that often

providers do not counsel obese patients in a timely manner and their attitudes toward the condition of obesity may be a contributing factor.

In general, primary care providers report a low confidence level in managing pediatric obesity. In one study, twenty percent of 1,243 physician participants rated themselves as either *not at all* or *slightly comfortable* in treating pediatric obesity (Jelalian, Boergers, Alday, & Frank, 2003). Similarly, another study found that only 12% of 356 pediatricians reported high self-efficacy in managing obesity (Miller-Perrin, Flower, Garrett, & Ammerman, 2005). Nearly all respondents reported that they were in need of better counseling tools to guide patients and their families toward a healthier lifestyle. In addition, pediatricians reported counseling patients and families on behaviors they perceived as easy to change and avoided those they perceived as unfeasible (Wright, Black, & Strunin, 2009).

Many providers (physician and NP) still do not regard childhood overweight and obesity as a priority diagnosis, or even a true disease (Benson, Baer, & Kaelber, 2009). Research suggests that less than 20% of pediatricians assess the BMI of children (Caprio & Genel, 2005) and many providers generally do not feel competent in addressing obesity in children (Freedman & Stern, 2004). Reasons for this may be that personal characteristics of the practitioners such as his/her own weight, eating habits, and exercise habits may influence the approach and management of obesity.

The aforementioned studies demonstrate that there is uneasiness within the nursing and medical profession when it comes to addressing obesity in children and often the problem is addressed only when significant medical complications begin to occur. As a result, the rate of pediatric obesity is high and continues to increase at an alarming pace (Green, Riley & Hargrove, 2012; and Raj, 2012).

Significance of Pediatric Obesity to the Ambulatory Care Setting

Healthcare costs are soaring and access to care is often difficult to attain. There are more than 47 million people in the United States who lack health insurance (Basler, 2007). It is anticipated that increasing access to primary care through the Patient Protection and Affordable Care Act (PPACA) will likely lead to an increase in the number of retail clinics across the United States and may even create a need for primary care services to be offered within the retail clinic setting. Retail clinics are also expected to account for 10 percent of the non-primary care outpatient visits within the next three years (Viebeck, 2013).

While the retail care clinic industry agrees that patients should have a medical home, the stark reality is that many Americans do not. Thus the retail clinic often becomes the patient's primary provider of care. The industry standard is to discourage this behavior and instead emphasize at every visit the need to find a primary care provider (PCP). However, the patient often states that they feel "comfortable" and have no desire to seek care elsewhere. Providers in a retail clinic are fast recognizing that they may provide the only healthcare that a patient will receive, and this is of particular concern when children are involved. Considering this proclivity and the rapid increase of pediatric overweight/obesity in the United States, it is becoming more apparent that prevention, recognition, and treatment of childhood overweight/obesity must be a standard of care included with every pediatric encounter in the ambulatory/retail care setting.

Theoretical Framework

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors by focusing on the attitudes and beliefs. The model was developed in the early 1950s by a group of social psychologists at the United States Public Health Service. The HBM was an attempt to understand the widespread failure of people to accept disease preventives; it was later applied to patients' responses to symptoms and to

compliance with prescribed medical therapies (Janz & Becker, 1984). The HBM is by far the most commonly used theory in health education and health promotion (Glanz, Rimer, & Lewis, 2002; National Cancer Institute, 2003) and will serve as the theoretical framework for this project.

Theoretical Constructs

The framework supporting the HBM is that personal beliefs ultimately influence health behavior. The NP's personal beliefs may influence what health behaviors are taught to their patients. These beliefs are often influenced by the four main theoretical constructs: perceived seriousness, perceived susceptibility, perceived benefits and perceived barriers. More recently, other constructs have been added to the HBM; the model has been expanded to include cues to action, modifying factors, and self-efficacy (Heiss, 2005).

NP beliefs have profound effect on their assessment and treatment practices. Thus, NP beliefs may create barriers to recognition, prevention, and treatment strategies that should be utilized with overweight/obese child. To reduce these barriers education and evidence based interventions need to be offered to the NPs working in the ambulatory care environment. The HBM framework supports the framework for this project; increased NP knowledge will change beliefs about pediatric overweight/obesity, and will translate into improved clinical practices in the ambulatory care settings.

Table 1

The Constructs and Definitions for the Health Belief Model (Heiss, 2005)

Constructs	Definitions
Perceived Susceptibility	Belief about getting a disease or condition.
Perceived Seriousness	Belief about the seriousness or severity of a disease.
Perceived Benefits	Belief about the potential positive aspects of a health action.
Perceived Barriers	Belief about the potential negative aspects of a particular health action.
Cues to Action	Factors which trigger action. Events, people, or things that move people to change their behavior.
Self-Efficacy	Belief that one can achieve the behavior required to execute the outcome.
Modifying Factors	Individual factors that affect rather the new behavior is adopted (age, personality, sex, socioeconomic status, and knowledge).

Problem Statement

Literature reveals a general lack of NP knowledge in the management of pediatric obesity in one study, forty percent of the 99 NP participants reported not using any guidelines in their prevention practices. More than half of the NP's sampled reported *never* or *rarely* using body mass index (BMI) to identify the rate of weight gain in their patients (Larsen, Mandleco, & Tiedman, 2006). This work, as well as the aforementioned studies demonstrates a need to provide education to NPs to improve the management quality of pediatric obesity.

Purpose

Once providers are confident with their own abilities to address pediatric obesity, they are more comfortable utilizing prevention strategies (Jelalian, Boergers, Alday, and Frank, 2003). The purpose of the project was to improve NP participants' knowledge of

prevention, recognition, and treatment of pediatric obesity. By providing education and increasing confidence this may remove some of the perceived barriers making the management of pediatric obesity an attainable goal for the NP.

Project Implementation

Project Objective

The objective of this project is to educate NPs on pediatric obesity management; thereby increasing treatment, recognition, and prevention strategies of NPs in the ambulatory care setting. The Project Director will assess the NP's knowledge level and clinical practices, pre and post-intervention. It is suspected that educating and empowering the NP will increase their knowledge and confidence thus preparing them to manage the challenges of obese youth.

Project Scope

The project scope consists of an educational intervention for NPs to prevent, recognize, and treat pediatric obesity in the ambulatory care setting. The project utilized a tool kit developed by BlueCross BlueShield of New Mexico (2013) in collaboration with The American Academy of Pediatrics, The American Diabetes Association, and the U.S. Centers for Disease Control and Prevention. The tool kit is titled "Prevention and Treatment of Pediatric Obesity and Diabetes" (Appendix A). The tool kit includes general risk assessment, physical risk assessment, behavioral risk assessment, and discussion of common diseases related to childhood obesity. The "Screening and Treatment of Child and Adolescent Overweight and Obesity" pocket resource, developed by Missouri Council of Activity and Nutrition (MoCAN) (2012), will be used as it provides an excellent summary of all the tool kit contents (Appendix B). Permission was granted to utilize both tools by the above stated organizations. It was anticipated that increased NP knowledge would translate into improved clinical practice in the ambulatory care settings.

Project Budget

The budget needed to complete the project was less then $200. This included all materials for the toolkit and transportation costs.

Sample

The sample was selected by convenience sampling. According to Wood and Ross-Kerr (2011), in a convenience sample the researcher goes to the setting and selects the sample that meets a predetermined criterion. The sampling criterion included nurse practitioners that practice in an ambulatory care setting. Nurse practitioners who work in a national retail pharmacy that specializes in ambulatory care located within the retail setting were recruited as participants. The sample size was intended to be 15-20 participants spanning from two different districts located within a mid-western state.

Design

A questionnaire was the source of data collection for the project (Appendix C). Wood and Ross-Kerr (2011) state that when the objective is to find out what people believe or think, the most effective method is to ask questions directly of the person. The purpose of asking questions is to find out what is going on in the minds of the subjects - their perceptions, attitudes, beliefs, feelings, motives, plans, past events, and recall. Research questionnaires are best designed to collect primary, self-reported data (Wood & Ross-Kerr, 2011). There are many advantages to using the questionnaire including they are less expensive and less time is spent collecting the data as the instrument may be given to a number of individuals simultaneously. Another advantage is that participants feel they can remain anonymous, and as a result may be more likely to express their opinions. The questionnaire is also standard from one participant to the next and is not susceptible to changes in emphasis.

The project design utilized a questionnaire developed by Story et al (2002); all the questions in the instrument were previously validated for content through a comprehensive review of the literature and through discussions with obesity experts and clinicians who worked with overweight youth. The questionnaire will be discussed in greater detail in the "Instrumentation" section.

The results of the participants' questionnaire were kept confidential, as the Project Director is employed by the same national retail pharmacy ambulatory care clinic and did not want to create an uncomfortable environment for potential participants. The design consists of assessing NP knowledge both pre and post-intervention. After informed consent was obtained, pre-intervention knowledge was assessed by administration of the questionnaire. Following the administration of the questionnaire, a power point presentation was offered discussing the significance of pediatric obesity, as well as participant education on the use of the toolkit. Post-intervention knowledge was measured after the participant utilized the toolkit for a two-month period. In addition, due to the decreased response rate in the post-intervention questionnaires (n=9) at the follow-up staff meeting, the Project Director utilized Google Plus and sent all the project participants the questionnaire electronically, this forum continued to maintain their confidentiality. This technique allowed for a 33% increase in the response rate. The total post-intervention sample size was 12 (n=12).

Methodology

The AOCA measures ordinal data utilizing the classic Likert scale. According to Wood and Ross-Kerr (2011) standard inferential statistics that rely on mean scores are inappropriate for analysis of ordinal and nominal data. Nonparametric statistical tests such as the Sign Test, the Wilcoxon Signed-Rank Matched Pairs Test, or the Mann-Whitney U Test are more appropriate for the analysis of ordinal data.

According to Burns and Grove (2009) the Sign test was developed for data that is difficult to assign numerical values. While the standard t-test relies on interval or continuous data – where the scale of measurement between any two adjacent points is the same – the Sign Test allows data to be ranked utilizing dimensions such as *agree-disagree*. While unequal sample size does not violate the assumptions of the Sign Test, unusually small sample size limits the power to test for significance. Given a lower than desired response rate for the pre and post-intervention respondents, 19 and 12 respectfully, the Sign Test is not ideal.

The Wilcoxon Signed-Rank Matched Pairs Test is usually used to measure changes that occur in pre-test/post-test measures (Burns and Grove, 2009). Measuring both the direction and magnitude of the change, the Wilcoxon test is more powerful than the Sign test. Using pre and post-intervention scores to measure the change for each respondent to test for significance, the Wilcoxon Test requires not only equal sample size, but that each response has both pre and post-intervention scores. As stated previously, this study employed a convenience sample of nurse practitioners from a large, national retail pharmacy. As the Project Director was also employed by the same retail pharmacy, particular attention was placed on maintaining the confidentiality of the respondents. As a result, the pre and post-intervention groups were treated as independent samples, thus making the Wilcoxon Test inappropriate for use on this sample.

The Mann-Whitney U-Test can be viewed as a parallel test to an independent sample t-test (Salkind, 2014). Utilizing the median to rank order responses, the Mann-Whitney U-Test calculates the sum of the ranks and utilizes the U score to determine significance by comparing the change in rank sum. As such, the U-test does not require equal sample size and would allow for the inclusion of all responses, pre and post-intervention.

Given the small sample size and unequal number of pre and post-intervention respondents, a simple analysis of the mode was first utilized to examine overall change in responses, including magnitude and directionality. As stated previously, the use of alternative measurements of central tendency such as the mode, the most common response, or the median, the middle value in a rank ordered set of responses, is more appropriate for analysis of ordinal data than use of mean scores. Pre and post-intervention responses were entered into an Excel database and Excel statistical tools were utilized to calculate the mode, median and frequency distribution for each variable, and statistical analysis. The Mann-Whitney U-test was used to determine statistical significance for each pre-post intervention change in mode or median score. Frequency distributions were plotted on bar charts for each variable with changes in pre and post-intervention responses.

Protection of Human Participants

As with any social research, protection of participant's rights and well-being are critical. Approval was obtained from the Otterbein Institutional Review Broad (Appendix D) and the national retail pharmacy's Research and Legal Council (Appendix E). The key to this approval was the development of a Participant Consent Form (Appendix F). The consent informs the participants about the nature of the project, risks and benefits of the project, how the data will be utilized, contacts to call with questions or concerns, and participant's rights.

Outcomes and Analysis

This section includes a description of the project sample and the project findings. Results are discussed according to section and question number within the questionnaire. In addition, the results are presented in tables within the data analysis section.

Participant Characteristics

The sample consisted of 19 (n=19) respondents to the pre-intervention questionnaire and 12 (n=12) respondents to the post-intervention questionnaire. During data collection for the pre-intervention questionnaire the respondents were asked to complete a separate document titled "Participant Data Form" to provide additional demographic information (Appendix G). The pre-intervention sample included 3 males (n=3) and 16 females (n=16). The average age for the NP participants was 41 years. The average years as a registered nurse prior to becoming a NP was 13 years and the median was 8 years. Three (n=3) participants reported that they practice in both rural and urban settings; two (n=2) reported practicing only in a rural setting and 14 (n=14) reported practicing only in an urban setting.

In addition, pre-intervention participants identified several sources that could improve their ability to treat overweight children and adolescents. The participants responded to the variables with "yes or no" answers. Based on these responses percentages were calculated.

Ninety-five percent of the participants reported that utilizing professional guidelines (UTIL5A), and attending CME conferences both nationally (UTIL5C) and locally (UTIL5D) might improve NP treatment skills. Eighty-four percent responded utilizing government guidelines (UTIL5B) and web sites (UTIL5E) could improve NP treatment abilities. Seventy-three percent reported using telephone (UTIL5F) and televised conferences (UTIL5G), and having textbooks (UTIL5I) available would improve their treatment strategies and only 58% reported the videos (UTIL5H) would be a valuable resource for them. These results suggest that participants would be more likely to utilize professional guidelines and conferences to improve their clinical practice and less likely to utilize videos, textbooks, and televised/phone conferences.

Instrumentation

The project utilized the Assessment of Overweight in Children and Adolescents (AOCA) tool, developed by Story and others (2002) (Appendix H). Content validity for the instrument was established through a comprehensive review of the literature and through discussions with obesity experts and clinicians who worked with overweight youth. The instrument was developed to study multiple domains of pediatric obesity, including: 1) attitudes toward managing child and adolescent obesity, 2) perceived barriers in the treatment of overweight children and adolescents, 3) perceived skill level in obesity management and interest in training, and 4) preferred sources of information on obesity treatment modalities. Mary Story, Ph.D, referenced above, was contacted by e-mail requesting permission to utilize the instrument in a scholarly research project. Permission was granted and the eight-page instrument was obtained (Appendix I).

The AOCA is a Likert scale instrument and contains two sections, the first focusing on the experiences and attitudes of the healthcare professional and the second on the assessment and actual treatment of the overweight child. This project utilized all of the questions within the first section and a majority of the questions in the second section of the AOCA. The selected questions address the specific needs of retail heath/ambulatory care environment. The questions not utilized include those pertaining to laboratory testing, pharmacological treatments, family health history and referrals. This instrument was titled "AOCA: Short Form for Use in Ambulatory Care" (Appendix C). A panel of clinical experts reviewed the shortened instrument and found it to be appropriate for the scope of the project.

Data Analysis and Findings

Data analysis was completed as described within methodology utilizing an analysis of both the mode and median for each question to determine whether or not there was a

change in the pre-intervention/post-intervention response. An analysis of pre and post-frequency distributions was used to determine the direction and extent of that change. Statistical significance of each change was tested utilizing the Mann-Whitney U-Test. Mode, median, and statistical significance were calculated utilizing Excel.

Section One of the AOCA: Short Form for Use in Ambulatory Care.

Section one of the AOCA: Short Form for Use in Ambulatory Care focuses on NP perceptions as they relate to overall treatment of the overweight pediatric patient. There are five individual questions within this section. The responses are ordinal in nature and utilize a 3 or 5-point Likert scale.

Question One

Table 2

Provider Clinical Perceptions about Childhood/Adolescent Overweight

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
PCP1A	4	4	--
PCP1B	4	4	--
PCP1C	2	1	-1
PCP1D	2	1	-1
PCP1E	3	3	--
PCP1F	2	3	+1
PCP1G	4	4	--
PCP1H	4	4	--

Question one contains eight variables clarifying the NP's experiences and attitudes toward pediatric overweight (Table 2). The defining variable for this question is represented as provider clinical perceptions (PCP). These variables were measured on a 5-point Likert scale: 4) most of the time, 3) often, 2) sometimes, 1) rarely, and 0) never.

Pre-intervention responses indicated that participants viewed childhood (PCP1A, "most of the time") and adolescent (PCP1B, "most of the time") overweight as a condition

that required treatment. Participants initially reported "sometimes" overweight children (PCP1C) and adolescents (PCP1D) would outgrow their overweight and "sometimes" adolescent overweight is more amendable to treatment then adult overweight.

Post-intervention participants responded that "rarely" overweight children (PCP1C) and adolescents (PCP1D) would outgrow their overweight and "often" adolescent overweight is more amendable to treatment then adult overweight (PCP1F). In addition, participants reported both pre and post-intervention "most of the time" being overweight in childhood or adolescence would have an effect on chronic disease development (PCP1G) and quality of life (PCP1H) in the future. These results suggest that participating in the project improved provider knowledge base in regards to overweight/obese children and adolescents, particularly as it relates to obesity and other chronic health conditions as an adult. It should be noted that none of the changes in central tendency were noted to be statistically significant.

Question Two

Table 3

Provider Perceptions about Barriers to Treatment

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
BAR2A	3	4	+1
BAR2B	3	3	--
BAR2C	3	3	--
BAR2D	2	2	--
BAR2E	2	3	+1*
BAR2F	2	3	+1*
BAR2G	3	3	--
BAR2H	3	2	-1
BAR2I	2	2	--

* Change is statistically significant at $p < 0.05$

The second question contains nine variables to identify potential NP barriers to effective treatment of overweight children and adolescents (Table 3). The defining variable for this question is represented as barrier (BAR). These variables were measured on a 5-point Likert scale: 4) most of the time, 3) often, 2) sometimes, 1) rarely, and 0) never.

Pre-intervention responses indicated that participants perceived that their clinical knowledge (BAR2E, "sometimes") and treatment skills (BAR2F, "sometimes") were occasional barriers to effective treatment. Participants were also less likely to view lack of patient motivation (BAR2A, "often") as a barrier. In addition, pre and post-intervention participants felt lack of parental involvement (BAR2B, "often"), and clinician time (BAR2C, "often) was frequent barriers to effective treatment of pediatric overweight/obesity.

Post-intervention scores demonstrate participants increasingly believed lack of patient motivation (BAR1A, "most of the time"), lack of clinician knowledge (BAR2E, "often"), and lack of clinician treatment skills (BAR2F, "often") were the most serious barriers to treatment of pediatric overweight/obesity. The increase in scores for lack of clinician knowledge (BAR2E) and lack of clinician treatment skills (BAR2F) were both noted to be statistically significant ($p < 0.05$). These results suggest that participation may have increased self-awareness related to the provider's own knowledge, skill, and comfort levels, ultimately becoming more evident as barriers to providing effective treatment.

Question Three

Question three examined how often participants use information from multiple sources to assess and treat overweight children and adolescents (Table 4). The defining variable for this question is represented as information (INF). Question three contains eight variables describing potential sources for provider information. These variables were measured on a 5-point Likert scale: 4) most of the time, 3) often, 2) sometimes, 1) rarely, and 0) never.

Table 4

Provider Sources of Information

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
INF3A	2	3	+1
INF3B	2	3	+1*
INF3C	2	3	+1
INF3D	2	2	--
INF3E	3	2	-1
INF3F	2	2	--
INF3G	2	3	+1
INF3H	0	2	+2*

* Change is statistically significant at $p < 0.05$

Pre-intervention responses indicated that participants were most likely to rely on past experiences (INF3E, "often") to inform practice. In addition, participants were less likely ("sometimes") to rely on information from nursing/graduate school (INF3A), professional journals (INF3B), seminars/CME courses (INF3C), textbooks (INF3D), mass media (INF3F), and computer programs/websites (INF3G). Pre-intervention respondents reported "never" using information from pharmaceutical companies (INF3H).

Post-intervention scores demonstrate less reliance on past experience (INF3E, "sometimes") and increased reliance on more appropriate sources such as information from nursing/graduate school (INF3A), professional journal articles (INF3B, $p < 0.05$), seminars/CME courses (INF3C), computer programs/websites (INF3D), and pharmaceutical companies (INF3H $p < 0.05$). These results suggest that participation my have raised awareness about the need to address childhood/adolescent overweight, and encouraged practitioners to draw less on their own experiences seeking instead more recent and relevant evidence-based information.

Question Four

Table 5

Provider Self-Perceptions of Skills for Treatment of Overweight

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
SKL4A	2	2	--
SKL4B	2	2	--
SKL4C	2	2	--
SKL4D	2	2	--
SKL4E	2	2	--
SKL4F	2	2	--
SKL4G	2	3	+1

Question four rates NP skill proficiency in treating and assessing overweight in children and adolescents (Table 5). The defining variable is represented as skill (SKL). Question four contains seven variables describing different areas of skill proficiency for the participant. This question is based on a 3-point Likert scale. The ratings are from low to high: 1) low, 2) moderate and 3) high.

Participants pre and post-intervention rated their proficiency in behavioral management strategies (SKL4A), modification of diet/eating practices (SKL4B), modification of physical activity (SKL4C), modification of sedentary behavior (SKL4D), guidance in parenting techniques (SKL4E), and addressing family conflicts/concerns (SKL4F) as "moderate." The participants rated their proficiency in assessment of degree of overweight (SKL4G) in children and adolescents as "moderate" pre-intervention and "high" post-intervention. While the change was not statistically significant, this result suggests that the participants gained more confidence in their own ability to assess the degree of overweight in the pediatric population from participation in the project and utilization of the toolkit. It should be noted that the non-follow up nature of the ambulatory care setting,

makes application of many of these intervention strategies difficult. This is discussed further in Section Five as a potential limitation and consideration for future application.

Discussion: Section Two of the AOCA: Short Form Use in Ambulatory Care.

Section two of the AOCA: Short Form for use in Ambulatory Care focuses on NP approach to assessment and treatment of overweight children and adolescents. There are seven individual questions within this section. The responses are ordinal in nature and utilize a 3 or 5-point Likert scale.

Question One

Table 6

Frequencies of Recommendations Regarding Weight Control

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
REC1A	0	0	--
REC1B	0	2	+2*
REC1C	2	2	--
REC1D	2	2	--

* Change is statistically significant at $p < 0.05$

Question one contains four variables to clarify the participant's willingness to identify and address overweight children and adolescents and how often they made recommendations about weight control for these patients (Table 6). The defining variable for this question is recommendations (REC). These variables were measured on a 5-point Likert scale: 4) most of the time, 3) often, 2) sometimes, 1) rarely, and 0) never.

Pre-intervention, respondents reported "never" making recommendations for weight management for children aged 5 years or less (REC1A & REC1B). Respondents were more likely to make recommendations regarding weight control ("sometimes") for both pre-pubertal, school-aged children (REC1C) and adolescents (REC1D).

Post-intervention responses remained unchanged for infants (REC1A), school-aged children (REC1C), and adolescents (REC1D). However, respondents were significantly more likely ($p < 0.05$) to make weight control recommendations for pre-school aged children (REC1B).

These results suggest that the providers are now aware that children are not likely to outgrow their overweight and the problem needs to be addressed when it is identified. In addition, despite a willingness to address issues of overweight in children of nearly any age, it is clear those providers continue to struggle with how best to identify or address issues in overweight, especially in infants.

Question Two

Table 7

Provider Use of Methods for Assessing Childhood/Adolescent Overweight

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
ASS2A	2	3	+1*
ASS2B	1	2	+1
ASS2C	1	3	+2
ASS2D	--	--	--
ASS2E	1	2	+1
ASS2F	4	4	--
ASS2G	1	4	+3
ASS2H	0	0	--
ASS2I	0	2	+2*

* Change is statistically significant at $p < 0.05$

Question two contains eight variables identifying NP methods to assess excess weight in children and adolescents (Table 7). The defining variable for this question is assessment (ASS). These variables were measured on a 5-point Likert scale: 4) most of the time, 3) often, 2) sometimes, 1) rarely, and 0) never.

Pre-intervention the participants were more likely to use their clinical impression (ASS2A, “sometimes”) to judge excess weight. They stated that they “rarely” used weight for age percentile (ASS2B), change in weight velocity (crossing percentiles) (ASS2E), and body mass index percentile (ASS2G) to assess excess weight gain in pediatrics.

Post-intervention, the participants were more likely to use multiple methods to assess excess weight in children and adolescents. Participants reported they would use weight for age percentile (ASS2B, “sometimes”), weight for height percent, (ASS2C, “often”), change in weight velocity (ASS2E, “sometimes”), waist-hip ratio (ASS2I, “sometimes”) and BMI percentile (ASSG, “most of the time”). Participants reported “most of the time” they would use body mass index BMI (ASS2F) to assess excess weight gain both pre and post-intervention. Amongst each of these increases, only the further reliance on clinical impression (ASS2A) and increase use of waist-hip ratio (ASS2I) were noted to be statistically significant ($p < 0.05$). It is difficult to draw a conclusion given the results. While the change and directionality of the responses seem to suggest that respondents became increasingly reliant upon the use of multiple assessment measures for determining the level of overweight, the NP’s clinical impression seems to persist as the dominant response post-intervention.

Question Three

Question three contains nine variables to identify NP ability to evaluate children and adolescents for overweight (Table 8). The defining variable for this question is consideration (CON). These variables were measured on a 5-point Likert scale: 4) most of the time, 3) often, 2) sometimes, 1) rarely, and 0) never.

Table 8

Provider Considerations for Causes of Childhood/Adolescent Overweight

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
CON3A	2	2	--
CON3B	4	3	-1
CON3C	4	2	-2
CON3D	0	2	+2*
CON3E	3	3	--
CON3F	4	3	-1
CON3G	4	4	--
CON3H	3	3	--
CON3I	4	3	-1

* Change is statistically significant at $p < 0.05$

Pre-intervention, respondents reported that parent (CON3F) or patient (CON3G) concern regarding weight were the most common triggers ("most of the time") for discussion of childhood/adolescent overweight and that they were equally likely to consider eating disorders (CON3B), depression (CON3C), and family dynamics (CON3I) during evaluation. Respondents were less likely to consider the patients readiness to make changes (CON3E, "often"), the patient reporting being teased about weight (CON3H, "often"), or the patients self-esteem (CON3A, "sometimes"). In general respondents did not consider a history of abuse (CON3D, "never") when assessing overweight pre-intervention.

Post-intervention, considerations for self-esteem (CON3A), patient readiness to make change (CON3E), patient concern about weight (CON3G), and being teased about weight remain unchanged. Consideration of eating disorders (CON3B), parent concerns about weight (CON3F), and family dynamics (CON3I) decreased slightly from "most of the time" to "often", while considerations of depression decreased most substantially from "most of the time" to "sometimes." While most respondents reported "never" considering a history of physical, mental, or emotional abuse as it relates to childhood/adolescent

overweight pre-intervention, this changed substantially post-intervention ("sometimes"). This change was noted to be statistically significant ($p<0.05$).

These changes seem to validate the results in the previous variable "BAR" (Table 3) that suggested that clinician knowledge was a primary barrier to treatment pre-intervention.

Question Four

Table 9

Provider Considerations for Childhood/Adolescent Activity Level

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
ACT4A	4	4	--
ACT4B	3	3	--
ACT4C	1	3	+2
ACT4D	4	4	--

* Change is statistically significant at $p < 0.05$

Question four contains four variables to evaluate provider assessment of physical activity. The defining variable for this question is activities (ACT). These variables were measured on a 5-point Likert scale: 4) most of the time, 3) often, 2) sometimes, 1) rarely, and 0) never.

Respondents reported that they would ask most frequently about patient participation in organized activities (ACT4A, "most of the time") and the patient's level of sedentary behaviors, such as time spent watching TV, playing video games/computer, or reading (ACT4D, "most of the time"). Though still a primary consideration, respondents were less likely to ask about unstructured physical activity/free play (ACT4B, "often"), and less likely still to consider routine activities such as walking to school or the bus stop (ACT4C, "rarely").

Post-intervention, responses remained unchanged for considering a patient's participation in organized activities (ACT4A), the patient's sedentary behaviors (ACT4D), and the patient's level of unstructured activity/free play (ACT4B). Consideration of routine activities (ACT4C, "often") increased substantially from pre-intervention measures. Though the change was not noted to be statistically significant, the directionality suggests that participation may have provided NPs with new insights related to simple strategies for increasing patient physical activity.

Question Five

Question five identifies how NPs in the ambulatory care setting usually obtain a diet history. The question contained six of the most common methods: 1) one day recall, 2) diet dairy, 3) usual or typical food intake, 4) food frequency questionnaire, 5) frequency of specific foods, and 6) eating practice or pattern. The participant chose only one answer both pre and post-intervention. The most repeated method pre and post-intervention was usual or typical food intake. This response may be because typical food intake is an accurate way to assess caloric consumption and is very quick and easy to utilize in the ambulatory care setting.

Question Six

Question six identified whom the participants were most likely to engage in the treatment process while treating overweight children and adolescents. Three options were available: 1) patient alone, 2) patient and parents, and 3) patient, parents and other household members. For all age groups the participants reported they would engage both the patient and parents in the treatment process both pre and post-intervention. This is a likely response because the participants were already aware that changing a pediatric patient's home and school environments would take the commitment from the parents, as well as the child.

Question Seven

Table 10

Treatment Approaches for Childhood/Adolescent Overweight

Variable	Pre-Intervention Score (PRE)	Post-Intervention Score (PST)	Change
TREAT7A	1	2	+1
TREAT7B	2	2	--
TREAT7C	1	1	--
TREAT7D	1	1	--
TREAT7E	0	0	--
TREAT7F	0	0	--
TREAT7G	2	2	--
TREAT7H	2	2	--
TREAT7I	2	2	--
TREAT7J	2	2	--

Question seven contains ten variables to evaluate NP treatment approaches for children/adolescent overweight. The defining variable for the question is treatment (TREAT). These variables were measured on a 3-point Likert scale: 2) often, 1) sometimes, and 0) never.

Pre-intervention participants reported treating pediatric overweight by changing eating patterns (TREAT7A, "sometimes"), using a low fat diet (TREAT7C, "sometimes"), and attempting a modest caloric restriction (TREAT7D, "sometimes"). Participants reported they "often" would limit certain types of food (TREAT7B), increase organized activity (TREAT7G), increase unstructured play (TREAT7H), increase routine activity (TREAT7I) and decrease sedentary behaviors (TREAT7J) both pre and post-intervention. All NPs reported that they would "never" implement a very low calorie diet (TREAT7E) or a commercial diet fast/ meal replacement program (TREAT7F) as a treatment option for pediatric overweight/obesity both pre and post-intervention. The only change noted post-

intervention was increased reliance on the use of changes in eating patterns (TREAT7A, "often") as a way to treat pediatric overweight/obesity. This change was not noted to be statistically significant. These results indicate that the participants were well versed on appropriate treatment methods prior to project participation. These responses were likely due to the NPs graduate level education on pediatric health and assessment.

Conclusions, Summary & Recommendations

Summary of Project Findings

It was established during the pre-intervention phase that the participants already understood that being overweight in childhood and adolescence could lead to the development of chronic diseases and have an adverse effect on future quality of life. Participants responded that they were relatively proficient in many of the skills used to prevent the development of pediatric obesity (modifying diet, providing guidance for parents and addressing family concerns) and responded that childhood and adolescent overweight is a condition that needed treatment. In addition, participants indicated that they were confident with many techniques used for pediatric obesity treatment. The responses indicated that the NPs utilized multiple treatments in the past, such as, limitation of certain foods, implementation of a low fat diet, modest calorie restrictions, increasing physical activity, and decrease sedentary behaviors.

The project results found growth in the participants' ability to prevent, recognize and treat pediatric obesity. After providing education and a period to utilize the tool kit, the participants improved in many areas assessed within the questionnaire. Post-intervention participants reported that children would not outgrow being overweight, and identified that a significant barrier to pediatric obesity treatment was not the patient, but the lack of education on the part of the NP. The participants began to seek education in more

evidence-based resources and relied less on their own experiences to shape their treatment strategies.

The participants also began to use more reliable methods to assess excess weight. Initially the participants reported using their own clinical impression as a method to assess overweight in a child. After utilization of the tool kit, the NPs began to use other recommended methods to assess excess weight in a pediatric patient: weight for age percentile, weight for height percent, change in weight velocity, BMI percentiles, and waist circumference. The participants were also more likely to recognize overweight and recommend weight control measures to preschoolers.

Many of the participants stated during free dialogue that they did not feel they were prepared to treat this condition in graduate school. They recognized pediatric obesity as a huge problem, but did not possess the knowledge and skills to appropriately treat the overweight/obese pediatric patient. These participants echoed what was reported in the review of literature. The implication to advanced nursing practice is simple, providing education, in graduate school or even in an informal staff meeting, will ultimately improve the care provided to overweight/obese youth and improve their clinical outcomes in the future. The cumulative questionnaire results indicate that improved treatment, recognition, and prevention of pediatric obesity were achieved, even within the small population that participated in the project.

Limitations of the Project

A limitation is that these project findings cannot be generalized to multiple practices environments. This is due in part to the small sample size, homogeneity of the sample and utilization of a convenience sampling method. In addition, the questionnaire was designed initially for a primary care practice setting, where the patients would likely return for further weight reduction interventions. The majority of the questions could be applied to

other ambulatory care environments, but not all the questions. This limitation needed to be considered while interpreting the data results and in future applications.

The time of year that this project was implemented was another limitation. The project was started in November, in the height of cold and flu season. The limitation of time to devote to the project may have contributed to the decrease in post-intervention participants. In addition, due to lack of funding, the project was introduced at a staff meeting. Consents were signed, education was provided and distribution of the tool kit occurred in about 30 minutes. One of the participants stated "that there was a lot of information within the tool kit and it would have been nice to have more time to get education on all the materials." With proper funding, project implementation could have occurred in a more amendable environment with more then 30 minutes to implement and discuss the project. This may have led to more post-intervention participants.

Since the Project Director was employed at the sample site, maintaining participant confidentiality was important. In order to accomplish this no unique identifier was placed on the questionnaire, causing the pre and post intervention responses to be treated as independent samples. This design flaw limited the statistical tests that could be utilized. By not having a unique identifier, there was no way to connect the participant's pre and post questionnaires. This created a scenario with no matched pairs, thus decreasing the strength of the available statistical testing methods.

Implications for Future Projects

A potential direction for research in regards to pediatric obesity and treatment is the relationship between obesity and mental health. During the Project Director's immersion experience in a clinic for overweight and obese children, it was noted that the two are closely related. However, more research needs to be completed to better assess which component proceeds: obesity or poor mental health. Does the mental disorder lead to

obesity or does obesity lead to poor mental health in the pediatric population? This would be a timely and excellent research question to consider.

Future implications for potential project utilization include: 1) Implementation of the project in an environment that is conducive to a longer educational session, 2) Implementation of the project in the Spring and Summer months, 3) Lengthening the participant utilization timeframe to four months, 4) Provide an electronic forum for monthly educational offerings for the participants and 5) Implementation of the project in an environment were the Project Director is not affiliated.

Project Application in Other Settings

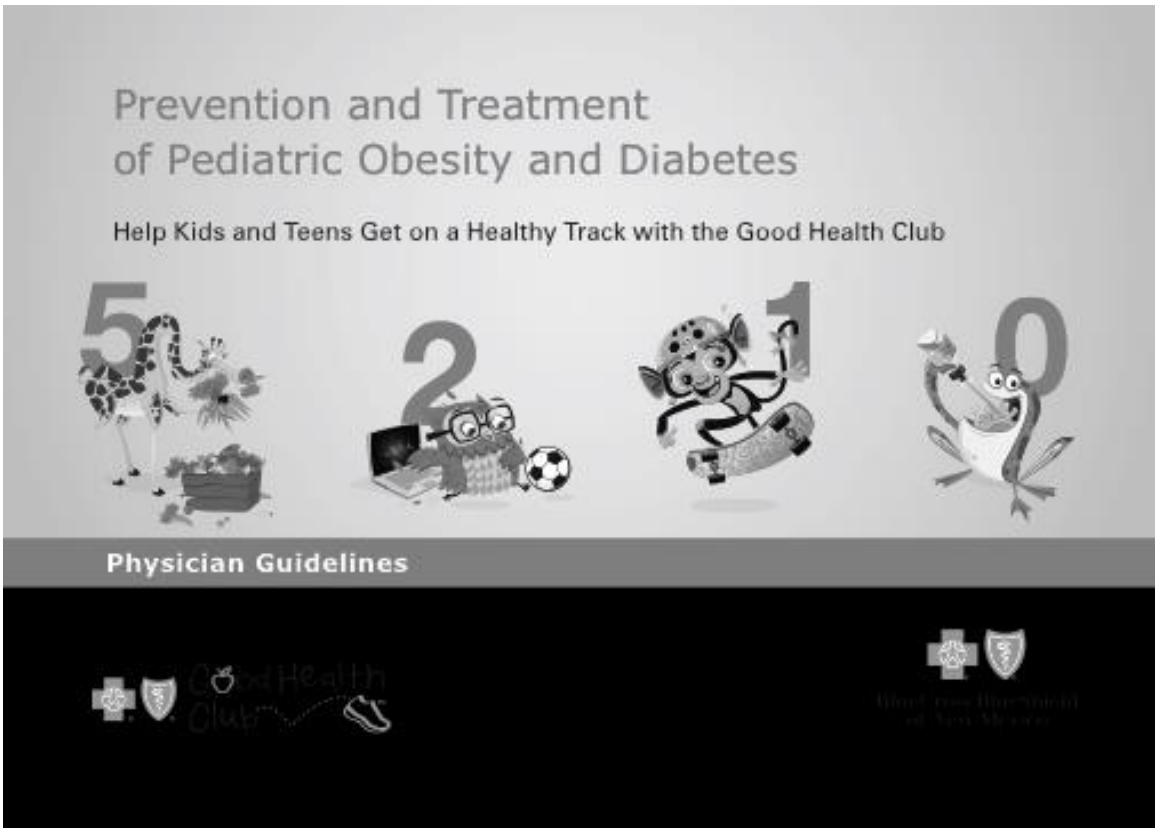
This project could be applied in multiple practice environments, as well, the university setting. The project could easily be utilized in a family or pediatric practice with little modification. In these settings the participants could potentially utilize the non-modified AOCA, assessing laboratory testing, pharmacological treatments, family health history, and referrals. In addition, the project could be applied as a preventive treatment modality for new parents as they are seeking prenatal care. The new parents could receive education on feeding the child the first year of life, as well as, how to raise a healthy and happy toddler. Educating parents on a healthy weight for an infant, toddler, and preschooler would be critical. Discussions with parents about how children tend not to outgrow overweight, but instead, tend to only develop obesity if left unchecked could be influential in helping parents develop good eating habits for the children. If the framework of this project could be used to educate the family and prevent pediatric overweight, then that would be a worthwhile task to accomplish.

Finally, educational offerings of this project could be applied to the graduate curriculum for the advance practice nurse. Discussions on this subject should extend beyond simply limiting screen time and sugary drinks. NP's should be armed with

knowledge and skills to help them confidently address issues of childhood obesity. The implications of pediatric obesity are limited to the immediate patient and family, but affect the entire health of a nation. As more of the nations NPs are prepared to recognize, prevent, and treat pediatric obesity, the health of our children will improve significantly.

APPENDIX A

Prevention and Treatment of Pediatric Obesity and Diabetes Tool Kit


Prevention and Treatment
of Pediatric Obesity and Diabetes
Help Kids and Teens Get on a Healthy Track with the Good Health Club
5
2
1
0
Physician Guidelines

As you know, Americans weigh more each year. In fact, the rate of obesity has more than tripled in three decades and, as the weight of the nation increases, the prevalence of diabetes rises.

The Blue Cross and Blue Shield companies recognize the critical role physicians have in motivating patients to adopt healthier lifestyles. As physicians, you treat young children who may struggle with weight issues. That puts you in a unique position to help them identify and develop healthy habits that will guide them in being healthier adults. These guidelines were designed to provide you with a quick reference when looking at possible risk factors in your young patients.

Together, we can prevent future cases of diabetes by encouraging healthy choices and behaviors in America's youth today.

Guidelines for Physicians on the Prevention and Treatment of Childhood Diabetes Based on Identified Risk

Sources: Adapted from the American Academy of Pediatrics; Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Child and Adolescent Overweight and Obesity: Summary Report; Centers for Disease Control and Prevention; Saint Joseph's Hospital, Atlanta, Ga.; and Blue Cross and Blue Shield companies by the Blue Cross and Blue Shield Association.

Review provided by leading experts:
American Academy of Pediatrics
American Diabetes Association

General Risk Assessment

This assessment is recommended for all pediatric patients, regardless of their known level of risk.

All children should:

- Get their height and weight measured at each visit.
- Get their Body Mass Index (BMI) calculated during each office visit.

Assessment	Key Elements	Details
Medical and Family History	Identify familial risks.	• Overweight/obese • Type 2 diabetes • High blood pressure • Heart disease • High cholesterol

Assessment	Key Elements	Details
Physical Examination	**For all patients:** • Measure height and weight. • Calculate BMI and plot on standard growth charts. **For healthy weight patients:** • Measure blood pressure (correct cuff). **For overweight patients:** • Blood pressure (correct cuff), acanthosis nigricans, tonsils, goiter, tender abdomen, liver, bowing of legs, limited hip range of motion, optic discs if headaches, acne and hirsutism. **For obese patients:** • Blood pressure (correct cuff), acanthosis nigricans, tonsils, goiter, tender abdomen, liver, bowing of legs, limited hip range of motion, optic discs if headaches, acne and hirsutism.	• Measure height • Measure weight • Online calculator, BMI wheel, growth charts To calculate BMI: Weight (kg) / [Height (cm)]^2 x 10,000 or Weight (lb) / [Height (in)]^2 x 703

General Risk Assessment

Assessment	Key Elements	Details
Physical Examination	**For morbidly obese patients:** • Blood pressure (correct cuff), acanthosis nigricans, tonsils, goiter, tender abdomen, liver, bowing of legs, limp, limited hip range of motion, optic discs if headaches, acne, hirsutism and skin inflammation.	
	• Identify underlying syndromes or secondary complications for overweight and obese patients.	• Severe recurrent headaches • Shortness of breath, exercise intolerance • Snoring, apnea, daytime sleepiness • Sleepiness or wakefulness • Abdominal pain • Hip, knee or walking pain • Foot pain • Irregular menses (<9 per year) • Primary amenorrhea • Polyuria polydipsia • Unexpected weight loss • Nocturnal enuresis

Assessment	Key Elements	Details
Weight Status Category	Categories based on BMI percentile: • Underweight: Less than the 5th percentile • Healthy Weight: 5th percentile to less than the 85th percentile • Overweight: 85th to less than the 95th percentile • Obese: Equal to or greater than the 95th percentile	
Nutritional Review	Identify eating behaviors, food intake and preferences for all locations: • At home • At school • At other caregiver	Probe on: 1. Eating breakfast 2. Portion size 3. Eating balanced meals 4. Limiting sugar and fat intake 5. Preferred beverages

(5)

General Risk Assessment

Assessment	Key Elements	Details
Activity Review	Identify daily activities and exercise patterns.	Probe on: • Daily physical activity at home and school • Types of activity (vigorous or leisurely — for example, running versus walking) • Amount of daily screen time (e.g., TV, instant messaging, video games, etc.)
Psychosocial Assessment	• Screen for depression. • Assess family support to change.	Scale of 1–10: 1. Not Ready (1–3) 2. Somewhat Ready (4–6) 3. Willing (7–10)

Assessment	Key Elements	Details
Psychosocial Assessment	**Not Ready to Change (1–3):** • Do you have any concerns regarding your child's weight? Parent/patient doesn't express concern. • Are you worried about your child's eating or activity? Parent/patient does not think this is a problem. • Are you worried about your child's ability to do activities with others his/her age? Parent/patient does not think this is a problem.	• Acknowledge the patient is not ready to work on weight loss at this time, and let patient know you respect his/her decision. • Review the health risks that come with being overweight and how this is affecting the patient (review BMI, waist circumference and health risks) and advise to maintain current weight. • Give the parent and patient more information to take home.

General Risk Assessment

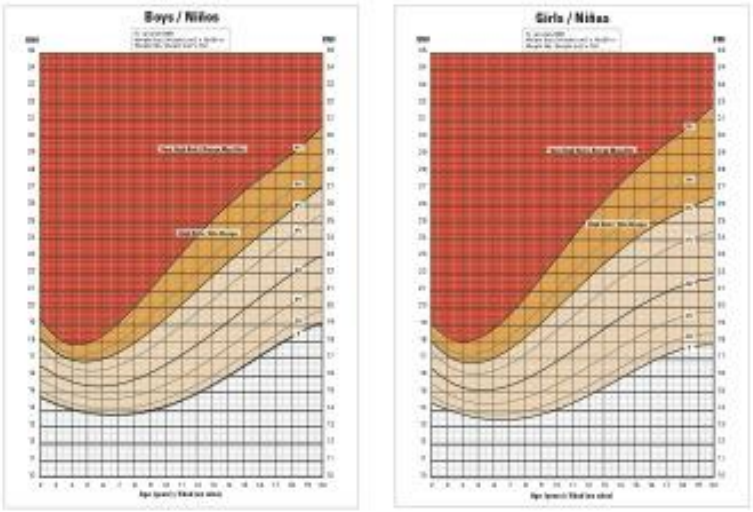
Assessment	Key Elements	Details
Psychosocial Assessment	**Somewhat Ready to Change (4–6):** • Are you worried about your child's weight? Parent/patient has some worries. • Are you worried about your child's ability to do activities with others his/her age? Parent/patient has some worries. • Considering your family history, are you worried about your child getting diabetes? Parent worries about child being at risk. • On a scale of 1–10, how willing are you to change some habits around nutrition and activity? 4–6 shows some willingness to change. • Can I tell you my concerns? • May I give you some information on healthy nutrition and activity?	• Acknowledge the patient in a nonjudgmental manner. Review the health risks of being overweight and how this is affecting the patient. Tell the patient to bring up the subject at any time in the future. You could also follow-up with: "What would help you become more ready for change?"

Assessment	Key Elements	Details
Psychosocial Assessment	**Willing to Change (7–10):** • Are you worried about your child's weight? Parent/patient is worried. • Are you worried about your child's ability to do activities with others his/her age? Parent/patient is concerned. • Considering your family history, are you worried about your child getting diabetes? Parent worries about child being at risk. • On a scale of 1–10, how willing are you to change your eating habits and activity? 7-10 shows a willingness to change.	• Talk about options and help the patient establish an action plan. • "Have you tried making changes in the past? What changes were the most successful and least successful?" • "How much physical activity do you usually get right now? How do you feel about being more active?" • "Will your family and friends help you lose weight?" • "Do you think you will have any problems losing weight?" • "What do you think would be the easiest thing to change or work on first?"

Physical Risk Assessment

Identifying risk through Body Mass Index-for-age percentiles for boys and girls, ages 2–20

See the laminated Body Mass Index-for-age percentiles chart for a larger image.



Source: Centers for Disease Control and Prevention

(10)

BMI Category	Risk Level	Recommended Action	Care Guidelines
Overweight BMI: 85th to less than the 95th percentile	**High**	1. If there is evidence of a health risk, use "Stage 1 Prevention Plus Protocol." These recommendations can be used by the primary care physician or other healthcare professionals who have some training in pediatric weight management or behavioral counseling. The goal should be to keep the same weight with growth, resulting in a decreasing BMI as age increases. Stage 1 recommendations include: • Dietary habits and physical activity: ~ Five or more servings of fruits and vegetables per day ~ Two hours or less of screen time per day and no TV in the room where the child sleeps ~ One hour or more of daily physical activity ~ No sugar-sweetened drinks	1. With risk factors in patient's history or following physical examination: Obtain fasting glucose and other tests depending on risk. Twice a year check-up, starting at 10 years of age for children with a BMI in the 85th to less than the 95th percentile who have other risk factors.

(11)

Physical Risk Assessment			
BMI Category	**Risk Level**	**Recommended Action**	**Care Guidelines**
Overweight BMI: 85th to less than the 95th percentile	**High**	• Patients and families of the patient should learn how to follow these eating behaviors: ~ Eating a daily breakfast ~ Limiting meals outside of the home ~ Family eating meals together at least five times per week ~ Allowing the child to monitor his or her meals and avoiding overly restrictive behaviors ~ Follow-up: After 3-6 months, if there is no improvement in BMI or weight status, advance to Stage 2, based on patient and family's readiness to change.	

(12)

BMI Category	Risk Level	Recommended Action	Care Guidelines
Overweight BMI: 85th to less than the 95th percentile	**High**	2. If no health risk, look for behavior problem — such as bad eating habits or not being active enough. Set goals to improve. 3. A follow-up appointment to check weight should be scheduled in one month.	2. With no risk factors: Get fasting lipid profile.
Obese BMI: Equal to or greater than the 95th percentile	**Very High**	1. Same as protocol for "High" risk. 2. Refer the patient and the parents to an obesity treatment program if they demonstrate a readiness to change.	1. Even without risk factors: Obtain appropriate "High" risk level laboratory tests, plus blood urea nitrogen, or BUN, and creatinine.

(13)

Behavioral Risk Assessment

This will help you look for behavioral risks and recommend actions with parents. Track their answers to the questionnaire.

1. Does your child eat five or more fruits and vegetables per day?	❑ Yes	❑ No
2. Does your child have a favorite fruit or vegetable that they eat every day?	❑ Yes	❑ No
3. Does your child eat breakfast five times a week or more?	❑ Yes	❑ No
4. Does your child watch TV, videos or play computer games for two hours or less per day?	❑ Yes	❑ No
5. Does your child take gym class or participate in sports or dance in or outside of school three or more times a week?	❑ Yes	❑ No
6. Does your child have a favorite sport or physical activity that they love to do?	❑ Yes	❑ No
7. Does your child eat dinner at the table with the family at least once a week?	❑ Yes	❑ No
8. Is your child's room a "TV-free zone?"	❑ Yes	❑ No
9. Does your child eat meals at the table with the TV turned off?	❑ Yes	❑ No
10. Does your child drink water instead of soda, juice or other sweetened drinks?	❑ Yes	❑ No

Add the number of "No's" to conduct the following behavioral risk assessment:

No's	Risk Level	Recommended Action
1–5	Low to Medium	1. Reinforce proper nutrition and behavior.
6–8	High	1. Reinforce proper nutrition and behavior. 2. Review healthy living and self-help information with patient/parent.
9–10	Very High	1. Reinforce proper nutrition and behavior. 2. Review healthy living and self-help information with patient/parent. 3. Make an action plan to become healthier.

Reference: Lab Values

These are the lab tests you could use to identify whether a pediatric patient is prediabetic. They wouldn't be performed on a child who is at a healthy weight – only on overweight or obese pediatric patients.

Plasma Glucose Criteria for the Diagnosis of Impaired Glucose Tolerance in Diabetes

Plasma Glucose	Normal	Impaired	Diabetes
Fasting Plasma Glucose	<100 mg/dl	100-125 mg/dl	≥126 mg/dl
Two-hour modified OGTT (Perform test using a glucose load containing equivalent of 75 g anhydrous glucose dissolved in water). *OGTT is not recommended for routine clinical use.*	<140 mg/dl	140-199 mg/dl	≥200 mg/dl
Random			≥200 mg/dl + symptoms
HBA1c			≥6.5%

Note: Tests may be repeated on another day to confirm diagnosis of diabetes for all test methods.

(16)

Cholesterol

Category	Acceptable	Borderline	Abnormal
Cholesterol (mg/dl)	<170	170-199	>200
LDL (mg/dl)	<110	110-129	>130
HDL (mg/dl)	≥45		<45

Triglycerides

Age	Male	Female
8–9	25-90	30-115
10–11	30-105	35-130
12–15	35-130	40-125
16–19	40-145	40-125

(17)

Diseases Related to Childhood Obesity

The following are symptoms and possible etiologies of illnesses that may be related to childhood obesity.

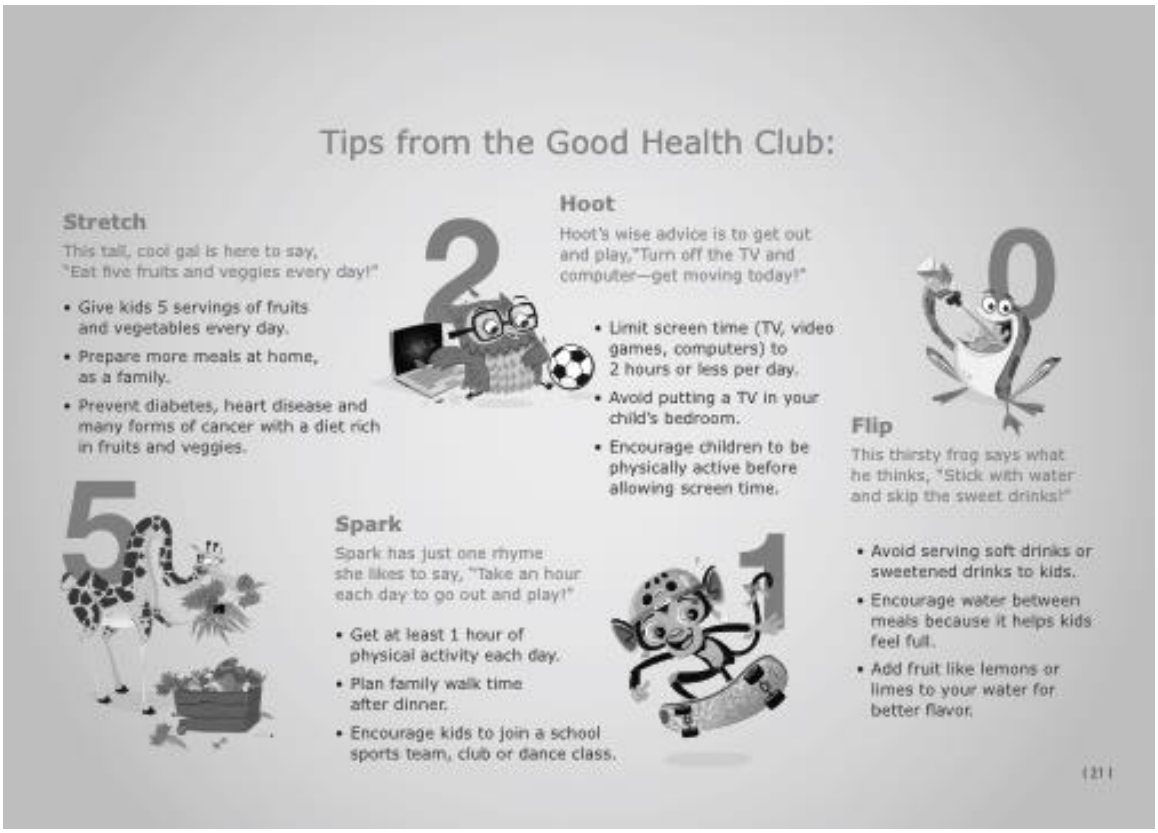
Symptom	Possible Etiologies
Anxiety, school avoidance, social isolation	Depression
Severe recurrent headaches	Pseudotumor cerebri
Shortness of breath, exercise intolerance	Asthma, lack of physical conditioning
Snoring, apnea, daytime sleepiness	Obstructive sleep apnea, obesity hypoventilation syndrome
Sleepiness or wakefulness	Depression
Abdominal pain	Gastroesophageal reflux disease, constipation, gall bladder disease, nonalcoholic fatty liver disease

Symptom	Possible Etiologies
Hip, knee, walking pain	Slipped capital femoral epiphysis, Blount's disease, musculoskeletal stress from weight (may be a barrier to physical activity)
Foot pain	Musculoskeletal stress from weight (may be a barrier to physical activity)
Irregular menses (<9 per year)	Polycystic ovary syndrome (may be normal if recent menarche)
Primary amenorrhea	Polycystic ovary syndrome, Prader-Willi syndrome
Polyuria, polydipsia	Type 2 diabetes
Unexpected weight loss	Type 2 diabetes
Nocturnal enuresis	Obstructive sleep apnea
Tobacco use	Increased cardiovascular risk; may be used as a form of weight control

Help your pediatric patients and their parents get on a healthy track.

Give your patients information about the Good Health Club. Each of the four characters follow four healthy habits that help kids keep fit, eat right and avoid obesity and diabetes. The Good Health Club tells kids to eat lots of fruits and veggies, drink water instead of soda, and work up a sweat doing something fun instead of watching TV or playing on the computer.

(20)


Tips from the Good Health Club:
Stretch
This tall, cool gal is here to say, "Eat five fruits and veggies every day!"
• Give kids 5 servings of fruits and vegetables every day.
• Prepare more meals at home, as a family.
• Prevent diabetes, heart disease and many forms of cancer with a diet rich in fruits and veggies.
Hoot
Hoot's wise advice is to get out and play,"Turn off the TV and computer—get moving today!"
• Limit screen time (TV, video games, computers) to 2 hours or less per day.
• Avoid putting a TV in your child's bedroom.
• Encourage children to be physically active before allowing screen time.
Flip
This thirsty frog says what he thinks, "Stick with water and skip the sweet drinks!"
• Avoid serving soft drinks or sweetened drinks to kids.
• Encourage water between meals because it helps kids feel full.
• Add fruit like lemons or limes to your water for better flavor.
Spark
Spark has just one rhyme she likes to say, "Take an hour each day to go out and play!"
• Get at least 1 hour of physical activity each day.
• Plan family walk time after dinner.
• Encourage kids to join a school sports team, club or dance class.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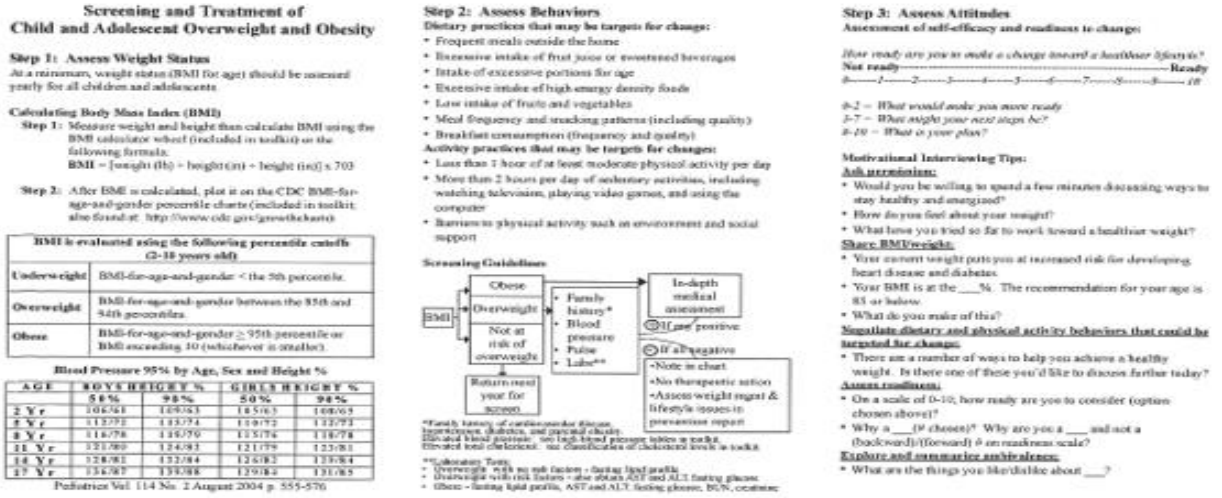
V05-10-247

APPENDIX B

MoCan Screening and Treatment of Child and Adolescent Overweight and Obesity Pocket Resource



Screening and Treatment of Child and Adolescent Overweight and Obesity

Step 1: Assess Weight Status

At a minimum, weight status (BMI for age) should be assessed yearly for all children and adolescents.

Calculating Body Mass Index (BMI)

Step 1: Measure weight and height then calculate BMI using the BMI calculator wheel (included in toolkit) or the following formula:
BMI = [weight (lb) ÷ height (in) ÷ height (in)] x 703

Step 2: After BMI is calculated, plot it on the CDC BMI-for-age-and-gender percentile charts (included in toolkit; also found at: http://www.cdc.gov/growthcharts)

BMI is evaluated using the following percentile cutoffs (2-18 years old)	
Underweight	BMI-for-age-and-gender < the 5th percentile.
Overweight	BMI-for-age-and-gender between the 85th and 94th percentiles.
Obese	BMI-for-age-and-gender ≥ 95th percentile or BMI exceeding 30 (whichever is smaller).

Blood Pressure 95% by Age, Sex and Height %

AGE	BOYS HEIGHT %		GIRLS HEIGHT %	
	50%	90%	50%	90%
2 Yr	100/54	104/63	185/63	108/65
3 Yr	112/72	116/74	110/72	112/73
4 Yr	116/78	119/79	115/76	116/78
11 Yr	122/80	124/83	121/79	123/81
14 Yr	128/81	132/84	126/82	129/84
17 Yr	136/87	139/88	129/84	131/85

Pediatrics Vol. 114 No. 2 August 2004 p. 555-576

Step 2: Assess Behaviors

Dietary practices that may be targets for change:
- Frequent meals outside the home
- Excessive intake of fruit juice or sweetened beverages
- Intake of excessive portions for age
- Excessive intake of high-energy density foods
- Low intake of fruits and vegetables
- Meal frequency and snacking patterns (including quality)
- Breakfast consumption (frequency and quality)

Activity practices that may be targets for changes:
- Less than 1 hour of at least moderate physical activity per day
- More than 2 hours per day of sedentary activities, including watching television, playing video games, and using the computer
- Barriers to physical activity such as environment and social support

Screening Guidelines

*Family history of cardiovascular disease, hypertension, diabetics, and glandular obesity.
Elevated blood pressure: see high blood pressure tables in toolkit.
Elevated total cholesterol: see classification of cholesterol levels in toolkit.

**Laboratory Tests:
- Overweight with no risk factors - fasting lipid profile.
- Overweight with risk factors - also obtain AST and ALT, fasting glucose.
- Obese - fasting lipid profile, AST and ALT, fasting glucose, BUN, creatinine.

Step 3: Assess Attitudes

Assessment of self-efficacy and readiness to change:

How ready are you to make a change toward a healthier lifestyle?
Not ready——————————————————————**Ready**
0——1——2——3——4——5——6——7——8——9——10

0-2 – What would make you more ready
3-7 – What might your next steps be?
8-10 – What is your plan?

Motivational Interviewing Tips:

Ask permission:
- *Would* you be willing to spend a few minutes discussing ways to stay healthy and energized?
- *How* do you feel about your weight?
- What have you tried so far to work toward a healthier weight?

Share BMI/weight:
- Your current weight puts you at increased risk for developing heart disease and diabetes.
- Your BMI is at the ___%. The recommendation for your age is 85 or below.
- What do you make of this?

Negotiate dietary and physical activity behaviors that could be targeted for change:
- There are a number of ways to help you achieve a healthy weight. Is there one of these you'd like to discuss further today?

Assess readiness:
- On a scale of 0-10, how ready are you to consider (option chosen above)?
- Why a ___(# chosen)? Why are you a ___ and not a (backward)-((forward) 0 on readiness scale?

Explore and summarize ambivalence:
- What are the things you like/dislike about ___?

- What are the advantages of keeping things the same/making a change?
- Let me see if I understand what you have told me so far. Did I get it all? Did I get it right?

Close the encounter:

- Our time is almost up. Thank you for being willing to discuss ___.
- I strongly encourage you to ___. The choice is, of course, entirely yours.
- I am confident that if you decide to ___, you can be successful.
- Confirm next steps: follow up appointment/referral to specialist.

Treatment Recommendations for Children Age 2-19 with BMI ≥ 85th Percentile:

Stage 1: Prevention Plus protocol:

1. Family visits with provider or health professional based on family needs and risk behaviors.
2. Encourage healthy dietary habits and physical activity
   - At least 2 1/2 cups of fruits and vegetables per day
   - Less than 2 hours of screen time per day, and no television in the child's room
   - 1 hour or more of daily physical activity
   - No sugar-sweetened beverages
   - Serve a healthy breakfast daily
   - Limit meals outside the home
   - Serve family meals at least 5-6 times per week
   - Allow child to self-regulate intake and avoid overly restrictive behaviors

Goal: weight maintenance and monthly follow-up.

After 3-6 months, if no improvement in BMI/weight status, advance to Stage 2.

Stage 2: Structured Weight Management protocol:

1. Dietary and physical activity behaviors:
   - Develop a balanced diet plan emphasizing low amounts of energy-dense foods
   - Structure daily meals and snacks
   - Supervise active play of at least 1 hour per day
   - Limit screen time to 1 hour or less per day
   - Increase behavior monitoring (e.g., screen time, physical activity, dietary intake, restaurant logs) by provider, patient and/or family

Goal: weight maintenance or weight loss not to exceed 1 lb/month in children aged 2-11 years, or an average of 2 lb/wk in older overweight/obese children and adolescents.

After 3-6 months, if no improvement in BMI/weight, advance to Stage 3.

Stage 3: Comprehensive Multidisciplinary protocol:

1. Eating and activity goals are the same as in Stage 2.
2. Activities in this stage should also include:
   - Structured behavioral modification program, including food and activity monitoring and development of short-term diet and physical activity goals

Children with BMI > 95th percentile, with significant comorbidities and who have not been successful with Stages 1-3 or children > 99th percentile who have shown no improvement under Stage 3, advance to Stage 4.

Stage 4: Tertiary Care protocol:

Referral to pediatric tertiary weight management center with access to a multidisciplinary team with expertise in childhood obesity and which operates under a designed protocol. For more information on Stages 3 and 4, please see Expert Committee Recommendations.

Recommendations for Weight Goals for Age

Goal: BMI < 85th Percentile

Age 2-5 Years

- BMI 85th-94th percentile - weight maintenance or slowing of weight gain
- BMI > 95th percentile - weight maintenance or weight loss not to exceed 1 lb/month
- BMI > 21 or 22 percentile - gradual weight loss not to exceed 1 lb/month

Age 6-11 Years

- BMI 85-94th percentile - weight maintenance or slowing of weight gain
- BMI 95th-98th percentile - weight maintenance or weight loss not to exceed 1 lb/month
- BMI > 99th percentile - weight loss not to exceed 2 lb/week

Age 12-18 Years

- BMI 85th-94th percentile - weight maintenance or slowing of weight gain
- BMI 95th - 98th percentile - weight loss, not to exceed an average of 2 lbs/week
- BMI > 99th percentile - weight loss, not to exceed an average of 2 lbs/week

Reference:
http://www.ama-assn.org/ama/pub/category/11759.html

MOCAN Missouri Council for Activity and Nutrition

This publication was supported by Grant/Cooperative Agreement Number U58/ [illegible] from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of Centers for Disease Control and Prevention.

APPEDIX C

Assessment of Overweight in Children and Adolescents
(Short Form for use in Ambulatory Care)

Assessment of Overweight in Children and Adolescents
(Short Form for Use in Ambulatory Care)

Directions:
For each section check the appropriate box to indicate your experiences. If a question does not apply to you leave it blank.

SECTION I: OVERALL TREATMENT-Experiences and Attitudes
(In the following questions, the term "adolescent" refers to young people who are undergoing or have completed puberty.)

1. In your opinion, how often is each of the following statements true?

	Most of the time	Often	Sometimes	Rarely	Never
a. Childhood overweight is a condition that needs treatment.					
b. Adolescent overweight is a condition that needs treatment.					
c. Overweight children will outgrow their overweight.					
d. Overweight adolescents will outgrow their overweight.					
e. Childhood overweight is more amenable to treatment then adult overweight.					
f. Adolescent overweight is more amenable to treatment then adult overweight.					
g. Overweight in childhood or adolescents have an effect on chronic disease in the future.					
h. Overweight in childhood or adolescence has an effect on quality of life in the future.					

2. In your opinion, how often is each of the following an important barrier to effective treatment of overweight children and adolescents?

	Most of the time	Often	Sometimes	Rarely	Never
a. Lack of patient motivation					
b. Lack of parent involvement in treatment					
c. Lack of clinician time					
d. Lack of reimbursement					
e. Lack of clinician knowledge about treatment					

f. Lack of treatment skills					
g. Lack of support services (counseling, nutrition)					
h. Futility (ineffectiveness of recommended interventions)					
i. Concern about precipitating eating disorders					

3. How often do you use information from each of the following sources when you assess and treat overweight children and adolescents?

	Most of the time	Often	Sometimes	Rarely	Never
a. Nursing school/graduate school					
b. Professional journal articles					
c. Workshops/seminars/ programs/CME courses					
d. Textbooks					
e. Past experiences					
f. Mass media					
g. Computer program/ websites					
h. Pharmaceutical companies					

4. For each of the following skills that are used in treatment of overweight children and adolescents, please rate your proficiency in that area.

Skill **Proficiency**

	Low	Moderate	High
a. Use of behavioral management strategies.			
b. Modification of patient diet/eating practices.			
c. Modification of patient physical activity.			
d. Modification of patient sedentary behavior.			
e. Guidance in parenting techniques.			
f. Addressing family conflicts/concerns.			
g. Assessment of the degree of overweight.			

5. Which of the following would improve your ability to treat overweight children and adolescents?

	Yes	No
a. Professional guidelines		
b. Government guidelines		
c. CME courses at national professional meetings		
d. CME courses at local meetings		
e. Computer programs/web sites		
f. Telephone conferences		
g. Televised lectures		
h. Videotapes		
i. Textbooks		

SECTION II: Your approach to the assessment and treatment of overweight children and adolescents**.**

1. During the past year, when you identified overweight children or adolescents, how often did you make recommendations about weight control?

	Most of the time	Often	Sometimes	Rarely	Never
a. Infants (0-2 years)					
b. Preschool children (3-5 years)					
C. School-age children (pre-pubertal)					
d. Adolescents (pubertal or post-pubertal to 18 years of age)					

2. How often do you use each of the following methods to assess excess weight in children and adolescents?

	Most of the time	Often	Sometimes	Rarely	Never
a. Clinical impression					
b. Weight for age percentile					
c. Weight for height percent					
d. Weight for height percentile					
e. Change in weight velocity (crossing percentiles)					
f. Body Mass Index (BMI)					
g. BMI percentile					
h. Skinfold thickness percentile					
i. Waist-hip ratio or waist circumference					

3. When you evaluate children and adolescents for overweight, how often do you ask about or consider each of the following?

	Most of the time	Often	Sometimes	Rarely	Never
a. Poor self-esteem					
b. Eating disorders					
c. Depression					
d. History of abuse (physical, sexual , or emotional)					
e. Readiness to make changes to manage weight					
f. Parent concern about weight					
g. Patient concern about weight					
h. Being teased about weight					
i. Family dynamics					

4. When caring for overweight children and adolescents, how often do you routinely ask about the following types of activity?

	Most of the time	Often	Sometimes	Rarely	**Never**
a. Organized physical activities (youth sports)					
b. Unstructured physical activity or free play					
c. Routine activity (walking to school or bus stop)					
d. Time spent in sedentary behavior (TV, computer, video games, or reading)					

5. When caring for overweight children and adolescents, how is the diet history <u>usually</u> obtained? *Choose only ONE.*

1. One-day recall	
2. Diet Diary	
3. Usual or typical food intake	
4. Food frequency questionnaire	
5. Frequency of specific foods	
6. Eating practice or pattern	
7. Other, *please specify*	

6. When you treat overweight children and adolescents, whom do you routinely engage in treatment? *(Please mark only one for each age group).*

	Patient alone	Patient + Parent(s)	Patient+Parent(s)+other household members
a. Preschool children (3-5 years)			
b. School-age children (pre-pubertal)			
c. Adolescents (pubertal or post-pubertal to age 18)			

7. When you treat overweight children and adolescents, how often do you do the following treatment approaches?

	Never	Sometimes	Often
a. Changes in eating patterns (Schedule snacks, instead of on demand)			
b. Limitations of certain foods (chips, soda)			
c. Low fat diet			
d. Modest caloric restriction			
e. Very low calorie diet			
f. Commercial diet (slim fast or other meal replacement programs)			
g. Increase in organized activity			
h. Increase in unstructured physical activity or free play			
i. Increase in routine activity (walking)			
j. Decrease in sedentary behaviors			

APPENDIX D

Otterbein Institutional Review Board Approval Letter

INSTITUTIONAL REVIEW BOARD
RESEARCH INVOLVING HUMAN SUBJECTS
OTTERBEIN UNIVERSITY

__X__ Original Review
_____ Continuing Review
_____ Five-Year Review
_____ Amendment

ACTION OF THE INSTITUTIONAL REVIEW BOARD

With regard to the employment of human subjects in the proposed research:

HS # 12/13-87
Keane, Ribar, & Farus-Brown: Improving the recognition, prevention, and treatment . . .

THE INSTITUTIONAL REVIEW BOARD HAS TAKEN THE FOLLOWING ACTION:

__✓__ Approved
_____ Approved with Stipulations*
_____ Deferred
_____ Disapproved
_____ Waiver of Written Consent Granted

*Stipulations stated by the IRB have been met by the investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the college, signed consent forms are to be transferred to the Institutional Review Board for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the IRB, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: 11 July 2013 Signed: _____
Chairperson

OC HS Form AF

APPENDIX E

National Retail Pharmacy's Research and Legal Council Approval

OTTERBEIN UNIVERSITY

Farus-Brown, Susan <susan.farus-brown@otterbein.edu>

Green Light...

2 messages

Pappas, Alice <Alice.Pappas[redacted]> Tue, Sep 24, 2013 at 2:00 PM
To: "Farus-Brown, Susan" <susan.farus-brown@otterbein.edu>

Hi Susan,

I am so pleased that I was able to speak w you in person and convey the good news.

As I mentioned on the phone:

1. Add a comment in the proposal that documentation will be made in the clinical record when the 1-2 minute discussion does take place (standardize the comment to be made as well as the location for the providers to enter the documentation.

2. Add a comment in the proposal indicating that the NP will use their clinical judgment when determining if the tool kit is appropriate in each pediatric visit. As an example, patient acuity may preclude use of the tool kit during some visits.

Alice

Otterbein University Mail - REQUESTED REVISIONS FOR ... https://mail.google.com/mail/u/0/?ui=2&ik=4083c680b1&view...

OTTERBEIN UNIVERSITY

Farus-Brown, Susan <susan.farus-brown@otterbein.edu>

REQUESTED REVISIONS FOR [redacted] PROPOSAL

5 messages

Farus-Brown, Susan <susan.farus-brown@otterbein.edu> Mon, Sep 30, 2013 at 1:58 PM
To: Patricia Keane <Pkeane@otterbein.edu>, "Pappas, Alice" <alice.pappas@[redacted]>, [redacted]

Good Afternoon Dr. Pappas,
Attached you will find the revisions. They are highlighted in yellow.
I will begin data collection at the next staff meeting on Nov. 10th and then conclude data collection at the staff meeting to be tentatively scheduled in Jan. 2014. Please let me know if you require any other information.
Kindest Regards,
Susan

–
Susan Farus-Brown MSN, CNP

Short Form Revisons for [redacted]
86K

Pappas, Alice <Alice.Pappas@cvscaremark.com> Mon, Sep 30, 2013 at 2:09 PM
To: "Farus-Brown, Susan" <susan.farus-brown@otterbein.edu>

Full speed ahead!

I look forward to reading about the outcome.

Alice

APPENDIX F

Consent for Investigational Research

Consent for Investigational Research

Title of the Project: "Improving the Recognition, Prevention, and Treatment of Pediatric Overweight/Obesity in the Ambulatory Care Setting."

The Objective of the Project is: The objective of this project will be to increase nurse practitioner (NP) knowledge related to pediatric obesity management through education, thereby, increasing recognition, prevention, and treatment strategies of the NP in the ambulatory care setting.

How many people will take part in this project? A minimum of 20-25 NPs that work with pediatric patients in the ambulatory care setting will participate in this project.

How long will I be participating in this project? The project will take approximately four months from start to finish.

What are the risks of the project?
*No risks can be identified.

What are the benefits for taking part in this project?
*It may offer no benefit except to assist the student investigator in completing course work for a Doctoral Degree.
*This project may increase the nurse practitioner's knowledge of recognition, prevention and treatment of pediatric overweight/obesity.

What are the costs?
*No compensation is provided for participating in this project.

Will the information about me be kept confidential?
*Identities will not be disclosed on the questionnaire. Results of the questionnaires will be kept confidential.
How will my information be utilized?
*Information will be summarized with other participants, anonymously in a written report that is a requirement for the student investigator to earn a doctoral degree.

What are my rights as a participant?
*Participation in this project is voluntary. The participant may refuse to be a part of this project and may withdrawal from this project at anytime.

Whom do I call if I have questions or problems?
*If you have questions about your rights as a research participant, you should immediately contact the Otterbein University Institutional Review Board's Chairperson: Robert Kraft, PhD, the telephone number is 614-823-1473.
*If a participant has been injured or harmed by taking part in this project, they should immediately communicate with the Principle Investigator, Patricia Keane, PhD, RN, CNP, the telephone number is 614-823-1678.

Additionally:
*Participants will be given all other information that either the investigator or Institutional Review Board believes is pertinent to make an informed decision whether or not to participate in this project.
*Participants may keep a signed copy of this consent for their records and future reference.
*Participant's signatures on consent forms affirm that they are at least 18 years of age.

I hereby freely and voluntarily consent to take part in this project as described above. The consent is based on the verbal information provided to me. I have discussed the information with the student investigator, Susan Farus-Brown and have been given the opportunity to ask questions which have been answered to my satisfaction. Any questions I have about this research have been or will be addressed by Susan Farus-Brown. I am free to ask additional questions at any time. I am able to refuse to take part or withdraw from this project at any time, without facing any penalty.

My signature below indicates that I voluntarily agree to take part in this project.

Subject's Signature and Date

Student Investigator's Signature and Date

APPENDIX G

Participant Data Form

Participant Data Form

Improving the Recognition, Prevention, and Treatment of Pediatric Overweight/Obesity in the Ambulatory Care Setting

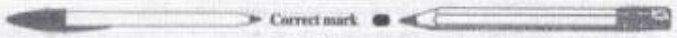
1. What is your gender (Male or Female)? _____
2. What is your four-digit year of birth? _____
3. What is your age? _____
4. What is the four-digit calendar year that you were licensed as a RN? _____
5. What is the four-digit calendar year that you were licensed as a CNP? _____
6. How many years did you practice as a RN prior to becoming a CNP? _____
7. Do you practice in a rural or urban setting? _____
8. What county do you practice in? _____

APPENDIX H

The Original AOCA Instrument

ILSI Research Foundation
Assessment of Overweight in Children and Adolescents

DIRECTIONS:
For each section, fill in the oval to indicate your experiences. Please be sure to use a LEAD PENCIL or a blue or black ink pen, and to fill in each oval completely. **If a question does not apply to you, leave it blank.** Thank you!



SECTION I: OVERALL TREATMENT - Experiences and Attitudes

(In the following questions, the term "adolescent" refers to young people who are undergoing or have completed puberty.)

1. In your opinion, how often is each of the following statements true?

	Most of the time	Often	Sometimes	Rarely	Never
a. Childhood overweight is a condition that needs treatment.	●	○	○	○	○
b. Adolescent overweight is a condition that needs treatment.	●	○	○	○	○
c. Overweight children will outgrow their overweight.	○	○	○	●	○
d. Overweight adolescents will outgrow their overweight.	○	○	○	●	○
e. Childhood overweight is more amenable to treatment than adult overweight.	○	●	○	○	○
f. Adolescent overweight is more amenable to treatment than adult overweight.	○	●	○	○	○
g. Overweight in childhood or adolescence has an effect on chronic disease in the future.	●	○	○	○	○
h. Overweight in childhood or adolescence has an effect on the quality of life in the future.	●	○	○	○	○

2. In your opinion, how often is each of the following an important barrier to effective treatment of overweight children and adolescents?

	Most of the time	Often	Sometimes	Rarely	Never
a. Lack of patient motivation	○	●	○	○	○
b. Lack of parent involvement in treatment	●	○	○	○	○
c. Lack of clinician time	●	○	○	○	○
d. Lack of reimbursement	●	○	○	○	○
e. Lack of clinician knowledge about treatment	○	●	○	○	○
f. Lack of treatment skills	○	●	○	○	○
g. Lack of support services (e.g., nutrition counseling)	●	○	○	○	○
h. Futility (ineffectiveness of recommended interventions)	○	●	○	○	○
i. Concern about precipitating eating disorders	○	○	●	○	○
j. Other, *please specify:* _____	○	○	○	○	○

3. How often do you use information from each of the following sources when you assess and treat overweight children and adolescents?

	Most of the time	Often	Sometimes	Rarely	Never
a. Medical school / residency training (Pediatricians) OR Nursing school / graduate school (Nurse Practitioners) OR Undergraduate / graduate school / internship (Dietitians)	○	○	●	○	○
b. Professional journal articles	○	○	●	○	○
c. Workshops / seminars / programs / CME courses	○	○	○	○	●
d. Textbooks	○	○	●	○	○
e. Past experience	○	○	●	○	○
f. Mass media	○	○	○	○	●
g. Computer programs / web sites	○	○	○	○	●
h. Pharmaceutical companies	○	○	○	○	●
i. Other, *please specify:* [illegible]	○	●	○	○	○

PLEASE DO NOT WRITE IN THIS AREA

2408

4. For each of the following skills that are used in treatment of overweight children and adolescents, please rate your proficiency in that area and your interest in further training.

Skill	Proficiency			Interest in further training		
	Low	Moderate	High	Low	Moderate	High
a. Use of behavioral management strategies	○	●	○	●	○	○
b. Modification of patient diet / eating practices	○	●	○	●	○	○
c. Modification of patient physical activity	○	●	○	●	○	○
d. Modification of patient sedentary behavior	○	●	○	●	○	○
e. Guidance in parenting techniques	○	●	○	●	○	○
f. Addressing family conflicts / concerns	●	○	○	●	○	○
g. Assessment of the degree of overweight	○	○	●	●	○	○

5. Which of the following would you use to improve your ability to treat overweight children and adolescents?

	YES	NO		YES	NO
a. Professional guidelines	●	○	f. Telephone conferences	○	●
b. Government guidelines	○	●	g. Televised lectures	○	●
c. CME courses at national professional meetings	○	●	h. Videotapes	○	●
d. CME courses at local meetings	○	●	i. Textbooks	●	○
e. Computer programs / web sites	○	●	j. Other, *please specify:* [illegible]	●	○

SECTION II: Your approach to the assessment and treatment of overweight children and adolescents.

1. During the past year, when you identified overweight children and adolescents, how often did you make recommendations for weight control?

	Most of the time	Often	Sometimes	Rarely	Never
a. Infants (0 - 2 years)	○	○	○	○	●
b. Preschool children (3 - 5 years)	○	○	○	○	●
c. School-age children (pre-pubertal)	○	○	●	○	○
d. Adolescents (pubertal or post-pubertal to 21 years)	●	○	○	○	○

2. How often do you use each of the following methods to assess excess weight in children and asolescents?

	Most of the time	Often	Sometimes	Rarely	Never
a. Clinical impression	●	○	○	○	○
b. Weight for age percentile	●	○	○	○	○
c. Weight for height percent (e.g., 200% of ideal weight for height)	●	○	○	○	○
d. Weight for height percentile	●	○	○	○	○
e. Change in weight velocity (crossing percentiles)	○	○	●	○	○
f. Body mass index (BMI = weight/height²)	●	○	○	○	○
g. BMI percentile	○	○	●	○	○
h. Skinfold thickness percentile	○	○	●	○	○
i. Waist-hip ratio or waist circumference	○	○	●	○	○
j. Other, *please specify:* _____	○	○	○	○	○

3. Do you distinguish between overweight and obesity in your practice? ●YES ○NO

4. For each of the following methods, indicate the value you use as a cutoff. Mark the oval on the right if you never use a method. *If you answered "NO" to question 3, complete only the "Overweight" section below.*

	Overweight						Obese (if different from overweight)						NEVER USE
	110%	120%	130%	140%	150%	+150%	110%	120%	130%	140%	150%	+150%	
a. Weight for height percent (e.g., 200% of ideal weight for height)	○	○	○	○	○	○	○	○	○	○	○	○	○
	75th	85th	90th	95th	97th	99th	75th	85th	90th	95th	97th	99th	
b. Weight for age percentile	○	○	○	○	○	○	○	○	○	○	○	○	○
c. Weight for height percentile	○	○	○	○	○	○	○	○	○	○	○	○	○
d. BMI percentile	○	○	○	○	○	○	○	○	○	○	○	○	○
e. Skinfold thickness percentile	○	○	○	○	○	○	○	○	○	○	○	○	○
f. Body mass index (BMI) in the assessment of mature adolescents (kg/m²)	○ 18.5 - 24.9	○ 25 - 29.9	○ 30 - 34.9	○ 35 - 39.9	○ >40		○ 18.5 - 24.9	○ 25 - 29.9	○ 30 - 34.9	○ 35 - 39.9	○ >40		○

In the remaining questions, no distinction is made between the terms "overweight" and "obesity."

ASSESSMENT

5. When you evaluate children and adolescents for overweight, how often *in your history and physical examination* do you screen for the following conditions?

	Most of the time	Often	Sometimes	Rarely	Never
a. Hypertension	○	●	○	○	○
b. Endocrinologic disorders (e.g., hypothyroidism)	○	●	○	○	○
c. Orthopedic problems (e.g., tibia vara, slipped capital femoral epiphysis)	○	○	○	●	○
d. Type 2 diabetes mellitus or insulin resistance	○	●	○	○	○
e. Genetic syndromes associated with obesity (e.g., Prader Willi)	○	●	○	○	○
f. Sleep disorders (e.g., sleep apnea or obesity hypoventilation syndrome)	○	○	○	●	○
g. Pseudotumor cerebri	○	○	○	○	●
h. Gastrointestinal disorders associated with obesity (e.g., reflux, gallbladder disease)	○	●	○	○	○

6. When caring for overweight children and adolescents, how often do you request the following laboratory evaluations?

	Most of the time	Often	Sometimes	Rarely	Never
a. Lipid profile	○	○	●	○	○
b. Total cholesterol	○	○	●	○	○
c. Insulin	○	○	○	●	○
d. Glucose tolerance test	○	○	○	●	○
e. Glucose	○	○	●	○	○
f. Glycohemoglobin	○	○	●	○	○
g. Thyroid function tests	○	○	●	○	○
h. Cortisol	○	○	○	○	●
i. Liver enzymes	○	○	○	●	○
j. Other, *please specify:* _____	○	○	○	○	○

PLEASE DO NOT WRITE IN THIS AREA

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7. When you evaluate children and adolescents for overweight, how often do you ask about family history for each of the following conditions?

	Most of the time	Often	Sometimes	Rarely	Never
a. Overweight	○	●	○	○	○
b. Dyslipidemia	○	●	○	○	○
c. Hypertension	○	●	○	○	○
d. Cardiovascular disease	○	●	○	○	○
e. Gallbladder disease	○	○	●	○	○
f. Eating disorders in the parents	○	○	●	○	○
g. Diabetes mellitus	○	●	○	○	○
h. Other endocrine abnormalities	○	○	○	●	○

8. When you evaluate children and adolescents for overweight, how often do you ask about or consider each of the following?

	Most of the time	Often	Sometimes	Rarely	Never
a. Poor self-esteem	●	○	○	○	○
b. Eating disorders	●	○	○	○	○
c. Depression	●	○	○	○	○
d. History of abuse (physical, sexual, or emotional)	●	○	○	○	○
e. Readiness to make changes to manage weight	●	○	○	○	○
f. Parent concern about weight	●	○	○	○	○
g. Patient concern about weight	●	○	○	○	○
h. Being teased about weight	●	○	○	○	○
i. Family dynamics	●	○	○	○	○

9a. As part of your evaluation of overweight children or adolescents, is a diet history usually obtained? ● **YES** ○ **NO**

If "NO," skip questions 9b and 9c.

9b. Who is <u>usually</u> responsible for obtaining the diet history? *Choose only ONE.*

1. Dietitian / Nutritionist	●
2. Office / Clinic Nurse	○
3. Nurse Practitioner	○
4. Physician	○
5. Other, *please specify* _____	○

9c. How is the diet history <u>usually</u> obtained? *Choose only ONE.*

1. One-day recall	○
2. Diet diary	○
3. Usual or typical food intake	●
4. Food frequency questionnaire	○
5. Frequency of specific foods	○
6. Eating practice or pattern	○
7. Other, *please specify* _____	○

10. When caring for overweight children and adolescents, how often do you routinely ask about the following types of activity?

	Most of the time	Often	Sometimes	Rarely	Never
a. Organized physical activities (e.g., youth sports)	○	●	○	○	○
b. Unstructured physical activity or free play	○	●	○	○	○
c. Routine activity (e.g., walking to school or bus stop)	○	●	○	○	○
d. Time spent in sedentary behavior (TV, computer, video games, or reading)	○	●	○	○	○

TREATMENT

11. How often do you initiate treatment in the following patient groups?

	Most of the time	Often	Sometimes	Rarely	Never
a. Overweight *children* with no obesity-associated medical conditions	○	○	○	○	○
b. Overweight *adolescents* with no obesity-associated medical conditions	○	○	○	○	○
c. Overweight *children* who do not want to control their weight	○	○	○	○	○
d. Overweight *adolescents* who do not want to control their weight	○	○	○	○	○

12. When you treat overweight children and adolescents, whom do you routinely engage in treatment?
(Please mark only one for each age group.)

	Patient alone	Patient + Parent(s)	Patient + Parent(s) + Other household members
a. Preschool children (3-5 years)	N/A	●	○
b. School-age children (pre-pubertal)	○	●	○
c. Adolescents (pubertal or post-pubertal to 21 years)	●	○	○

13. When you treat overweight children and adolescents, how often do you use the following treatment approaches?

Eating	Preschool Children Never	Sometimes	Often	School-age Children Never	Sometimes	Often	Adolescents Never	Sometimes	Often
a. Changes in eating patterns (e.g., snacks that are scheduled rather than "on demand")	○	●	○	○	●	○	○	●	○
b. Limitations of specific foods (e.g., chips, soda)	●	○	○	●	○	○	●	○	○
c. Low fat diet	●	○	○	●	○	○	●	○	○
d. Modest calorie restriction	○	●	○	○	●	○	○	●	○
e. Very low calorie diet, including a ketogenic diet	●	○	○	●	○	○	●	○	○
f. Commercial diet (e.g., Slimfast or other over-the-counter meal replacement)	●	○	○	●	○	○	●	○	○
g. Other diet changes, *please specify:* _____	○	○	●	○	○	●	○	○	●

Physical Activity	Preschool Children Never	Sometimes	Often	School-age Children Never	Sometimes	Often	Adolescents Never	Sometimes	Often
h. Increase in organized activity (e.g., youth sports)	●	○	○	○	●	○	○	●	○
i. Increase in unstructured physical activity or free play	○	○	●	○	○	●	○	○	●
j. Increase in routine activity (e.g., walking)	○	○	●	○	○	●	○	○	●
k. Decrease in sedentary behavior (watching TV)	○	○	●	○	○	●	○	○	●

General	Preschool Children Never	Sometimes	Often	School-age Children Never	Sometimes	Often	Adolescents Never	Sometimes	Often
l. Prescription medications for weight loss	●	○	○	●	○	○	●	○	○
m. Over-the-counter appetite suppressants	●	○	○	●	○	○	●	○	○
n. Herbal remedies	●	○	○	●	○	○	●	○	○
o. Weight loss surgery	●	○	○	●	○	○	●	○	○

14. Indicate how often you refer overweight children or adolescents to each of the following programs or specialists. *If any of the following programs or specialists are not available to you for referral, indicate "Not Available for Referral."*

	Most of the time	Often	Sometimes	Rarely	Never	Not Available for Referral
a. Behavior modification / behavior therapist	○	○	○	○	○	●
b. Family therapy	○	○	○	○	○	●
c. Group therapy	○	○	○	○	○	●
d. Dietitian / Nutritionist	●	○	○	○	○	○
e. Nurse	○	○	○	○	●	○
f. Exercise specialist	○	○	○	○	○	●
g. Child / Adolescent weight loss program (e.g., Shapedown, Body Shop)	○	○	○	○	●	○
h. Pediatric obesity specialist or program	○	○	○	○	●	○
i. Pediatric subspecialist (e.g., endocrinologist, pulmonologist, orthopedist)	○	○	○	●	○	○
j. Commercial adult weight loss program (e.g., Weight Watchers)	○	○	○	○	●	○
k. Self-help programs (e.g., Overeater Anonymous, TOPS)	○	○	○	●	○	○
l. Camps for overweight children / adolescents	○	○	○	○	○	●
m. Other programs for children / adolescents, *please specify:* _____	○	○	○	○	○	○

15. How frequently do you routinely schedule follow-up visits for the treatment of overweight?

- ○ More than once a week
- ○ Every 1-2 weeks
- ○ Every 3-4 weeks
- ○ Every 5-6 weeks
- ● Every 2 months
- ○ Every 3 months
- ○ Every 4-6 months
- ○ More than 6 months

SECTION III: General Information about your background, training, and practice.

1. What year did you go into practice (excluding training)?

Example: 19 | 4 | 0 |

19 | 6 | 4 |

PLEASE DO NOT WRITE IN THIS AREA

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2. Which of the following is your specialty area?

- ● Pediatrics
- ○ General practice (adults and children)
- ● Other (specify) CSmCSA

3. What type of care do you usually provide? (>50% of your time)

- ● Primary
- ○ Referral

4. In which area do you spend more than 50% of your clinical work time caring for patients? *Choose only ONE.*

- ○ General Pediatric and/or Adult Practice
- ○ Adolescent Medicine
- ○ Allergy
- ○ Cardiology
- ○ Developmental / Behavioral
- ○ Emergency Medicine
- ○ Endocrinology
- ○ Gastroenterology
- ● Hematology / Oncology
- ○ Infectious Disease
- ○ Neonatology / Perinatology
- ○ Pulmonology
- ○ Other (specify) _____

5. During a typical work week, how many hours do you spend in direct patient care?

- ● 0-5 hours
- ○ 6-10 hours
- ○ 11-15 hours
- ○ 16-20 hours
- ○ 21-25 hours
- ○ 26-30 hours
- ○ 31-35 hours
- ○ 36-40 hours
- ○ 41-45 hours
- ○ 46-50 hours
- ○ Over 50 hours

6. During a typical complete work week, approximately how many patients do you see?

- ● 1-10
- ○ 11-20
- ○ 21-30
- ○ 31-40
- ○ 41-50
- ○ 51-60
- ○ 61-70
- ○ 71-80
- ○ 81-90
- ○ 91-100
- ○ 101-125
- ○ 126-150
- ○ 151-175
- ○ 176-200
- ○ 201-225
- ○ 226-250
- ○ > 250

7. What is the *approximate* racial/ethnic composition of your child/adolescent patients?

	0%	<10%	10-25%	26-50%	>50%	Don't Know
a. Blacks / African Americans	○	○	○	●	○	○
b. Asian Americans / Pacific Islanders	○	●	○	○	○	○
c. Whites / European Americans	○	○	○	●	○	○
d. Native Americans / Alaskan Natives	●	○	○	○	○	○
e. Biracial / multiracial	○	○	○	○	○	●
f. Other *(specify)*: _____	○	○	○	○	○	○

g. What is the *approximate* Hispanic/Latino American composition of your child/adolescent patients?

0%	<10%	10-25%	26-50%	>50%	Don't Know
○	●	○	○	○	○

8. What is the *approximate* percentage of your patients covered by private insurance, public insurance, or are uninsured?

	0%	<10%	10-25%	26-50%	>50%	Don't Know
a. Private or commercial insurance	○	○	○	○	○	[redacted]
b. Medicaid	○	○	○	○	○	
c. Uninsured	○	○	○	○	○	
d. Other *(specify)*: _____	○	○	○	○	○	

9. Approximately what percent of your INSURED patients (both privately and publicly insured) belong to a managed care system or are traditional fee-for-service?

	0%	<10%	10-25%	26-50%	>50%	Don't Know
a. Managed care system (i.e., HMO, PPO, etc.)	○	○	○	○	○	●
b. Non-managed care system (i.e., traditional fee-for-service)	○	○	○	○	○	●

10. What is your sex?

- ○ Male
- ● Female

11. How tall are you?

feet	inches
○ 4	○ 0
● 5	○ 1
○ 6	○ 2
○ 7	○ 3
	● 4
	○ 5
	○ 6
	○ 7
	○ 8
	○ 9
	○ 10
	○ 11

12. How much do you weigh? *(In pounds)*

Example: 1 4 5

1	4	5
●		
	●	
		●

1	2	5
●		
	●	
		●

13. How many days of the week do you typically exercise for 30 minutes or more per day (of at least moderate activity, similiar to the intensity of a brisk walk, which results in increased breathing and heart rate)?

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ● 7

14. How often do you eat a low-fat diet? *(Less than 30% of calories from fat)*

- ○ Always
- ● Most times
- ○ Sometimes
- ○ Rarely / Never
- ○ Don't know

15. On average, how many servings of fruits and vegetables do you eat a day?

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ● more than 5

THANK YOU FOR FILLING IN THIS SURVEY!

Please remember to go back through and fill in each oval completely to indicate your answer and to erase any stray marks. Place the questionnaire in the postpaid envelope, and mail it.

PLEASE DO NOT WRITE IN THIS AREA

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APPENDIX I

Permission to Utilize the AOCA in Scholarly Project

OTTERBEIN UNIVERSITY

Farus-Brown, Susan <susan.farus-brown@otterbein.edu>

FW: Doctoral Student of Nursing Scholarly Project

1 message

Susan FarusBrown <Susan.FarusBrown@minuteclinic.com> Tue, Apr 2, 2013 at 9:05 AM

To: sfarusbr@columbus.rr.com
Cc: susan.farus-brown@otterbein.edu

Susan Farus-Brown MSN, CNP, FNP-BC
Certifed Family Nurse Practitioner
Minute Clinic
Ohio-South
susan.farusbrown@minuteclinic.com

From: Debra Kibbe [mailto:dkibbe@gsu.edu]
Sent: Fri 3/29/2013 10:26 AM
To: Mary Story; Susan FarusBrown
Subject: RE: Doctoral Student of Nursing Scholarly Project

Hi Susan,

Please find attached the questionnaire for your use. I'm not sure the questions in this needs assessment tool will enable you to achieve the goal stated in your email, but there was a whole set of materials and tools that resulted from this initial research exploring practice patterns by clinicians. If you would like to have a call and discuss the various tools and resources that are available it might save you some time and effort!

Good luck with your research!
Debbie

Debra Kibbe
Senior Research Associate
Georgia Health Policy Center
404-413-0287
dkibbe@gsu.edu

-----Original Message-----
From: Mary Story [mailto:story@epi.umn.edu]
Sent: Friday, March 29, 2013 10:09 AM
To: Susan FarusBrown; Debra Kibbe
Subject: Re: Doctoral Student of Nursing Scholarly Project

Susan
I am copying Debra Kibbe who can send you the instrument.
Mary

Mary Story PhD, RD
Professor, Division of Epidemiology and Community Health Senior Associate Dean for Academic and Student Affairs School of Public Health University of Minnesota
1300 S 2nd St., Suite 300

Minneapolis, MN 55454
612-626-8801
612-624-9328 (fax)
story001@umn.edu

On 3/27/13 4:33 PM, Susan FarusBrown wrote:
> Dr. Story,
> I am writing in regards to the survey instrument that was utilized in
> the "Management of Child and Adolescent Obesity: Attitudes, Barriers,
> Skills, and Training Needs Among Health Care Professionals" research
> article.
> I am a DNP student at Otterbein University and I am completing
> research and developing a project consisting of "tool kit" for Health
> Care Providers to assist with recognition, prevention and treatment of
> childhood obesity. This tool kit will consist of expert advice on
> establishing rapor with a patient and family, peer reviewed practice
> standards, and expert committee guidelines.
> I am searching for an instrument that will help me assess the
> provider's self efficacy pre-intervention and post-intervention. I was
> hoping that you may grant me permission to utilize your instrument in
> my research endeavors, as well as, send a copy of the complete instrument.
> Thanks so much for your time and consideration.
> Kindest Regards,
> Susan
> *Susan Farus-Brown MSN, CNP, FNP-BC *
> *Certifed Family Nurse Practitioner *
> *Minute Clinic*
> *Ohio-South *
> *susan.farusbrown@minuteclinic.com*
> <mailto:susan.farusbrown@minuteclinic.com>

MCHB Questionnaire.pdf
2448K

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