

Perception and Documentation of Weight Management Practices in Pediatric Primary Care

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ABSTRACT

Background: Pediatric obesity is a significant problem in the United States. The Childhood Obesity Action Network (COAN) published expert recommendations in 2007 for pediatric obesity prevention and assessment at well-child visits. The purpose of this study was to assess pediatric providers' perception and documentation of their adherence to the 2007 COAN guidelines.

Methods: This was a 2-part cross sectional research study. A 36-item questionnaire about screening and management of obesity was sent to 69 providers from 16 pediatric practice sites in Southeastern Wisconsin. A retrospective chart review of well-child visits performed in June 2012 was conducted.

Results: Discrepancies were found between what providers reported and documented for their obesity screening management and anticipatory guidance that they provided. In addition, the majority of providers reported inadequacy and lack of comfort when working with overweight or obese patients. Patient compliance and motivation were reported as barriers to obesity management.

Conclusion: Discrepancies exist between providers' self-report and documentation of obesity screening and management. In addition, providers report discomfort in managing obesity. Tools to improve documentation and continued education to improve provider comfort in managing obesity are imperative steps in optimizing care.

INTRODUCTION

Childhood obesity (defined as body mass index above the 95th percentile for age and gender in youth age 2 to 18 years) is increasing at an alarming rate in the United States and it is affecting children and adolescents of all races, ethnicities, and income lev-

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els.¹ Wisconsin's obesity rate ranked 16th highest in the country in 2006, with 1 in 4 high school students overweight or obese.² Based on current trends, Wisconsin's obesity rate is predicted to grow by more than a third by 2018.³

Significance of Problem

Primary prevention of overweight/obesity is recommended by multiple organizations and initiatives, including the American Heart Association, American Academy of Pediatrics and Healthy People 2020.^{1,4,5} Despite this position, screening for overweight/obesity at well-child checks by primary care providers is not done consistently.⁶ For example, Dilley and colleagues found that overweight children were identified as such by their primary care provider only 28% of the time.⁷ These children tended to be older and fell into the

highest body mass index (BMI) categories, highlighting potential missed early intervention opportunities with children who fell into the at-risk of being overweight category.⁷

The Centers for Disease Control and Prevention recommends that parents partner with their child's health care provider to monitor their child's growth.⁸ However, parents of overweight and obese children are less likely to recognize the weight status of their children compared to parents of normal-weight children.⁹ Such misclassification is important as parental perceptions of their child's weight, eating habits, and physical activity determine parental readiness for action and involvement in the treatment of childhood obesity.^{10,11} This places the responsibility of educating the family on the child's weight status and concerns with overweight or obesity on the health care provider.

While education is important, the accurate documentation of the patient's weight status, the anticipatory guidance provided, and the family's level of motivation are critical to the success of weight management. As other studies have recognized, documen-

CME

CME available. See page 154 for more information.

Table 1. Sample Questions from Provider Survey

Question Number	Question	Response Options
6	Do you routinely take a family medical history at well-child visits?	Yes or No
18	Do you routinely ask the family if they have any concerns about their weight at well-child visits?	Yes or No
21	If there are concerns about the patient's weight, do you assess if the family is ready to make lifestyle changes?	Yes or No
27	What anticipatory guidance do you consistently provide at well child visits?	(Check all that apply – i.e. sugar sweetened beverages, moderate to vigorous physical activity for at least 60 minutes a day, remove television from child's bedroom, eat breakfast every day, limit portion sizes, etc)
29	How effective do you think you are at treating obesity?	Highly ineffective, ineffective, effective, or highly effective
31	A. I feel I am better able to treat obesity than asthma. B. I feel I am better able to treat obesity than Attention Deficit Hyperactivity Disorder (ADHD).	True or False True or False
34	In the last year, did you participate in any CME sessions or trainings regarding childhood and adolescent overweight/obesity?	Yes or No

Table 2. Demographics

Chart Review of Patient Demographics	SD	N (%)
Mean Age of Children Seen	8.72 (+/- 5.0)	
Gender		
Male		158 (50.6)
Female		154 (49.4)
BMI Category		
Underweight (<5th percentile)		10 (3.2)
Normal weight (6-85 percentile)		226 (72.4)
Overweight (86-95 percentile)		48 (15.4)
Obese (> 95 percentile)		0 (0.0)

tation is not always performed consistently in a primary care setting¹²⁻¹⁴ or accurately charted.^{15,16} Inadequate or inaccurate documentation complicates follow-up visits and the ability for the provider to assess adherence to previous recommendations.

The aims of this study were to (1) evaluate the documentation of adherence of pediatric health care providers in a large, urban city in the Midwest to established guidelines for the screening of overweight/obesity in their patients between 2 and 18 years of age; (2) assess providers' perception of their adherence to established screening guidelines; and (3) examine pediatric providers' level of comfort with screening and management of obesity within their primary care clinic.

METHODS

This was a 2-part cross-sectional study conducted in southeastern Wisconsin. A 36-item questionnaire regarding screening and management of overweight/obesity was sent to 69 providers (physicians, physician assistants, and nurse practitioners) from 16 pediatric practices sites. The survey was designed by the investigators based on the Childhood Obesity Action Network (COAN) recommendations for assessment, prevention, and treatment of child and adolescent overweight/obesity¹⁷ (Table 1). The survey was reviewed by 2 content experts. The content validity index

was 0.91. The pediatric practices were diverse and represented affluent, middle class, and low-income areas. The questionnaire was sent electronically through the online Survey Monkey tool (SurveyMonkey, Palo Alto, California) to all providers in July 2012 and took approximately 20 minutes to complete. Providers were given 6 weeks to voluntarily complete the questionnaire with 1 reminder e-mail sent during this timeframe. Responses were anonymous.

The second part of this study was a retrospective chart review. Based on the recommendation of a statistician, the medical record department of each pediatric practice surveyed was asked to provide 5 randomly selected charts per provider who completed well-child visits in June 2012. This chart review was all inclusive and not limited to providers who completed the questionnaire. At the time of the study, the medical group was using paper charting. The selection process for the charts was based on the following inclusion criteria: (a) age 2-18 years old; (b) patient seen between June 1-30, 2012 (the month before the survey was distributed); (c) purpose of visit was for a well-child exam. There were no exclusion criteria. Three charts were excluded at analysis due to not meeting inclusion criteria. A total of 312 charts (158 male, 154 female) were analyzed (Table 2). The data was collected using a scantron tool. Data included patient's age, gender, ethnicity, height, weight, BMI, blood pressure, family history, review of systems, labs ordered, and anticipatory guidance provided. The data was then scanned using the Remark system (Gravic, Inc., Malvern, Pennsylvania) and analyzed. Descriptive analysis was performed.

This proposal was approved by Children's Hospital of Wisconsin Institutional Review Board. This project qualified for an expedited review as it posed no more than minimal risks to the subjects. A HIPAA waiver was required as this was a retrospective chart review.¹⁸

RESULTS

The response rate for this study was 43.5%. When comparing

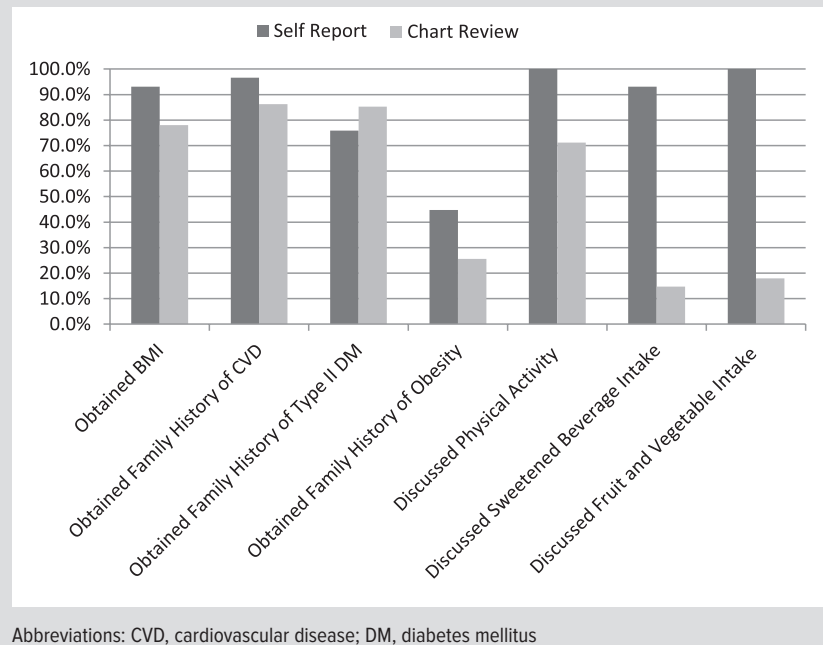
the results from the provider survey to the chart review, there were discrepancies noted between what the provider reported and what was documented in the charts (Figure 1). For example, 100% of the providers reported that they measure height and weight and 93.1% reported calculating BMI. While the chart review results showed that 100% of charts documented height and weight, 79% of charts had a documented BMI. Of the charts reviewed, 15% of patients were overweight and 9% were obese as calculated by BMI. Of the patients that were overweight, 22% were documented as such; of the patients that were obese, 51.6% were documented as such.

Anticipatory guidance and family history are important components of the well-child visit. All providers (100%) reported discussing physical activity with patients, however, the chart review illustrated that 71.2% of providers documented discussing physical activity and 18.3% documented counseling on physical activity. Providers (93.1%) reported discussing sweetened beverage intake. On chart review, 14.7% of providers documented sweetened beverage intake and 11.5% documented counseling on sweetened beverage intake. Providers (96.6%) reported screening for a family history of cardiovascular disease, 75.9% reported screening for type II diabetes mellitus, and 44.8% reported screening for a family history of obesity. A documented review of family history was noted for cardiovascular disease (86.2%), type II diabetes (85.3%), and family history of obesity (25.6%).

When evaluating the providers' self-assessment of their management of overweight/obesity, 100% of providers reported that they need to improve how they assess, prevent, and treat overweight and obese patients; 67.9% of providers reported being ineffective in treating obesity. Providers reported feeling more comfortable with treating asthma (100%) and ADHD (89.7%) than obesity.

Additional assessment included asking providers to determine the age at which they thought it appropriate to discuss eating habits, physical activity, and obesity concerns. They reported that it was appropriate to discuss eating habits (93.1%) and physical activity (79.3%) at well-child checks for patients less than 5 years old, but only 58.6% thought that obesity should be discussed with this age group. When determining what perceived barriers exist, providers reported patient compliance (71.4%) and patient motivation (55.2%) as the most significant barriers to obesity management. When discussing assessment of a child/

Figure 1. Provider Self Report Versus Documentation



family's motivation to change when there was a concern about the patient's weight, 86% of providers surveyed perceived that they questioned patients and families about their level of motivation to make changes. However, based on the chart review there was no documentation in any of the charts that the level of motivation to make changes was discussed.

DISCUSSION

This study found incongruences between the pediatric providers' perceptions of the care they provided and the care that was documented for assessment and prevention of childhood overweight/obesity, specifically regarding eating habits and physical activity. These findings are similar to other studies, which have demonstrated that providers generally overestimate how often they assess and counsel patients about health-related behaviors (ie, cardiac risk factors or tobacco cessation), but this has not been found specifically when focusing on behaviors related to childhood weight management.^{15,16} It has been questioned that the moderate intense dietary counseling that is recommended to combat obesity may be beyond the capability of the provider.¹⁹ This is corroborated by Bleich and colleagues, who found that United States primary care physicians identified nutritionists/dietitians as the most qualified providers to care for obese patients.²⁰ However, in our sample, only 3 of 312 patients were referred to a dietician, creating the potential for improved collaboration.

Unlike previous studies in which providers identified reimbursement and competing medical/social issues as barriers to obesity management in the primary care setting,^{21,22} these providers reported patient compliance and patient motivation as their

perceived barriers. This supports the need for providers to assess levels of motivation with the families, but as noted, such was not documented in any of the charts. Without that documentation occurring, it is not possible to determine if there is a true lack of patient motivation or awareness of the problem on behalf of the family. The concern about lack of family awareness is accentuated by the fact that only a small percentage of providers identified documented the child's abnormal weight status based on their BMI. Furthermore, over half of the providers surveyed did not think obesity should be discussed with families of children less than 5 years.

While all of the providers in this study felt that their assessment, prevention, and treatment of overweight/obese patients could be improved, only 21.4% of providers had participated in recent (within previous 1 year) CME sessions or training regarding childhood and adolescent overweight/obesity. Offering targeted CME programs and ensuring more extensive training may assist providers in feeling more confident in treating overweight/obesity.²¹

In addition to education, streamlining documentation through the use of electronic health records (EHR) has been seen as a measure that could enhance a provider's adherence to guidelines for the prevention and treatment of overweight/obesity. An EHR provides a potential opportunity to integrate health care guidelines within a provider's charting through actions such as calculating and labeling a BMI percentile, highlighting specific medical history or health habit questions, or offering recommended options of anticipatory guidance based on the child's clinical diagnosis.⁴ However, further studies are needed to better understand the true impact of EHR use on health care provider behavior.²³ Despite EHR implementation, the provider still needs to be knowledgeable and comfortable in the discussion of overweight/obesity with the family.

Overall, this exploratory study had some similar findings to previous published literature showcasing the lack of comfort of pediatric providers in screening for and managing childhood weight concerns. Novel findings that add to the literature include the lack of consensus of the appropriateness of discussing overweight/obesity status with families who have a child less than age 5 and marked disagreement between what the provider reports discussing and counseling the patient/family on in regard to behaviors related to weight management and anticipatory guidance. When dealing with a chronic health condition such as overweight or obesity that relies on education, behavior change, motivational interviewing, and consistent messaging, it is crucial for the primary care provider to have accurate documentation and consistent strategies started at an earlier age for successful treatment.

Limitations

The sample size was limited to 1 specific medical practice with 16 groups in southeastern Wisconsin. The medical director of

this practice was supportive of providers completing this confidential, online questionnaire, but because their participation was voluntary, there is potential for responder bias. Minimal documentation of care and anticipatory guidance may not be a true representation of the counseling that occurs during a particular well-child visit.

CONCLUSION

Childhood overweight/obesity continues to be a significant problem at both a national and local level. Health care providers play an integral role in the prevention, assessment, and treatment of the problem. Awareness and incorporation of national guidelines is an imperative step in optimizing care, as well as accurate documentation. Supporting providers to overcome their perceived barriers will provide an opportunity for the successful management of overweight/obesity. Future studies that examine interventions that support providers with efficient documentation methods, as well as effective provider education on incorporation and implementation of these guidelines are necessary.

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Quiz: Perception and Documentation of Weight Management Practices in Pediatric Primary Care

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants will be able to:

1. Describe the importance of screening for overweight/obesity in pediatric primary care.
2. Recognize the importance of accurate documentation of patient's weight status, the anticipatory guidance provided and the family's level of motivation for the success of weight management.
3. Identify barriers and strategies to overweight/obesity management.

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QUESTIONS

1. According to the article, which of the following is FALSE regarding childhood obesity?
 - It is defined by youth aged 2 to 18 years old.
 - It is defined as a body mass index above the ninetieth percentile.
 - Parents of obese and overweight children, in comparison to parents of normal-weight children, have more difficulty in recognizing their child's weight status.
 - Problems to prevention include missed early intervention opportunities as well as lack of identification of at risk and overweight youth.
2. Information reported by providers in the study was reasonably consistent with the information documented in patient charts.
 - True
 - False
3. According to this particular study, which of the following is NOT an immediate hindrance to providers in treating childhood obesity?
 - Competing medical and social issues.
 - Patient compliance and motivation.
 - A need for more provider training on assessment, prevention, and treatment.
 - Appropriateness of discussion of obesity with younger patients.
4. Suggested improvements to treating childhood obesity could include which of the following:
 - Increase collaboration with nutritionists and dietitians.
 - Improve documentation, particularly on obese/overweight identification, motivation, and discussion of eating habits and physical activity.
 - Provide and pursue CME sessions or training to increase provider effectiveness in treatment.
 - All of the above.

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