Protocol for Treating Obese Pediatric Patients

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ABSTRACT

This quality improvement project standardized screening and treatment of overweight and obese pediatric patients at a community health center and the application of a treatment algorithm. Providers demonstrated an increase in knowledge and reported increased confidence to screen and treat overweight and obese pediatric patients. By standardizing the community health center's practice, providers were more confident, and pediatric patients and families were more likely to decrease their weight or body mass index percentile.

Keywords: BMI percentile, community health center, Hispanic population, obesity screening, pediatric obesity

INTRODUCTION

Pediatric obesity is an epidemic across the United States, even in states deemed the healthiest in the country.[1] Between 2011–2014, the Centers for Disease Control and Prevention reported approximately 17% of children ages 6–11 years and 20.5% of adolescents 12–19 years were obese. A higher rate of obesity was observed in Hispanic children (21.9%) compared with non-Hispanic whites (14.7%).[2]

Primary care clinics are effective sites to tackle weight management in children but encounter some barriers, including limited time for assessment and counseling during visits, lack of resources, and a lack of provider self-confidence[3] and self-efficacy[4] in counseling patients about obesity. Perrin et al[3] identified inadequate knowledge of weight classification and a lack of patient education materials as 2 areas that affect provider self-efficacy. The authors suggest the use of counseling tools, communication tools, and easy-to-follow management guidelines. Thus, increased provider knowledge and educational tools are necessary to improve the counseling received by overweight and obese pediatric patients.

Many policy statements offer guidance regarding the management of children who are overweight or obese; all experts agree that a systematic approach in a clinic setting is necessary.[5] The American Academy of Pediatrics algorithm for the Assessment and Management of Childhood Obesity in Patients 2 Years and Older [6] is widely utilized in primary care. These guidelines include an assessment algorithm and a stepwise approach to increase the intensity of management and treatment. It incorporates recommended nutrition and exercise counseling, the *Let's Go! 5-2-1-0!* public health message,[7] frequency of follow-up visits, and when to perform laboratory testing and referrals to tertiary facilities.

This quality improvement (QI) project used evidence-based practice, motivational interviewing (MI), and the *5-2-1-0!* program messaging. It elaborated on the community health center's Childhood Weight Assessment and Counseling intervention, which aimed to increase provider documentation of nutrition and physical activity counseling with the use of the *Healthy Lifestyle Screening* tool.[8] Evidence supported this process improvement implementation[4,5,7,9-11] and the project implemented recommendations from the Centers for Disease Control and Prevention[12] and American Academy of Pediatrics.[6]

AIMS

The purpose of this QI project was to standardize practice in the screening and treatment of overweight and obese pediatric patients through use of the *Healthy Lifestyle Screening* tool and an adapted

American Academy of Pediatrics algorithm. The specific aims included: (1) to improve provider knowledge and confidence regarding the screening and treatment of overweight and obese pediatric patients pre– and post–QI education intervention; (2) compare body mass index (BMI) percentile and weight trends at initial and at subsequent follow–up visits; and 3) examine parent/patient readiness to achieve a Self-Management Goal (SMG).

METHODS

The QI project was a prospective review of the implementation of a standardized screening and treatment protocol of overweight and obese pediatric patients. The clinical site of this QI project was a Federally Qualified Health Center in the Western US, where 76% of the patients were Hispanic or from another minority group, 66% lived at or below the federal poverty line, and the pediatric obesity rate was estimated to be 41%. An algorithm was created in collaboration with the providers, clinic medical director, and Vice President of Clinical Services. It included a user–friendly decision tree with verbiage specific to the Federally Qualified Health Center and included a tertiary facility referral resource available to the Federally Qualified Health Center (see Figure). University internal review board and Vice President of Clinical Services approval was obtained.

Providers completed an evidence-based knowl–edge pre–test regarding their understanding of caring

Figure. Algorithm for Management and Treatment of Overweight and Obese Pediatric Patients at a Community Health Center. At every well child exam, use the following recommendations to guide your care regarding the *5-2-1-0* principles after reviewing the pediatric patient's calculated BMI percentile and responses to the *Healthy Lifestyle Screening*.
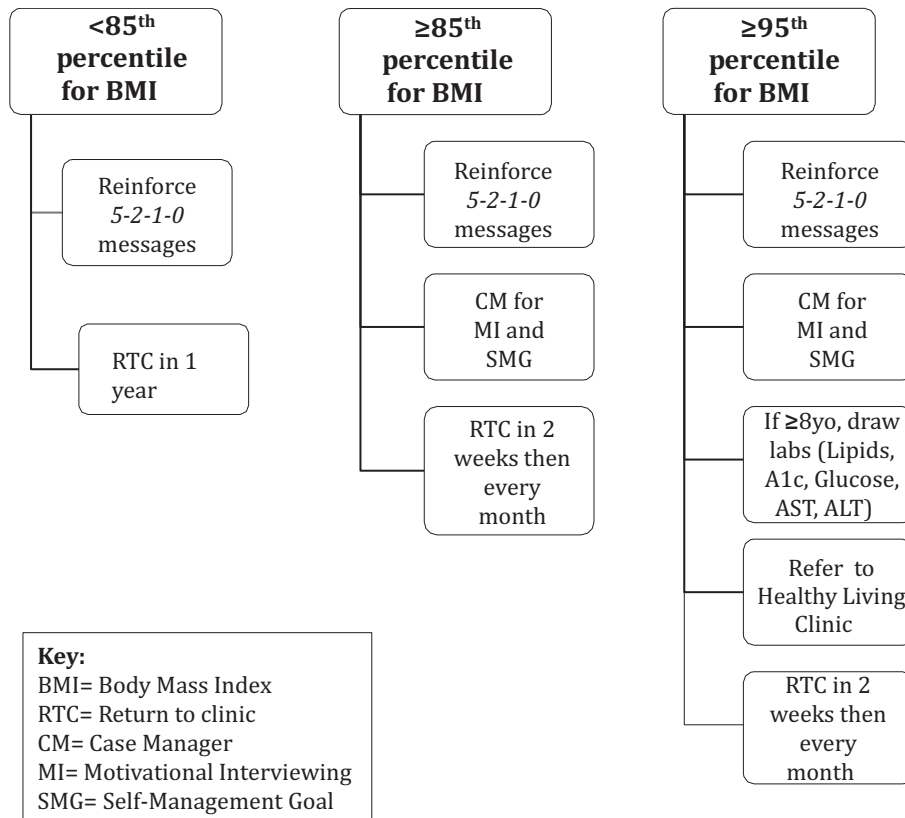
(Adapted from the 2015 American Academy of Pediatrics Algorithm for the Assessment and Management of Childhood Obesity in Patients 2 Years and Older.)