Improving Documentation of Pediatric Overweight and Obesity by Resident Physicians

Vickie Wu, MD; Carolyn Rosen, MD; Leora Mogilner, MD

Introduction

Methods

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- Pediatric overweight and obesity have increased in prevalence over the last few decades.
- Despite expert guidelines that provide recommendations on pediatric overweight/obesity screening, prevention, and management, these disorders are underdiagnosed, and providers often deviate from expert guidelines.
- The appropriate education of resident physicians, who serve as front-line providers for many patients and play an important role in caring for them, is critical.
- The objective was to evaluate the effectiveness of resident-focused educational interventions on the screening and management of pediatric overweight and obesity by resident physicians.

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- Design: two months pre-intervention and two months post-intervention chart reviews of preventive visits conducted by pediatric residents at an academic continuity practice.
- Charts of patients 2-18 years old with BMI $\geq 85^{\text{th}}$ percentile for age and sex at the visit were reviewed (overweight: BMI 85^{th} to $< 95^{\text{th}}$ percentile; obesity: BMI $\geq 95^{\text{th}}$ percentile).

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Alphabet Soup of Obesity and its Comorbidities

Vickie Wu, PGY-3

BestPractice Advisories

"This patient's BMI percentile for age and sex is greater than or equal to 85th percentile. Please complete the following:

1. Complete a nutrition and physical activity assessment (Suggestion: use the Smartphrase .nutritionbehaviorassessment).
2. Order screening labs if applicable (fasting glucose/HbA1c, ALT, AST, lipid panel).
3. Add the appropriate BMI/overweight/obesity diagnosis to the patient's Problem List and Visit Diagnosis.

[Jump to Growth Chart](#)

[Jump to Problem List](#)

For more information on healthy eating, scan this QR code with your phone's camera!

What is a healthy serving?

A serving of meat:
Deck of cards

A serving of fruit or vegetable: Tennis ball

A serving for toddlers:
Size of the palm of their hands

GOALS FOR NEXT VISIT!

In the space below, write down some tips you and your doctor discussed that will help you eat healthy and move more!

Healthy Tip	Move More Tip	My Success!

543210 Healthy Lifestyle Tips

5 At least 5 servings of fruits and vegetables a day

4 4 servings of water a day

3 3 servings of low fat dairy a day

2 2 hours (or less) of screen time a day

1 1 hour (or more) of physical activity a day

0 0 sweetened beverages (juice, soda)

Activity Ideas for Small Spaces

Screening for Overweight/Obesity at Preventive Visits

Management Algorithm

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Baseline demographics and clinical characteristics, pre- and post-intervention.

	All Patients (n=667)	Pre-Intervention (n=392)	Post-Intervention (n=275)	P-value
	Mean ± SD or N (%)	Mean ± SD or N (%)	Mean ± SD or N (%)	
Age	9.0 ± 4.4	8.7 ± 4.3	9.4 ± 4.5	0.057
Age Group				0.057
Age 2 – 5	196 (29.4)	125 (31.9)	71 (25.8)	
Age 6 – 11	254 (38.1)	153 (39.0)	101 (36.7)	
Age 12 – 18	217 (32.5)	114 (29.1)	103 (37.5)	
Sex				0.389
Male	377 (56.5)	227 (57.9)	150 (54.5)	
Female	290 (43.5)	165 (42.1)	125 (45.5)	
BMI Status				0.226
Obesity (≥95th percentile)	421 (63.1)	240 (61.2)	181 (65.8)	
Overweight (85 th to <95 th percentile)	246 (36.9)	152 (38.8)	94 (34.2)	
Ethnicity				0.385
Hispanic White/Black	6 (0.9)	4 (1.0)	2 (0.7)	
Non-Hispanic Black	235 (35.2)	148 (37.8)	87 (31.6)	
Non-Hispanic White	19 (2.8)	11 (2.8)	8 (2.9)	
Other	407 (61.0)	229 (58.4)	178 (64.7)	
No. of Patients per Resident Year				0.184
PGY-1	211 (31.6)	125 (31.9)	86 (31.3)	
PGY-2	233 (34.9)	137 (34.9)	96 (34.9)	
PGY-3	199 (29.8)	121 (30.9)	78 (28.4)	
PGY-4 & PGY-5	24 (3.6)	9 (2.3)	15 (5.5)

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Percentage of charts with documentation of outcome of interest, pre- versus post-intervention.
* Indicates significant difference ($p < 0.05$) between pre- and post-intervention.

Pre- and post-intervention correct diagnosis rates for patients with overweight and obesity.
* Indicates significant difference ($p < 0.0001$) between pre- and post-intervention.

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- Implementation of resident-focused educational interventions improved residents' diagnosis of overweight and obesity but not frequency of counseling.
- Additional efforts are needed to further boost diagnosis rates and improve counseling efforts, and further studies will ascertain whether this then translates into positive behavior changes and improved clinical outcomes.

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