



# Are Graduating Residents Prepared to Engage in Obesity Prevention and Treatment?

Mary Pat Frintner, MSPH; <sup>1</sup> Janice L Liebhart, MS; <sup>1</sup> Jeanne Lindros, MPH; <sup>1</sup> Alison Baker, MS; <sup>1</sup> Sandra G Hassink, MD, MS<sup>2</sup>



<sup>1</sup> American Academy of Pediatrics, Elk Grove Village, IL; <sup>2</sup> Nemours Pediatric Obesity Initiative at Alfred I duPoint Hospital for Children, Wilmington, DE

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## BACKGROUND and OBJECTIVES

- Pediatricians are on the front lines of the childhood obesity epidemic and play an important role in effective prevention and treatment
- Residency education is beginning to include obesity identification and management but little information is available to gauge residents' preparedness to manage children with obesity in practice
  - To what extent do residents receive training to care for children who are overweight and obesity? Are they more satisfied with the time devoted to such training in medical school or residency?
  - Do residents feel prepared to prevent and treat obesity?
  - Are residents confident in their ability to effectively counsel on the prevention and treatment of overweight and obesity?

## METHODS

### DATA SOURCE

- AAP Annual Survey of Graduating Residents, 2013: Mailed and emailed survey; May to September
- National, random sample survey of 1,000 graduating pediatric residents from all U.S. residency programs
  - Response rate = 63% (n=625)

### MEASURES OF OVERWEIGHT (OW) AND OBESITY (OB)

**Training:** Was the amount of instruction or training time devoted to OW and OB appropriate (during medical school and residency)?

- Too much, just right, or too little

For each of 10 childhood OW/OB areas:

- Have you had formal training? Yes or No
- Do you wish you had more training? Yes or No

Composite OW/OB training measure was created = sum of the number of areas where training was received (possible range = 0 – 10)

During residency, overall about what percentage of your patients were:

- Overweight (BMI > 85th and < 95th percentile)?
- Obese (BMI > 95th percentile)?

**Perceived Ability:** Residents were asked to rate their ability to evaluate and counsel on OW and OB, including their ability to use motivational interviewing

- Responses dichotomized: Very Good/Excellent or Poor/Fair/Good ability

**Comfort Level and Confidence:** Residents were asked if they are 1) comfortable using behavior change techniques and 2) believe that their own counseling on the prevention and treatment of OW and OB is effective

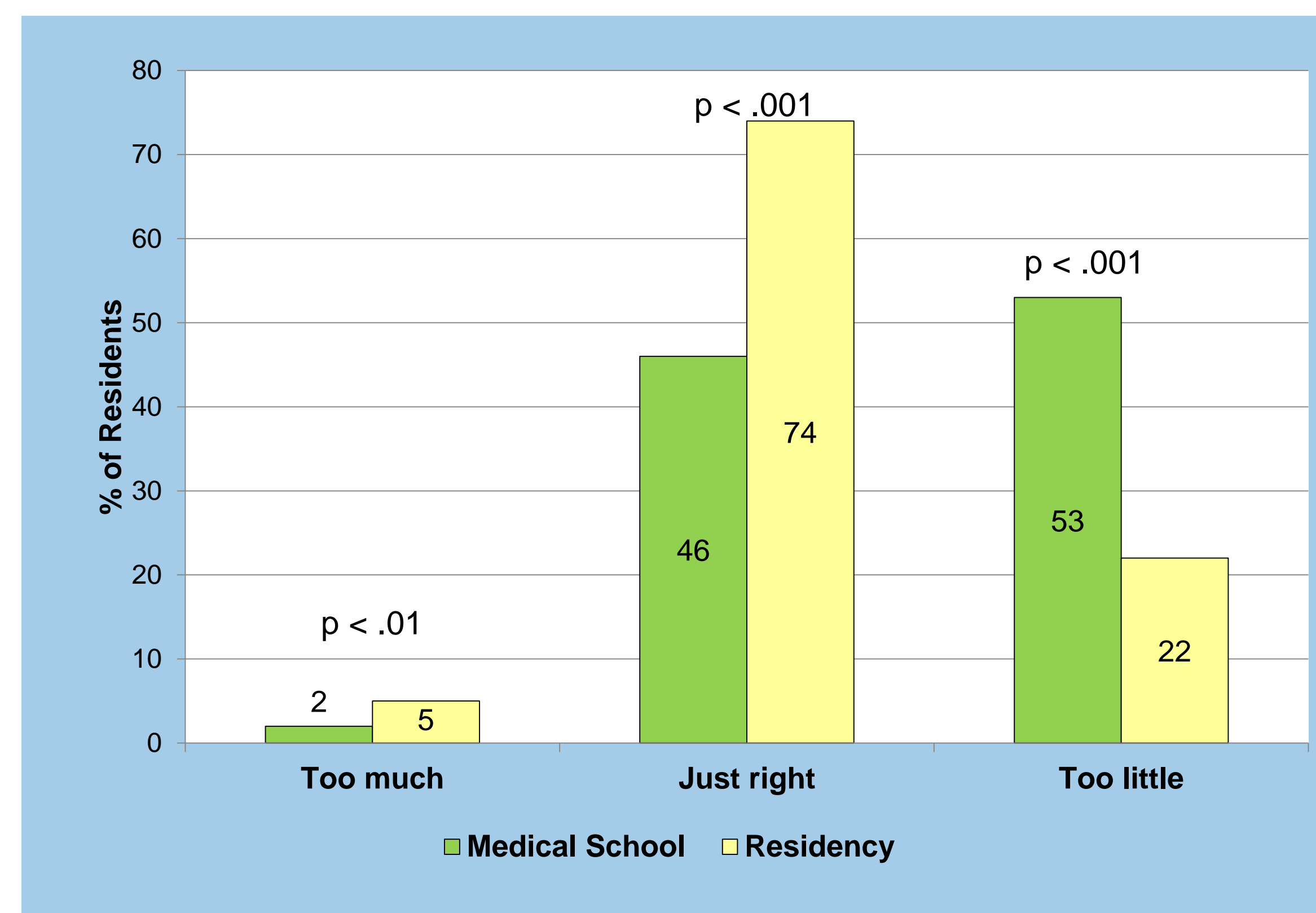
- Responses dichotomized for comfortable and effective: Very or Somewhat/ Slightly/Not at all

### ANALYSIS

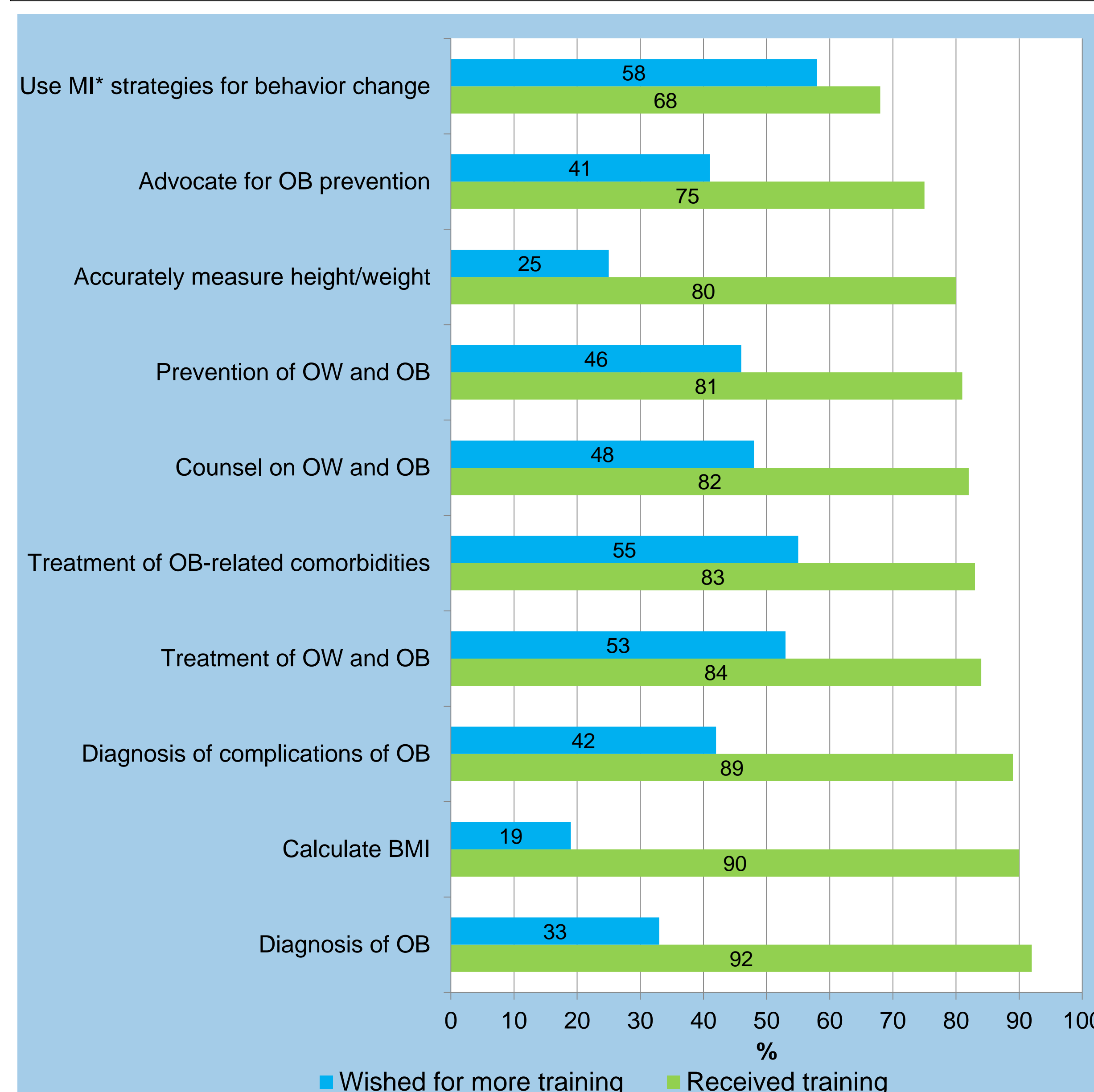
- McNemar tests assessed differences in amount of training on OW and OB in medical school vs residency
- Multivariable analysis assessed resident confidence in counseling on the prevention and treatment of OB (very effective). Predictors included: resident characteristics, percent of patient with OB during residency, satisfaction with residency training time devoted to OW and OB (just right), composite OW/OB training measure, very good/excellent ability to use motivational interviewing

## RESULTS

Training Time Devoted to Overweight and Obesity during Medical School and Residency



Training on Overweight (OW) and Obesity (OB): Percent of Residents Reporting Receipt of Training and a Wish for More Training



\*MI = Motivational Interviewing/shared decision-making strategies for behavior change;

49% of residents received training in all 10 areas  
Composite OW/OB training measure: Mean = 8.3

## RESULTS

### Resident-Reported Mean Percent of Overweight and Obese Patients During Residency

Overweight (BMI ≥ 85<sup>th</sup> and < 95<sup>th</sup> percentile) Patients: 36%

Obese (BMI ≥ 95<sup>th</sup> percentile) Patients: 18%

### Resident Perceived Ability: Percent of Residents Reporting Very Good/Excellent Ability

	%
Calculate BMI	87
Evaluate children for overweight/obesity	87
Begin obesity discussion in clinical visit	83
Counsel families on screen time	80
Evaluate children for obesity-related comorbidities	78
Measure height and weight	78
Take family history of overweight/obesity	78
Counsel families on physical activity	78
Counsel families on overweight/obesity	76
Counsel families on nutrition/diet	74
Use motivational interviewing	52

### Resident-Rated Comfort Level and Confidence: Percent of Residents Reporting Very Comfortable or Effective

	% Reporting "Very"
Comfortable discussing overweight and obesity with children/adolescents	69
Comfortable discussing overweight and obesity with families	68
Comfortable monitoring behavior change goals of obese patients	40
Comfortable using behavior change techniques in the treatment of obesity	35
Own counseling on <u>prevention</u> of overweight and obesity is effective	26
Own counseling on <u>treatment</u> of obesity is effective	22

## RESULTS

### Multivariable Analysis

### Predictors Associated with Perception of Being Very Effective in Counseling on the Prevention and Treatment of Obesity

	Very Effective Counseling aOR, 95% CI	
	Prevention of Obesity	Treatment of Obesity
Very good/excellent self-perceived ability to use motivational interviewing	4.78, 2.91-7.86	4.46, 2.58-7.69
Composite training measure (# of 10 overweight/obesity areas where training was received)	1.21, 1.06-1.37	1.38, 1.16-1.65

Also included in models but not significant: gender, race, age, program size, percent of obese patients during residency, satisfied with residency training time devoted to overweight and obesity (just right)

## CONCLUSIONS

- Most graduating pediatrics residents report satisfaction with training time devoted to overweight and obesity during residency (74%); fewer are satisfied with time during medical school (46%)
- Most residents report that they received training on overweight and obesity topics but more than half wished for more training in:
  - motivational interviewing
  - treatment of obesity-related comorbidities
  - treatment of overweight and obesity
- While most residents feel prepared to assess and counsel on overweight and obesity, only half feel prepared to use motivational interviewing
- Almost 7 in 10 residents report being very comfortable discussing overweight and obesity with children/adolescents and their families, but only
  - 1/3 feel comfortable using behavior change techniques in the treatment of obesity
  - 1/4 feel their own counseling on the prevention of overweight and obesity is effective
  - 1/5 believe their own counseling on the treatment of obesity is effective
- Residents who have more comprehensive training and rate their ability to use motivational interviewing as very good/excellent are more confident in the effectiveness of their own counseling on the prevention and treatment of obesity

## ACKNOWLEDGEMENTS

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