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Teaching primary care physicians the 5 A's for discussing weight with overweight and obese adolescents

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ABSTRACT

Objective: We developed an online intervention to teach physicians both MI (addressed in outcomes paper) and the 5 A's (Ask, Advise, Assess, Assist, and Arrange) when discussing weight with overweight/obese adolescents.
Methods: We audio recorded 527 encounters between adolescents and physicians and coded the 5 A's during weight/BMI discussions. Half of physicians were randomized to receive a tailored, intervention that included their own audio-recorded clips. To examine arm differences, we used multilevel linear mixed-effects models for sum of 5 A's and generalized estimating equations (GEE) models with a logit link for each of the A's separately.
Results: Intervention arm physicians used more A's than control physicians (estimated difference = 0.6; 95%CI(0.2,1.0);p = 0.001). Intervention physicians used Assess (p = 0.004), Assist (p = 0.001) and Arrange (p = 0.02) more when compared to control arm physicians.
Conclusion: An online intervention increased physicians' use of the 5 A's when discussing weight with overweight adolescents. These results are promising as the online intervention improved performance for the three A's that are infrequently used (Assess, Assist, and Arrange) yet have the most impact.
Practice implications: A tailored online program can increase physicians' use of the 5 A's behavioral counseling approach in clinical practice with adolescents.

1. Introduction

Over 30% of American adolescents are overweight or obese [1], putting them at risk of future obesity and chronic illness [2,3]. Although addressing adolescent obesity is a multifaceted problem, an essential part of the solution includes physicians [4,5]. Although little is known about counseling adolescents, physician counseling can help overweight adults improve their physical activity, nutrition and weight [6,7].

Guidelines for counseling adults about weight and other behaviors suggest that physicians use the 5 A's as a road map to guide their discussions. The 5 A's, applied from the smoking literature, is a simple mnemonic (Ask, Advise, Assess, Assist, and Arrange) and should take no more than 3 min of a 20-min encounter. The 5 A's have some theoretical foundation in the transtheoretical model of behavior change (Assessing readiness) [8] and promoting accountability (Arranging). Use of the 5 A's promotes higher motivation and more quit attempts among

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smokers [9]. Only recently have the 5 A's been applied to weight-related discussions among adults. [10]. This study found that physicians' pattern of use mimics those found with physicians discussing smoking. Specifically, physicians mostly Ask and Advise, yet, Assess and Arrange were related to weight-related behavior change. However, the best results occur when physicians use all 5 A's rather than just the first two. Arguably, just Asking and Advising represents a unidirectional conversation with physicians telling patients to change without much input from them. Adding, the three following A's (Assess, Assist, and Arrange), provides a richer and more meaningful conversation for patients. For instance, physicians can learn whether patients are open to changing any of their weight-related behaviors (Assess), briefly discuss how they might attempt to make changes (Assist), or let them know that the topic is important enough that the physician would like to see them again to address this topic at future visits (Arrange).

Although untested, the 5 A's might be especially important in conversations with adolescents. Supporting adolescent autonomy by Assessing whether they want to change could be more powerful than even with adults who are not striving for independence the way adolescents are. Assessing in a way that emphasizes that adolescents are responsible for their own behavior change is consistent with current primary care guidelines[11,12]. Adolescents might be less aware of ways to change behaviors than adults as their behaviors are still forming; thus, when physicians Assist them in changing weight-related behaviors, it could be more impactful than it would be for adults whose behaviors are more entrenched. Further, when physicians Arrange a follow-up visit with adolescents, this could drive the message home that their behaviors matter enough to physicians to schedule another visit. Physicians could a powerful role as they arguably serve as authority figures with whom adolescents might share sensitive health information as physicians are encouraged to promise of confidentiality. With this role, adolescents might be more likely to take physicians' messages more seriously.

The aim of this paper is to examine the effect of a tailored online intervention in increasing physician use of 5 A's during weight-related counseling with adolescents. The main aim of the intervention was to teach MI; however, teaching the 5 A's were a secondary aim. Unlike other counseling techniques, the 5 A's are straightforward for physicians to learn. They provide physicians with a "roadmap" that guides them through the weight discussion. Yet, many physicians have not learned the roadmap or use it consistently. To teach this roadmap, we developed an online intervention to demonstrate and give feedback to pediatricians and family physicians about how to use the 5 A's when discussing attaining a healthy weight with overweight and obese adolescents.

2. Methods

2.1. Recruitment: Physicians

The Teen CHAT study (Communicating Health: Analyzing Talk) was approved by the Duke University School of Medicine IRB. We approached primary care physicians from academically-affiliated and community-based practices to participate in a study examining how they address healthy weight with their adolescent patients. Only physicians who had at least two patients recruited during the Baseline Phase were randomized for the Intervention Phase of the study and continue through the Summary Report Phase (data not discussed in this paper; see Fig. 1). Physicians gave written consent, completed a baseline survey, and provided an electronic signature for generating letters to their patients. The years of collection were between 2009 and 13, and data analysis was completed in May 2015.

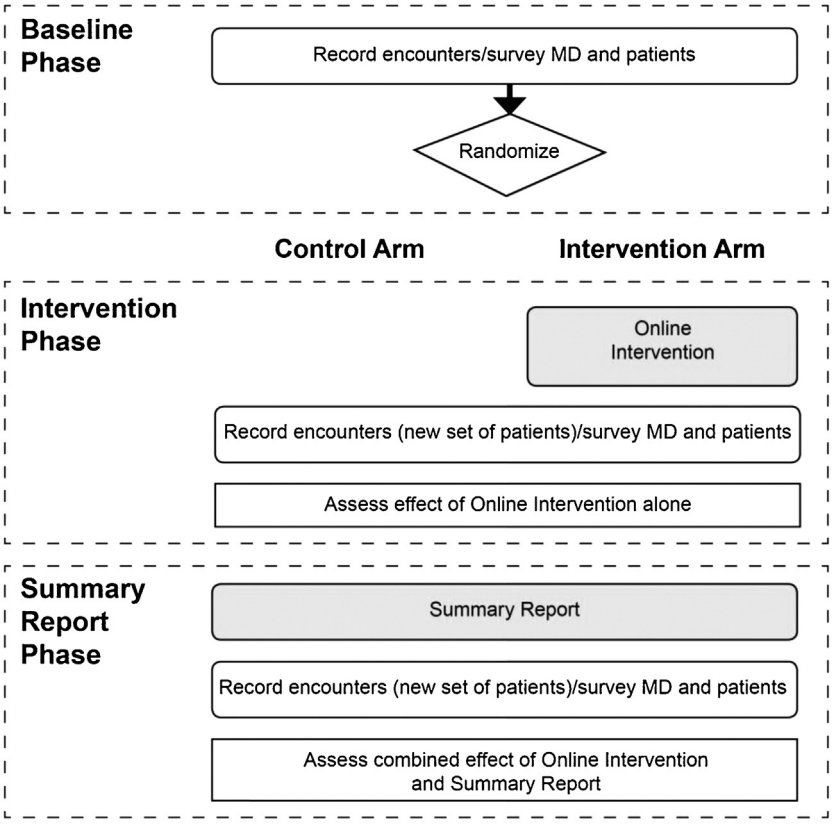

Fig. 1. Study flowchart.