Primary Care Interventions for Pediatric Obesity: Need for an Integrated Approach

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Recommendations for preventing and treating pediatric obesity suggest a staged approach with escalating intensity of care. Stage 1 is Prevention Plus, requiring sufficient capacity in a primary care setting to provide basic messages pertaining to healthful dietary and physical activity behaviors. Stages 2 and 3 are Structured Weight Management and Comprehensive Multidisciplinary Intervention, respectively, requiring more frequent clinical encounters and involving a registered dietitian (RD) and a behavioral medicine provider. Stage 2 may be appropriate in a primary care setting, although inadequate training and financial support for structured intervention often are limiting factors. Stage 3 requires primary care providers (PCPs) to coordinate patient care with a pediatric weight management clinic and, in some cases, community partners that provide opportunities for physical activity. Stage 4 is Tertiary Care Intervention and may include a very low-calorie diet, medication, and surgery.

Outcomes of clinical interventions for pediatric obesity are variable. In primary care settings, some interventions promote changes in diet, physical activity, or television viewing but do not achieve reductions in BMI\(^2\); others have favorable, albeit sometimes small, effects on BMI\(^3\). Although effective for certain patients/families, weight management clinics often are not feasible because of barriers associated with accessibility, transportation, and cost.\(^4\)\(^-\)\(^6\) Clearly, novel approaches are necessary to enhance interventions in primary care settings, extending the impact of weight management clinics and thereby avoiding progression to tertiary care referrals.

The trial reported by Resnicow et al\(^10\) in this issue of Pediatrics provides impressive data on the effectiveness of motivational interviewing (MI) to reduce BMI in primary care. The trial involved 42 practices in the American Academy of Pediatrics’ Pediatric Research in Office Settings network, with enrollment of overweight and obese children aged 2 to 8 years. Interventions included usual care, MI from a PCP (4 sessions), and MI from both a PCP (4 sessions) and an RD (6 sessions). Usual care comprised standard educational materials presented during routine visits. The “PCP only” and “PCP+RD” interventions augmented usual care with counseling directed toward building motivation for behavior change and collaborating with families to set action-oriented goals around discrete behaviors. The PCPs and RDS who implemented these interventions received MI training from a psychologist and booster training via DVD.\(^11\) Reductions in BMI percentile over 2 years were 1.8, 3.8, and 4.9 units for the usual care, “PCP only,” and “PCP+RD” interventions, respectively, suggesting that intervention intensity may be an important consideration. However, although PCPs completed >75% of their expected sessions, RDS completed <50%. Resnicow et al\(^10\)\(^,\)\(^11\) allude to a gap in care coordination between PCPs and RDS, leading to lack of care integration, as a partial
Patients were from a large network of primary care practices. What linkages can be established between primary care practices and weight management clinics to coordinate care with obesity specialists (psychologist, dietitian, physicians) when necessary? Linkages must extend beyond referrals and notes in electronic medical records to systems for training and possible comangement.

A psychologist trained the PCPs and RDs in MI. As such, the psychologist was part of the multidisciplinary team. However, timely and effective communication between psychologists and PCPs or RDs, to manage specific cases, was not part of the intervention. How can PCPs facilitate access to specialty colleagues for collaboration? Emerging communication technology could support such enhanced access.

Parents completed a questionnaire pertaining to diet, physical activity, and sedentary time, and PCPs shared responses with RDs. However, a form for recording patient encounters and thereby promoting communication between PCPs and RDs was apparently inadequate. How can we ensure adequate and efficient “handoffs” among members of a team in different settings?

Assisting patients/families to develop action plans involving utilization of community programs is within the purview of MI. How can interaction with community partners be extended, beyond PCPs advising patients to use programs, to obtaining updates on progress of individual patients?

Clearly, answers to these questions require collaboration among numerous stakeholders. Substantial effort must be directed toward coordinating care across settings to integrate services centered on the comprehensive needs of patients/families and measuring performance of care-coordination activities.

**REFERENCES**

7. Ambler KA, Hägédorn DW, Ball GD. Referrals for pediatric weight management: the importance of proximity. BMC Health Serv Res. 2010;10:302
15. Antonelli RC, Stille CJ, Antonelli DM. Care coordination for children and youth with special health care needs: a descriptive, multisite study of activities, personnel costs, and outcomes. Pediatrics. 2008;122(1). Available at: www.pediatrics.org/cgi/content/full/122/1/e209
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