Abstract

Longitudinal analysis of fittastic, a clinic-based healthy lifestyle program to address child obesity

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background: Obesity affects 18.5% of children. Primary care providers need effective tools to address this public-health challenge. Electronic-medical-record (EMR)-enabled decision support may help address childhood obesity; however, longitudinal studies evaluating effectiveness are needed.

methods: Patients from six primary-care clinics received EMR-enabled lifestyle counseling or usual care and were followed up to four years (2016-2020). At clinics with the decision support, nurses screened children for five lifestyle behaviors (physical activity, screen-time, calcium, water, and fruit/vegetable consumption) at well-child visits. Clinicians helped families choose a lifestyle goal for which children received a printout and goal-matched incentive. Control clinics received no support. Using descriptive statistics and body-mass-index (BMI) data from the EMRs of intervention and control clinics, we determined proportions of children with favorable weight patterns over time, defined as weight maintenance among healthy-weight children and BMI% improvement among children with overweight/obesity.

results: Of 303 children (190 intervention/113 control) at baseline, 67% had healthy (5-84th) BMI%s and 29% had overweight/obesity (BMI% ≥85; excluded 4% with underweight). After up to 4 years of follow-up, the proportion of children with favorable weight patterns was 68% at intervention clinics, compared to 58% at control clinics (*P*=.06).

conclusion: Although not statistically significant, longitudinal data trends suggest that EMR clinic-based healthy lifestyle interventions can help reduce obesity and aid in healthy weight maintenance in children seen in primary care. Because of the chronic nature of obesity, more longitudinal studies are needed to help primary care providers and public health researchers develop and assess tools to curb this epidemic.

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