

# STRONG CHILDREN'S RESEARCH CENTER

## Summer 2014 Research Scholar

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### ABSTRACT

**Title: *Patient and Provider Characteristics Associated With Nutrition, Physical Activity, and Screen Time Counseling in Monroe County Pediatric Practices***

**Background:** In the past thirty years, the United States has seen an unprecedented epidemic of obesity and its related comorbidities, with pediatric patients nowhere near immune from its malignant effects. Obesity rates have more than doubled amongst American children and have quadrupled amongst American adolescents within this time frame, according to the CDC. Efforts at combating this epidemic in our nation's youth have largely been focused on child and parental behaviors to help children lose weight. Pediatric primary care providers, however, may be underutilized resources in providing essential preventive counseling on nutrition, physical activity, screen time, and weight status. Focusing obesity prevention efforts on provider behaviors is a viable research frontier and may result in measurable decreases in the rate of childhood obesity in the decades to come.

**Objective:** To describe factors associated with pediatric provider performance and documentation of obesity screening and lifestyle counseling during well child visits in Monroe County pediatric practices.

**Methods:** 1589 randomly selected medical records from eight of the pediatric and family medicine practices participating in the Greater Rochester Health Foundation's 2012 Obesity Report Card were used. These records were stratified by the following characteristics: patient age group, patient sex, provider-identified patient weight status, actual patient BMI category, patient racial/ethnic group, practice geographic location, and practice participation in the Greater Rochester Obesity Collaborative. These characteristics were used to predict nutrition, physical activity, and screen time counseling outcomes from bivariate and multivariable models run by SAS 9.3 software.

**Results:** In bivariate analyses, the rates of any counseling were different ( $p < 0.05$ ) for 2-5 year olds vs. 6-11 year olds vs. 12-18 year olds (85.6% vs. 78.3% vs. 77.3%), patients identified by providers as obese vs. overweight vs. normal weight (96.3% vs. 93.3% vs. 78.4%), suburban vs. urban practices (74.4% vs. 84.9%), and intervention practices vs. control practices (76.6% vs. 83.7%). In addition, patient race/ethnicity and practice identity predicted counseling of any kind in a bivariate analysis. Practice group, practice location, patient sex, provider-identified patient weight status, patient age group, and patient race/ethnicity were then included in a logistic regression multivariable analysis. The only significant predictors of any counseling in the multivariable model were obese vs. normal weight patients (OR = 6.6, 95% CI = 2.1-20.8), patients age 6-11 vs. patients age 2-5 (OR = 0.5, 95% CI = 0.34-0.72), patients age 12-18 vs. patients age 2-5 (OR = 0.43, 95% CI = 0.29-0.63), and patient race/ethnicity black vs. other (OR = 1.9, 95% CI = 1.1-3.4). Additional multivariable analyses for nutrition counseling and physical activity or screen time counseling yielded similar results, most notably that younger children were frequently counseled on nutrition and overweight/obese children were frequently counseled on physical activity and screen time.

**Conclusion:** These results suggest that certain characteristics are associated with providers engaging in and documenting lifestyle counseling. In this sample, providers were more likely to engage in any lifestyle counseling with patients aged 2-5 and with patients who are obese. Nutrition counseling was most common among younger patients while physical activity and screen time counseling was found to occur more frequently among youth who were overweight or obese. Future practice-based obesity prevention strategies should take these tendencies into account.