

# STRONG CHILDREN'S RESEARCH CENTER

## Summer 2016 Research Scholar

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### ABSTRACT

**Title:** The WE-CARE Survey and Food Insecurity

**Background:** Pediatricians play an essential role in screening and identifying children and families for food insecurity (FI), poverty, and other social determinants of health (SDH). There are many documented adverse outcomes to health and well-being associated with FI in children and families. Past literature has shown relationships between FI and parental education, overweight or obesity status, smoking, housing insecurity, and maternal depression. The WE-CARE (Well-child care visit; Evaluation; Community resources; Advocacy; Referral; Education) Survey was developed and tested as a tool for pediatricians to screen patients and their families for SDH, including parental education, employment status, smoking, drug abuse, and depression, which are known to be associated with adverse child health outcomes. At the outpatient clinic at Golisano Children's Hospital, the WE-CARE Survey has been implemented at Well Child Checks since 2015 as a method to screen for SDH.

**Objective:** To characterize the FI status of patients and families at the outpatient pediatric clinic at Golisano Children's Hospital using the WE-CARE Survey. To assess the prevalence of FI, and the associated demographics and characteristics of food insecure children and families.

**Results:** A random sample of 711 WE-CARE Surveys was pulled and reviewed, out of a total of approximately 4,000 surveys spanning from late July 2015 to early July 2016. Additional demographic information was collected from these families through electronic chart review. The overall prevalence of FI was 17.7% (N = 121). Food insecurity was significantly associated with patient race and ethnicity (p = 0.003), insurance type (p = 0.001), parental high school education (p < 0.001), and season of visit (p = 0.002) in bivariate analyses. There were no significant associations between FI and child overweight or obesity status. In the logistic regression models, children under 2 years of age had higher odds of FI compared to children 2 to 5 years of age (OR: 2.02; 95% CI: 1.01-4.07), those with private insurance had lower odds of FI compared to those with government insurance (OR: 0.18; 95% CI: 0.05-0.59), all racial and ethnic groups had lower odds of FI compared to Black or African Americans, and the odds of FI was higher in winter, fall, and summer compared to spring. After adding the three WE-CARE Survey questions into the model, the associations for Hispanics and winter became insignificant. There were significant associations with FI to other questions asked on the WE-CARE Survey, notably smoking, depression, and risk of homelessness, all to a significance of p < 0.001 in bivariate analysis. After controlling for demographic variables, these associations remained significant, with odds ratios of 2.6, 4.6, and 5.9, respectively, for those with positive responses.

**Conclusion:** The strong associations between food insecurity and race and ethnicity, insurance type, season of visit, parental education, smoking, depression, and risk of homelessness further indicate the importance of pediatricians screening children and families for poverty and other SDH. Future goals of this project involve evaluating and improving the effectiveness of the WE-CARE Survey as a tool to help pediatricians connect families to the appropriate and available resources in the Rochester area.