

Title: Assessing food insecurity when caring for children with BMI $\geq 85^{\text{th}}$ percentile

Category: Original completed research

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Abstract: 300 of 300 words

Childhood obesity is a growing epidemic in the United States and New Mexico. Excess weight early in life progressively increases risks of severe health complications in adulthood. Healthy and Fit Children's Clinic (H&FCC) at Carrie Tingley Outpatient Children's Clinic treats children ages 2-17 years old with elevated body mass index (BMI; $\geq 85^{\text{th}}$ percentile). Providers work to lower children's BMI and risks for chronic cardiometabolic comorbid conditions through lifestyle changes. Successful weight management requires a comprehensive treatment plan including social determinants of health (SDoH) assessment. One key SDoH is food insecurity. H&FCC serves vulnerable populations. Providers are anecdotally aware of patients' needs but lack sufficient data on food insecurity prevalence. Addressing this gap, H&FCC set out to assess food insecurity within their patient population.

From May 2020-April 2021, H&FCC administered the Hunger Vital Sign (HVS) (two-question food security assessment) to every patient, including follow-up encounters, documenting responses in the electronic health record (EHR). Aggregate data without identifiers were collected from the EHR.

The HVS was administered 142 times to 114 unique patients. Treating each clinic encounter as a unique event, the prevalence of food insecurity was found to be 31%. However, since data were aggregated, each incidence of food insecurity was not tied to a unique individual. The prevalence of food insecurity based only on the first assessment of each patient was 33%. Of the 27 respondents who answered the HVS multiple times, 26% cycled through food insecurity.

The Hunger Vital Sign is designed to be administered annually at check-ups; however, results suggested that annual screening does not adequately capture the burden of food insecurity. Food insecurity is tied to instability inherent within vulnerable populations. Future studies will focus on tool development that measures the acute and fluid condition of food insecurity to optimize care for children in weight management clinics.