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Prevention of Pediatric Obesity: Focus on the First Two Years

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BACKGROUND

- 18.5% of children aged 2 to 19 are obese.¹
- Obesity rates are **disproportionately higher** in Hispanic and African American populations, and families of lower socioeconomic status.^{1,2}
- The Allentown zip code 18102 has the highest childhood obesity rates (22.7%) for LVHN's entire population.
- Rapid weight increases in the first 6 months of life are associated with obesity at 3 years of age.³
- There is a 70% chance that a child who is overweight or obese will remain obese in adulthood, leading to chronic health conditions.^{4,5}
- This study investigated whether enhanced dietary information at well visits from birth to 24 months would affect BMI.

METHODS

IRB approval granted and study coordinators/key personnel trained for patient scheduling and data collection

Consent obtained from parents. Infants placed in control or intervention group. Intervention group received nutrition counseling at each well visit until 2 years of age

Surveys administered at baseline, 6 months, 12 months, 18 months to understand feeding practices and family dynamics.

Data extracted from electronic medical records (EPIC) and entered into the database REDcap. Statistical analysis using SPSS software.

Figure 1: Research study methods and procedures

RESULTS

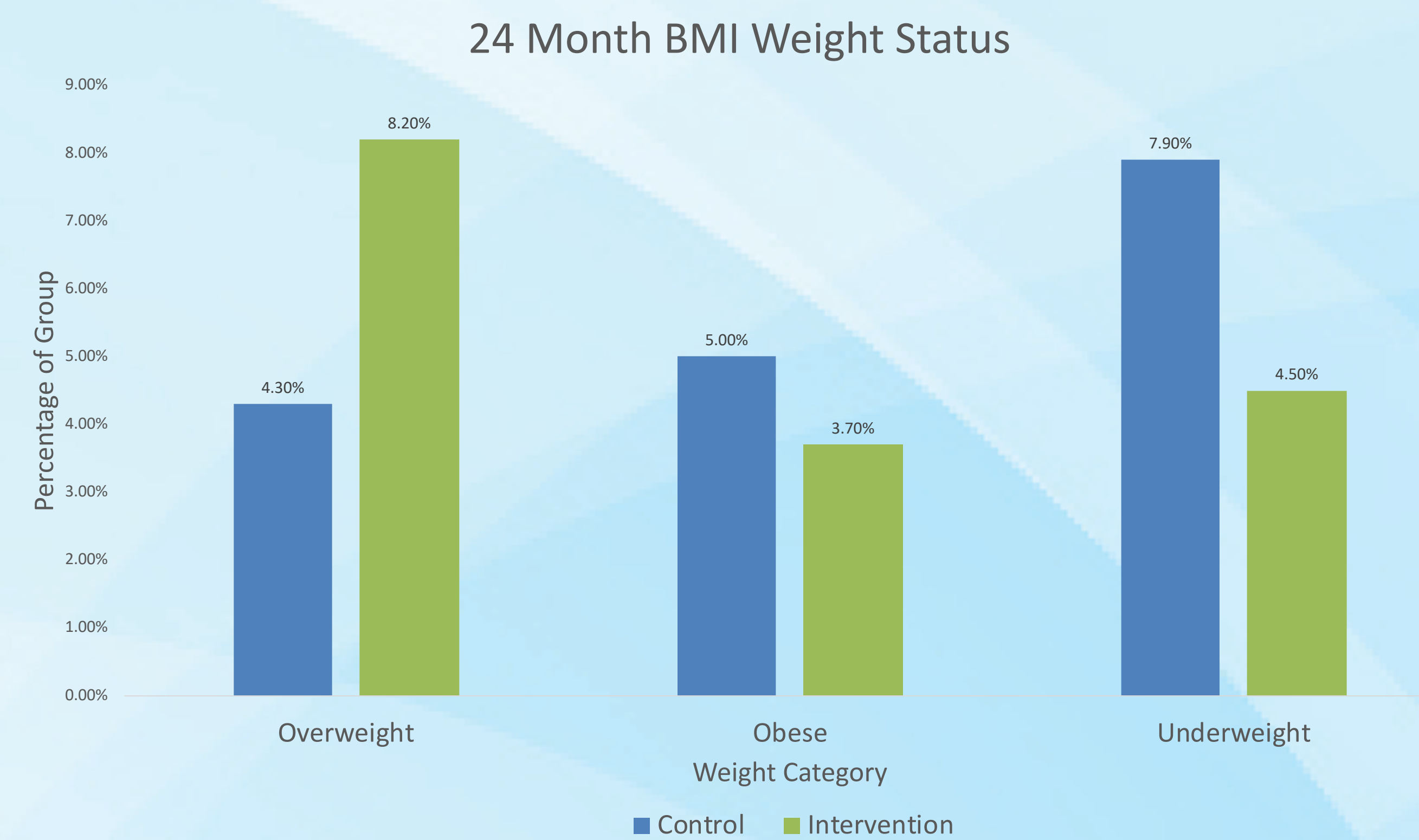


Figure 2: Chart depicting comparisons in weight status categories between control group and intervention group. No statistical significance between groups.

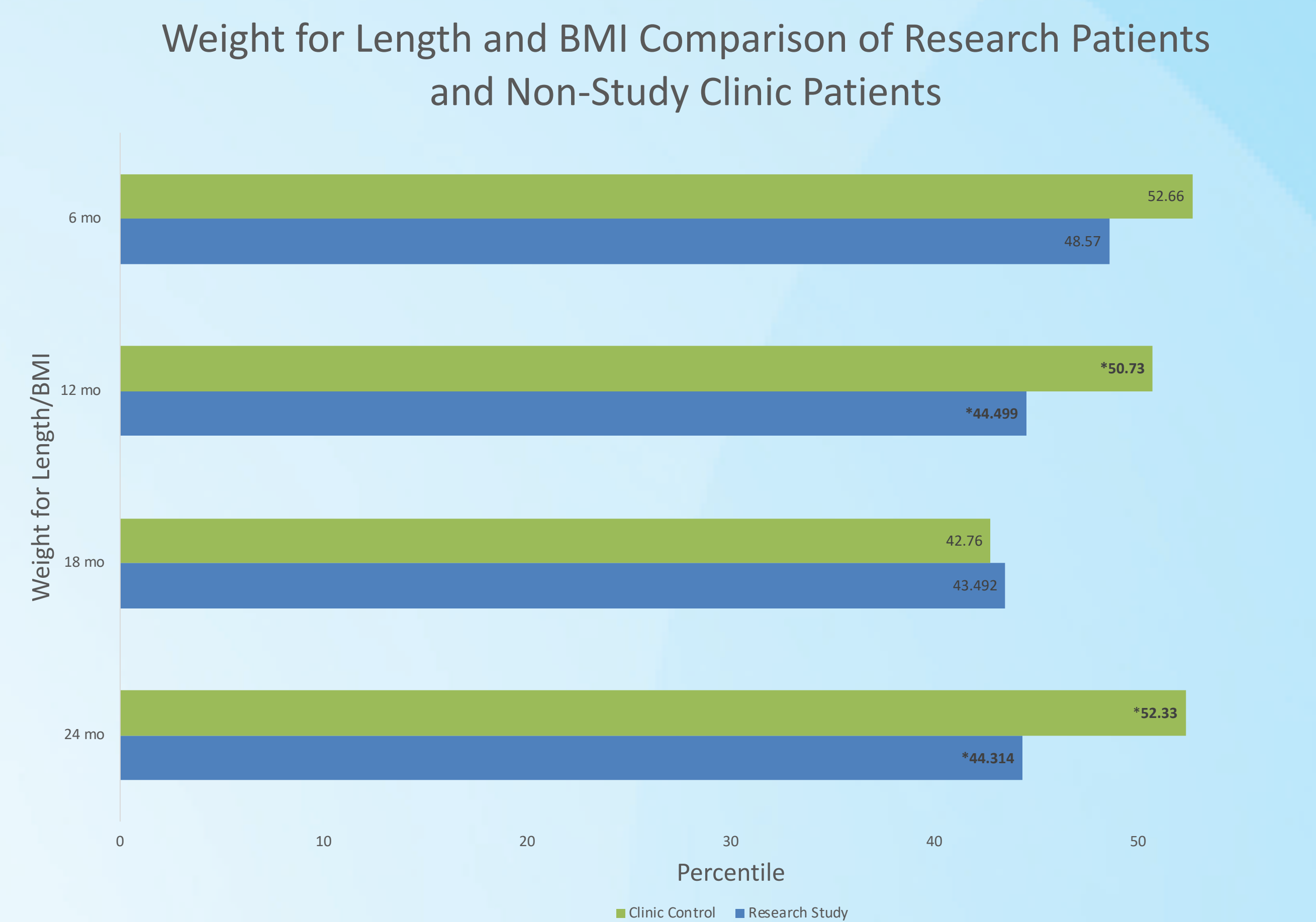


Figure 3: Chart depicting average weight for length percentiles for 6, 12, and 18 months and BMI percentiles at 24 months between combined research patients and non-study Children's Clinic patients. Statistical significance at 12 and 24 months.

CONCLUSION

- **No statistical differences** in 24 month BMI between research control group and intervention.
- **Statistical significance** between research patients and non-study clinic control patients for 12 month weight for length average percentile and 24 month average BMI percentile.
- There are 20 patients that still need their 2 year well visit to finish the study.
- **Study barriers** included patient no-shows, scheduling limitations, and change in scheduling personnel.
- Interventions focused only on education are ineffective against community conditions, cultural and nutrition habits, and other social determinants of health.

RECOMMENDATION

- Increase **community outreach** in high need areas through partnerships with community organizations and local non-profits.
- Focus on **school-based and community-based interventions** to bring healthy foods and nutrition programming to food insecure areas.

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