



GOALS@Home: Exploring the effectiveness of family, community and clinic collaboration in treating childhood obesity



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Background

The rate of childhood obesity in the United States has quickly escalated, tripling since 1963, and continues to rise. Obesity is particularly prevalent among minority youths; according to the 2009-2010 NHANES, 41.4% and 23.1% of 6-19 year old Mexican-American children, and 41.8% and 25.7% of 6-19 year old black children are overweight or obese, respectively (Robinson et al, 2013).

Traditional attempts to reduce the prevalence of childhood obesity have been largely unsuccessful. Stanford GOALS is a community-focused model for treating childhood obesity that is currently being tested in the surrounding communities.

Methods

- Randomized 240 families with overweight or obese children ages 7-11 into one of two programs:
 - 1. community-based health education intervention
 - 2. multi-component, multi-level, multi-setting (MMM) intervention
- Change in children's BMI percentile assessed annually over 3 years



Hypothesis

Children in the MMM intervention will experience greater reductions in rate of change of BMI percentile than those in the health education group.

Sustained Effects Through a Social-Cognitive Approach

Social Cognitive Theory:

- Interactions between personal, behavioral, and environmental factors lead to behavior change and maintenance
- Curriculum created to encourage intrinsic motivation using growth mindset in lessons
 - Praise effort, not outcomes
 - Emphasize the process of achieving goals
 - Normalize failure
 - Provide examples of hard work leading to successful behavior change

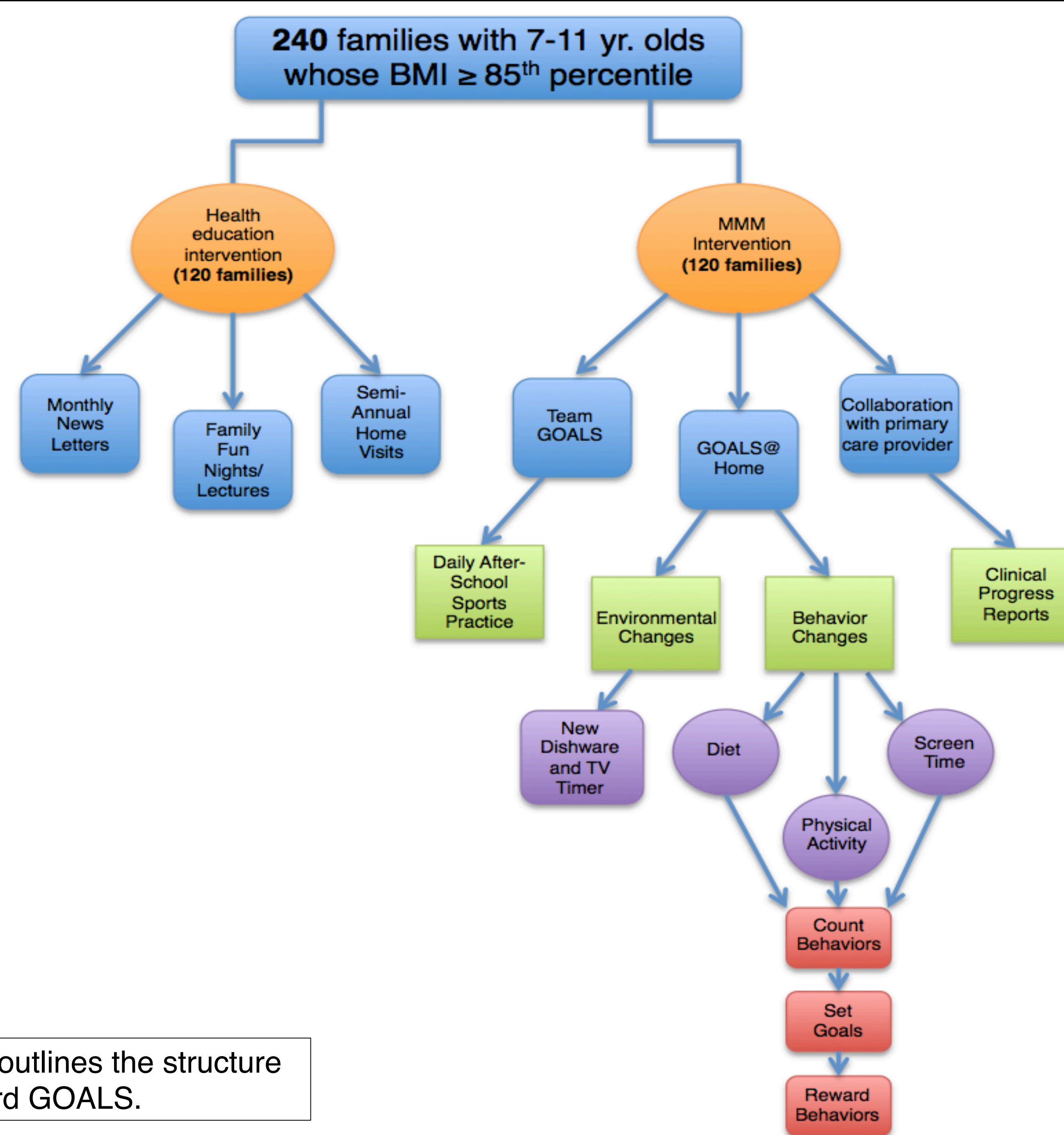


Figure 1 outlines the structure of Stanford GOALS.

Mastery Approach for Behavior Changes

- Environmental changes implemented first so that they may be sustained and support behavior changes throughout the intervention
- Process measures collected frequently to assess if families are maintaining environmental changes
- Motivational interviewing used to engage families
- Number of lessons is not set, rather families work on each topic until they reach a goal that children set with their parents
- Families choose order in which to address diet, physical activity, or screen time behaviors, so that they may take greater ownership and interest in the program

Fig. 2

Fig. 3

Fig. 4

Figures 2-4 show the journals used to self-monitor diet, physical activity, and screen time behaviors, respectively. Journaling is the first step of goal setting.

Conclusions

As this study is currently in its second of three years, there is still much progress to be made. We hope that a community and home-based, social cognitive approach will assure long-term behavioral changes that are feasible and sustainable for children and their families. Since weight loss behaviors are often hard to maintain, strategies to increase intrinsic motivation and growth mindsets in children are used in curriculum design to motivate children to gradually take responsibility for their health.

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References

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