# A Comprehensive Family-Based Shared Medical Appointment (SMA) for Overweight Hispanic Children

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## Background

Childhood obesity more than tripled in last 30 years. Among Hispanic children between ages 6 -11, Mexican-Americans have higher rate of obesity (22.5%) than non-Hispanic whites (14%).

Overweight and obese children have higher risks of type 2 DM, HTN, heart disease, and other health complications.

Obesity-related costs estimated at $117 billion/yr. Obesity responsible for about 300,000 deaths/yr. in all Americans.

## Problem

At Angelica Clinica (Houston, TX), approximately, 20% of overweight Hispanic children have high triglycerdemia, acanthosis nigrican, and borderline high blood pressure.

Clinic provides traditional office appointments, which are ineffective in reducing weight, preventing overweight related medical complications, and promoting patient/parent satisfaction.

## Purpose

To evaluate comprehensive family based SMA for :

- Reducing weight.
- Preventing medical complications.
- Improving patient/parent satisfaction.

## Methods

Program consists of 6 monthly SMA (monthly for first 2 months, at 4 months, and at 6 months) for 10 patients from 8-11 yrs. and their parent(s).

Utilizes a multidisiplinary approach that included g clinicians, nutritionist, physical trainer, and medical assistants.

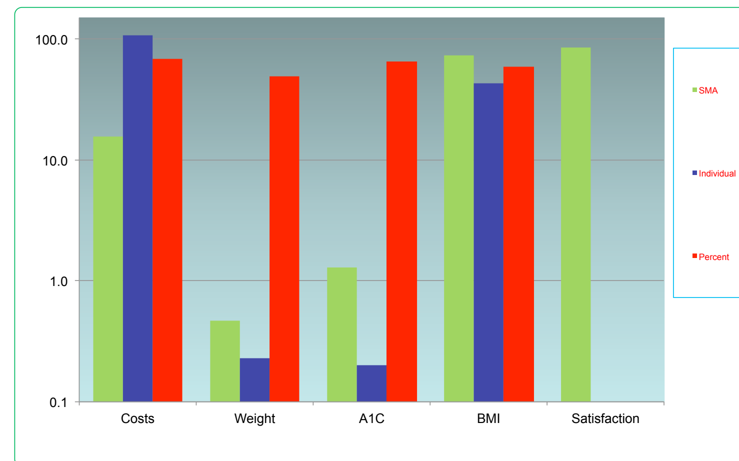
Each SMA session takes about two hours.

## SMA Sessions

| | |
|---|---|
| Phase 1: | Collect patient vital signs and data (20 minutes). |
| Phase 2: | Clinicians discuss general obesity clinical symptoms, prognosis, and interventions in group setting (30 minutes). |
| Phase 3: | Physical exam and private consultation with clinician. Interactive education with nutritionist and fitness instructor (45 minutes). |
| Phase 4: | Clinician finalizing of treatment plan and next appointment (20 minutes). |

## Pyramid: Food & Exercise

## Comparison SMA Vs. Individual Groups




## Literature Review

| Citations | Studies Samples | Results |
|---|---|---|
| Kirsh et al., 2007; Trento et al., 2001; Trento et al., 2002; Wagner et al., 2001; Sadur et al., 1999; Scott et al., 2004; Masley et al., 1998; Lamb et al., 2001) | RCTs | •SMA lower hospitalizations ER visits, A1C levels, costs, improved self-efficacy, satisfaction vs. individual groups (IG).<br>•IG vs SMA in Cost: ($107; $15.50).<br>•Weight (0.9; 2.6 kg).<br>• A1c (1.3 ;0.2). |
| Gaipagouglu et al., 2009; Sacher et al., 2010; Sovoye et al., 2007; Tanas et al., 2007) | RCTs | SMA reduced weight/BMI, improved fitness /self-esteem vs. IG. |
| DAHRQ, 2011 | Pilot | High satisfaction of program, reduced BMI levels and sustained weight loss > 1 year. |
| Bronson & Maxwell, 2004 | Survey | 85% opted for another SMA; 79% marked excellent for satisfaction. |

## Evaluation

Table 1: Success of Program

| Benchmarks | Daily | Outcomes |
|---|---|---|
| Weight BMI | 900-1200 calories | 4lbs or 10% reduction of Weight or BMI |
| Physical | 1hr/daily | 5 hrs/weekly |
| Healthy Consumption | 3-5 daily (No sugary food) | Maintain 3-5 daily (no sugary food). |
| BP/LPs/FBS | Reduction fat in take | Positive Trends |
| Satisfaction | >80% | >80% opt to return; satisfied |
| Costs | Equal/ more | Higher reimbursement |

## Conclusions

The SMAs apply a multidisciplinary approach in effort to provide more efficient care at reduced costs and improved patient satisfaction.

The goal of project was to use a SMA that involved children and their parent(s) to participate in education to manage their own medical condition.

As a result, participants were more likely to develop :

- Healthy eating behaviors.
- Maintain healthy weight status.
- Lower risk of developing obesity related medical complications.
- Save health care costs.
- Decrease early disability, morbidity, and mortality later in life.

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