

## RESEARCH LETTER

## Shared Medical Appointments: Promoting Weight Loss in a Clinical Setting

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**Introduction:** Shared medical appointments (SMAs) are 90-minute group appointments for patients with similar medical complaints. SMAs include components of a traditional office visit but provide further emphasis on health education. The effectiveness of SMAs on weight-loss in an outpatient setting has not been studied.

**Methods:** Weight-loss SMAs were offered by one physician at the Palo Alto Medical Foundation. Teaching content included Diabetes Prevention Program materials. This analysis includes patients who attended at least one SMA ( $n = 74$ ) compared with patients in the same physician's practice who had at least one office visit and a body mass index  $\geq 25$  kg/m<sup>2</sup> ( $n = 356$ ).

**Results:** The SMA group had a higher proportion of women than the comparison group (76% vs 64%) and were older (mean, 52.4 years; SD, 13.1 years vs mean, 47.0 years; SD, 13.3 years). SMA patients on average *lost* 1.0% of their baseline weight. Patients in the comparison group on average *gained* 0.8% of their baseline weight.

**Discussion:** SMAs may be a viable option for physicians to promote weight loss in the clinical setting. (J Am Board Fam Med 2011;24:326–328.)

**Keywords:** Overweight, Patient Appointments, Weight Loss

Overweight and obesity has become significant health problems in the United States. Previous studies, conducted in high-intensity research settings, have shown that modest weight loss through improvements in physical activity and diet can positively impact health.<sup>1</sup> There is little information about translating these high-intensity strategies into busy, outpatient clinical settings with limited resources.

Shared medical appointments (SMAs) have been used previously in outpatient settings to provide care for a small group of patients with a chronic

disease; they offer semistructured health education, social support, and increased access to providers.<sup>2</sup> In the current study, we sought to use SMAs for weight loss within a single-physician practice at the Palo Alto Medical Foundation, adapting the publicly available Diabetes Prevention Program (DPP) intervention materials<sup>3</sup> and creating a contemporaneous comparison group from the same physician's patient panel. This study contributes to the growing literature about SMAs in managing chronic health issues and specifically adds to the limited work about SMAs for weight loss that is available.

## Methods

The physician (ALM) personally invited all patients with a BMI  $\geq 25$  kg/m<sup>2</sup> to the SMA program by letter. She conducted biweekly weight-loss SMAs during the 2-year study period (November 2006 through October 2008). Eighty patients participated in the SMA program, with approximately 6 to 12 patients attending each SMA. Each SMA lasted 90 minutes; 60 minutes were devoted to addressing individual patient health concerns, and

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the remaining time was spent discussing specific health-related topics. Patients were provided with publicly available intervention materials adapted

from the DPP Lifestyle Balance program.<sup>3</sup> Additional information on the SMA procedure and materials can be found online.<sup>4</sup>

**Table 1. Participant Characteristics of the Weight-Loss Shared Medical Appointments (SMAs) and Patients in the Comparison Group**

Characteristics	SMA Participants (n = 74)	Comparison Group (n = 356)
Sex (%) <sup>*</sup>		
Female	56 (76)	227 (64)
Male	18 (24)	129 (36)
Age at study entry (years) <sup>†</sup>		
Mean (SD)	52.4 (13.1)	47.0 (13.3)
Median	51.5	46.0
Range	22–81	17–88
Weight at baseline (lb) <sup>†</sup>		
Mean (SD)	217.3 (46.8)	184.7 (35.6)
Median	209.0	179.0
Range	139.0–344.0	120.0–339.5
BMI at baseline (kg/m <sup>2</sup> ) <sup>†</sup>		
Mean (SD)	35.3 (6.3)	29.4 (4.3)
Median	34.9	28.4
Range	24.6–52.8	24.6–48.7
Weight change from baseline (lbs) <sup>†</sup>		
Mean (SD)	−1.0 (5.1)	+0.8 (7.0)
Median	−0.6	+1.2
Range	−48.0 to +36.0	−54.0 to +77.0
BMI change from baseline (kg/m <sup>2</sup> ) <sup>*</sup>		
Mean (SD)	−0.3 (2.1)	+0.2 (2.1)
Median	−0.2	+0.3
Range	−8.2 to +6.3	−8.6 to +10.0
Weight (% change from baseline) <sup>†</sup>		
Mean (SD)	−1.0 (5.1)	+0.8 (7.0)
Median	−0.6	+1.2
Range	−18.7 to +14.5	−27.3 to +34.3
BMI (% change from baseline) <sup>*</sup>		
Mean (SD)	−1.1 (6.0)	+0.8 (7.1)
Median	−0.5	+1.1
Range	−27.5 to +15.0	−27.3 to +33.3
Number of SMA visits		
Mean (SD)	2.9 (2.9)	
Median	2.0	—
Range	1–13	
Mean time between SMA visits (weeks)		
Mean (SD)	11.5 (14.6)	
Median	6.4	—
Range	1.3–61.0	
Total duration studied (months)		
Mean (SD)	4.0 (6.4)	
Median	1.0	—
Range	0.03–24	

<sup>\*</sup>Significant at  $P < .05$ .

<sup>†</sup>Significant at  $P < .01$ .

For comparison, we created a group of 356 patients with similar characteristics (sex, age, BMI, weight) who may have received similar advice and instructions on weight loss during an individual office visit with the physician (ALM) during the study period.

## Results

Patients participating in SMAs were more likely to be women ( $P < .05$ ), older ( $P < .01$ ), and have higher baseline weight and BMI ( $P < .01$ ) than the comparison group (Table 1). Participants in the SMA group attended, on average, 2.9 SMAs, with a median of 6.4 weeks between visits. SMA participants, on average, experienced a mean change of  $-1.0\%$  (loss of 2.0 lb) from baseline weight and  $-1.1\%$  from baseline BMI, whereas the comparison group experienced a mean change of  $+0.8\%$  from baseline weight (gain of 1.4 lb) and  $+0.8\%$  from baseline BMI. The total number of SMA visits was found to be significantly associated with weight loss and BMI reduction in women after adjusting for baseline values, age, and the total length of time in the study.

## Discussion

Within the same physician practice, patients who participated in the SMAs lost more weight than patients who went to traditional office visits. The results from this nonrandomized study suggest that SMAs may be a viable option for busy physicians to promote weight loss in the clinical setting. A number of clinical translations of the DPP lifestyle

intervention have been reported, including using trained lay leaders at the YMCA<sup>5</sup> and nurse educators in an academic medical practice.<sup>6</sup> Though the results of the current study fall a little significant these more intense programs, they suggest a great potential for physicians to incorporate a successful weight-control program into routine care. Physician-led weight-loss SMAs may be a useful clinic-based adjunct to more intensive community programs. Future studies should examine the effectiveness of this modality using a larger group of physicians and patients.

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