

# Is it Possible to Have a Financially Viable, Evidence-Based, Weight Management Program in a Patient Centered Medical Home?

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## Background

**Problem:** Obesity is an expensive and preventable public health issue that requires persistence and innovative strategies to address.

**Role of a Patient Centered Medical Home (PCMH) in treating obesity:** Medicare developed guidelines for delivering Intensive Behavioral Therapy (IBT) for obesity in primary care,<sup>1</sup> based on US Preventive Services Task Force (USPSTF) recommendations:<sup>2</sup>

- ❖ First Month: One session/week
- ❖ Months 2-6: Two sessions/month
- ❖ Month 6: Reassess progress and readiness to change
- ❖ Months 7-12: One session/month if lost  $\geq 3$ kg (6.6lbs) in 1<sup>st</sup> 6 months

**IBT Content:**

- ❖ 5As (Assess, Advise, Agree, Assist, Arrange) to promote sustained weight loss focused on diet and exercise interventions

## Setting

**UNC Family Medicine Center, Chapel Hill, NC**

- ❖ Large academic family medicine center
- ❖ Patient centered medical home (PCMH)



## Drivers of Program Development

- ❖ **Primary care providers (PCPs) have little training or time** to adequately deliver weight management interventions
- ❖ **Collaboration with interprofessional providers and resources** utilizing clinical social workers (LCSW), nutritionists, behavioral health specialists, and Family Medicine and Preventive Medicine residents to provide IBT

## Methods

**Intervention design:** Pilot, single-site feasibility study

**Eligibility Criteria:**

- ❖ Established PCMH patients
- ❖ BMI  $\geq 30$  or BMI  $\geq 25$  with obesity-related comorbidity
- ❖  $\geq 18$  years of age
- ❖ Completed  $\geq 1$  weight management visit between Sept 2015 and Aug 2018

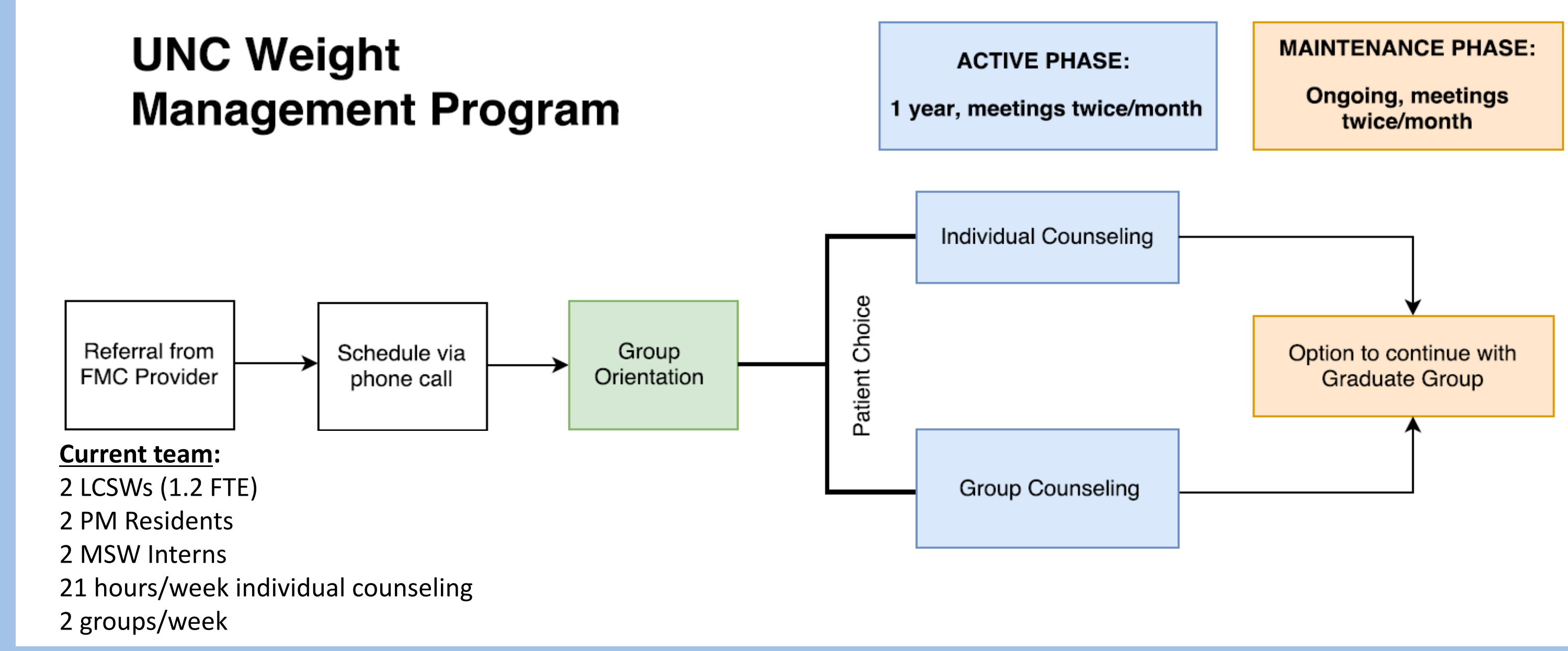
**Measures:**

- ❖ Program reach
- ❖ Demographics
- ❖ Clinical outcomes (weight loss & blood pressure (BP)): calculated comparing first and last available values between start date (SD) and SD+18 months
- ❖ Financial sustainability

This study has been reviewed and approved by the UNC Institutional Review Board - IRB:18-0358

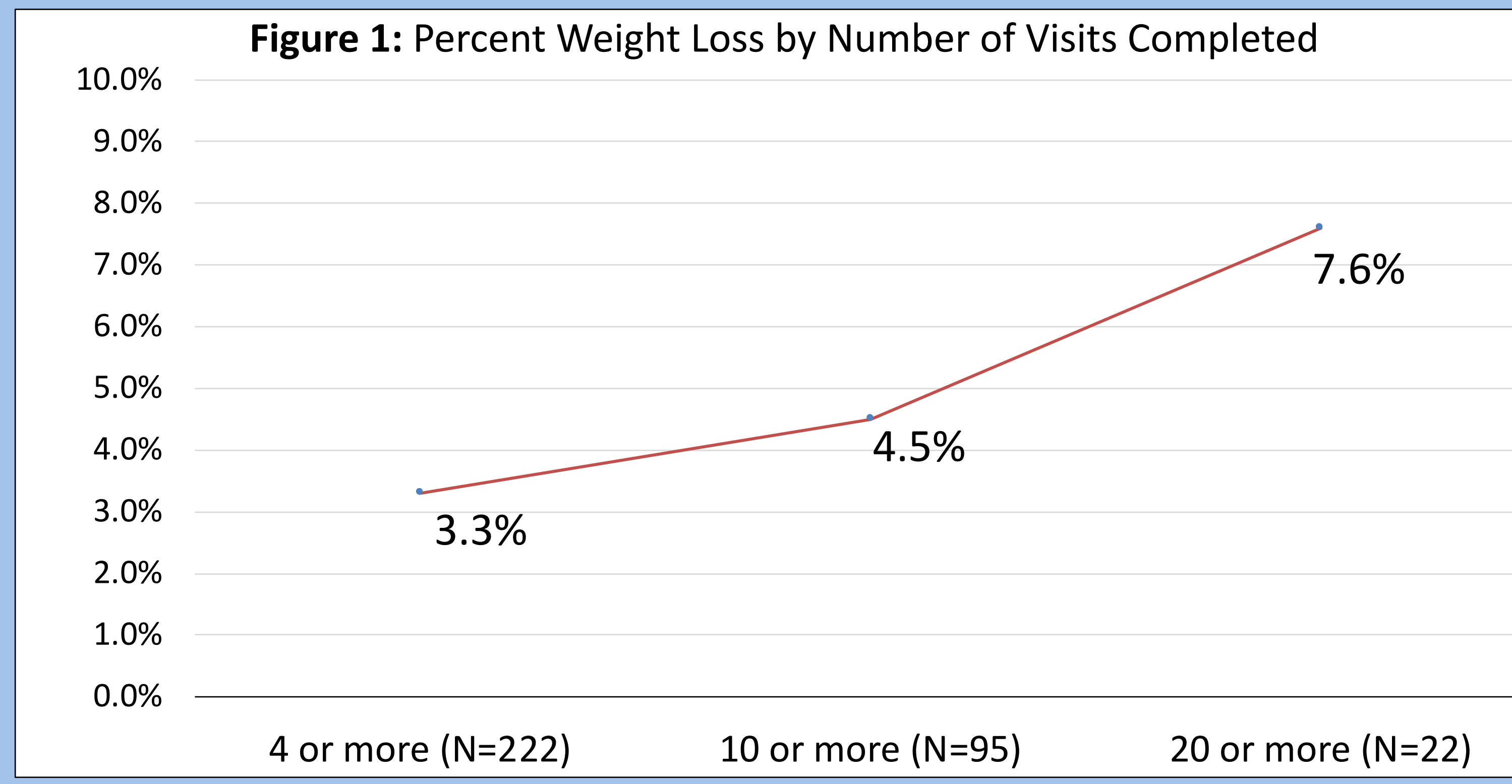
## Program Evolution

- Phase 1** (September 2015 – June 2016):
- ❖ 1 LCSW provided individual counseling, 6 hours/week (open to 25% of patients)
- Phase 2** (July 2016– April 2017):
- ❖ Involved MSW interns and PM residents to increase capacity (open to all patients)
  - ❖ Added option for 6-week group counseling
- Phase 3** (May 2017 - August 2018):



## Results

- Reach:**
- ❖  $>2700$  completed sessions since inception
  - ❖  $>500$  unique patients served
  - ❖ 222 patients have completed  $\geq 4$  visits
- Demographics:** See Table 1
- Patients who completed  $\geq 1$  visit and had at  $\geq 2$  weight values (N=485):**
- ❖ Average weight loss was 2.5%
  - ❖ 26% achieved clinically significant weight loss, defined as  $\geq 5\%$  of initial weight
- Patients who completed  $\geq 4$  visits (N=222), greater weight loss observed with greater number of visits (Figure 1):**
- ❖ 32% achieved clinically significant weight loss
- Blood Pressure for patients starting with BP  $\geq 140/90$ :**
- ❖ Average decrease in SBP was 14.7mmHg and DBP was 9.8mmHg at 6 months (N=21)
  - ❖ Average decrease in SBP was 14.3mmHg and DBP was 11.7mmHg at 18 months (N=20)
- Financial Sustainability (See Figure 2):**
- ❖ Building self-sustaining program through patient cost-sharing and billing receipts

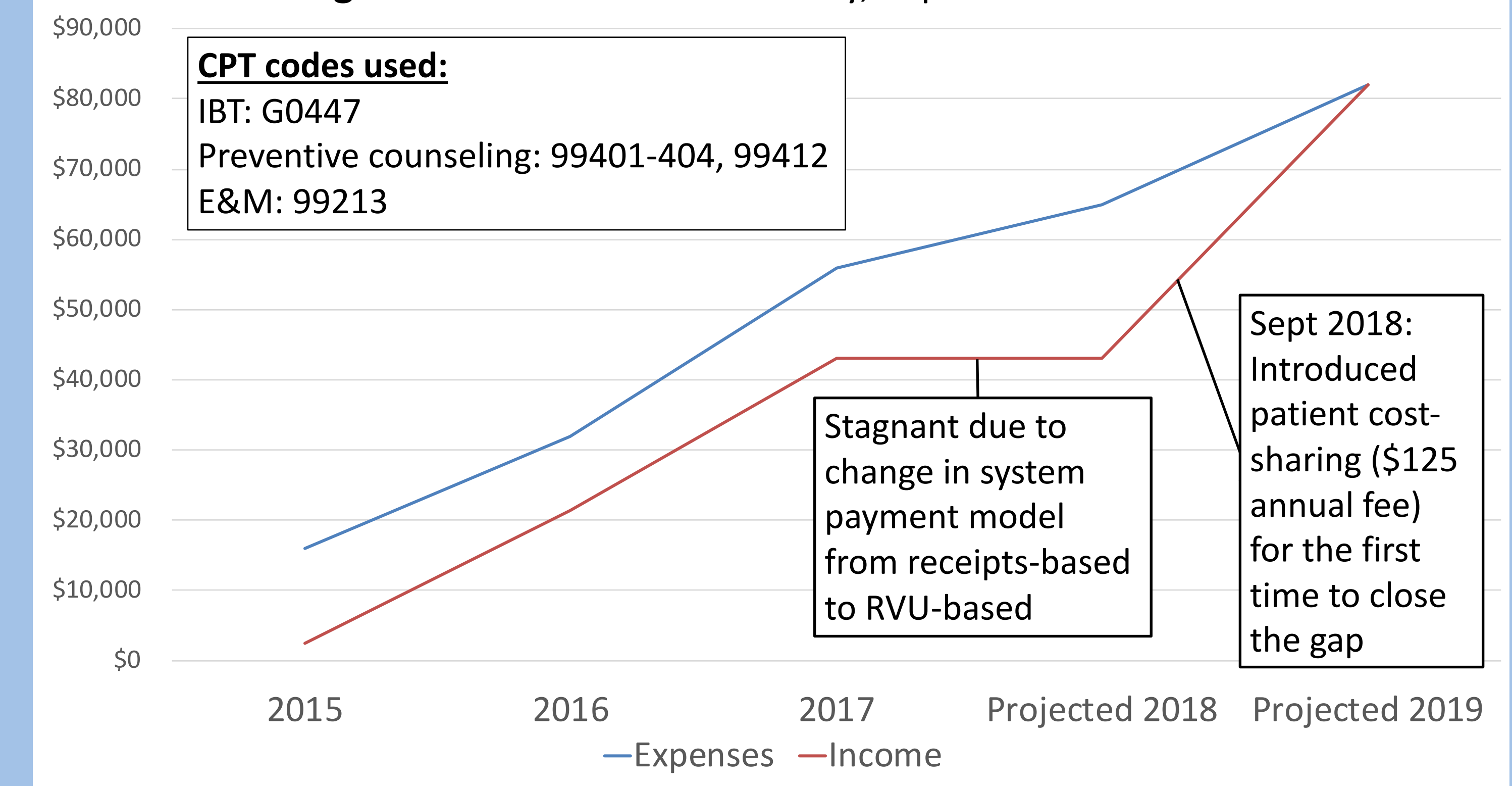


## Results (continued)

**Table 1: Demographics (N=505)**

Category	Sub-category	Percentage
Race	Black/African American	45%
	White/Caucasian	45%
	Other/unknown	10%
Ethnicity	Non-Latino/Hispanic	91%
	Latino/Hispanic	5%
	Other	4%
Gender	Female	78%
	Male	22%
Comorbidities	Hypertension	55%
	Diabetes Mellitus, Type 2	25%
	Depression	25%
	Obstructive Sleep Apnea	22%
	Osteoarthritis	20%
	Polycystic Ovarian Syndrome	5%

**Figure 2: Financial Sustainability, Expenses vs. Income**



## Discussion

This evidence-based interdisciplinary, intensive behavioral weight loss program

- ❖ Helps many patients achieve clinically significant weight loss
- ❖ Improves BP among those with uncontrolled hypertension
- ❖ Augments PCPs' ability to treat obesity
- ❖ Will be financially viable with introduction of minimal patient cost-sharing

Limitations include

- ❖ Lack of standardization in practices hampers efforts to collect data
- ❖ Change in data collection over time complicates reporting trends
- ❖ Great variability in patient retention
- ❖ Demographics not fully representative of PCMH patients

Next steps:

- ❖ Increase financial sustainability
- ❖ Increase reach and scalability
- ❖ Diversify population served – Latino population, men

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References: <sup>1</sup> Decision Memo for Intensive Behavioral Therapy for Obesity (CAG-00423N) <https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?&NcaName=Intensive%20Behavioral%20Therapy%20for%20Obesity&bc=ACAAAAAIAAAA&NCAId=253>  
<sup>2</sup> Final Recommendation Statement: Obesity in Adults: Screening and Management. U.S. Preventive Services Task Force. December 2016. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/obesity-in-adults-screening-and-management>