



Advancing High Performance Health

Obesity Care Model  
Collaborative: Case Study

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*Cleveland Clinic*



## Organizational Profile

Located in Cleveland, Ohio, Cleveland Clinic is a nonprofit, multispecialty academic medical center that integrates clinical and hospital care with research and education. Cleveland Clinic was founded in 1921 by four renowned physicians with a vision of providing outstanding patient care based upon the principles of cooperation, compassion, and innovation. Today, with more than 1,400 beds on its main campus and 4,450 beds system-wide, Cleveland Clinic is one of the largest and most respected hospitals in the country. It is ranked the number two hospital in the nation. There are 34 full-service family health centers and a community clinic. Cleveland Clinic is structured as a group practice. The doctors on staff are salaried employees and are not in private practice. They pool their wisdom and expertise for the benefit of the patient and the community. The practice is structured to complement the group practice model. By combining specialties surrounding a specific organ or disease system into integrated practice units called institutes, Cleveland Clinic can better provide collaborative, patient-centered care.

Cleveland Clinic Community Care (4C) centralizes departments that provide coordinated patient care across the practices of adult primary care, geriatrics, pediatrics, wellness, express care, home care, and hospital care. 4C strives to improve population health by providing comprehensive, coordinated care for patients. At the same time, research is focused on improving outcomes in the care of chronic diseases, prevention, better care processes, and outcomes for hospitalized patients, as well as advancing the science of infection diagnosis and management, particularly in medically or surgically complex patients.

## Pilot Profile

Like many institutions, Cleveland Clinic has faced multiple challenges in addressing the obesity epidemic. These challenges include the fact that many physicians believe that treatment is ineffective, discouraging medical approaches. Despite having a highly rated bariatric surgery department, not all eligible patients are referred because physicians are often unfamiliar with weight-loss treatments and feel unequipped to discuss them. Patients with a high bodyweight set point who do lose weight often find maintenance of reduced weight difficult. Thus, physicians often focus on patients' other physical health conditions first and neglect to address patients' obesity.

## Acronym Legend

**4C:** Cleveland Clinic Community Care

**BMI:** Body Mass Index

**BPA:** Best Practice Alert

**PDSA:** Plan, Do, Study, Act

**SMA:** Shared Medical Appointment

Cleveland Clinic wanted to overcome these challenges using a multipronged approach that dovetails with its focus on population health. This includes creating educational resources around obesity treatment and management for primary care providers, and heightening knowledge of appropriate referrals to specialists, including behavioral health and weight-management. Further, rather than focusing on a disease-specific approach, Cleveland Clinic wanted to take a whole-person approach. This meant creating integrated shared medical appointments at a pilot ambulatory care clinic site. This way, Cleveland Clinic addressed not only the proximate causes of obesity (e.g., diet and exercise) but also the root-causes, including sleep, stress, social needs, behavioral health problems, and physical disabilities.

## Executive Summary

Joining AMGA's Obesity Management Learning Collaborative was part of Cleveland Clinic's efforts to put patients first. Given the importance of treating obesity, Cleveland Clinic wanted to increase access to weight management services in the primary care setting. Thus, Cleveland Clinic set out to develop an integrated weight management shared medical appointment (SMA) at the pilot site. The SMA is promoted through primary care physicians at Lorain and lasts four sessions. These efforts successfully increased Cleveland Clinic's percentage of patients with normal weight at the pilot site from 10% at baseline to 15% at the end of the project.

## Obesity Program Goals and Measures of Success

There were four main goals that spanned across intervention levels. At the community level, the goal was to identify a visible space and provide patients with educational material regarding community services. At the organization level, the

goal was to define and implement a workflow to add, when appropriate, a diagnosis of obesity to the problem list. For the care team, the goal was to build and implement a SMA for weight management at the pilot site. Finally, for the patient/family Cleveland Clinic wanted to develop a way to integrate a patient/family advocate role into the care team. Biweekly meetings were held during the project period to track progress toward goals, discuss challenges, and identify solutions.

## Population Identification

The pilot site was a family health center with a committed and enthusiastic physician and administrator to lead the program. The entire primary care practice was the patient population of interest. However, only patients with a body mass index (BMI)  $\geq 30$  plus a physician referral were eligible for the SMA. These patients were identified through the best practice alert (BPA) that was implemented into the electronic health record.

## Interventions

### Background

The team used a combination of gap analysis and PDSA (Plan, Do, Study, Act) cycles to develop and refine interventions. While the original core team was small, it quickly expanded to include caregivers from a variety of backgrounds, including physicians, administrators, nurses, physical therapists, dietitians, health coaches, medical assistants, clerical staff and researchers. Together, the team identified important gaps, including providing education material to patients, the need for SMAs to increase access and create a patient and family champion role.

### Community

**Intervention:** Identify a space in visible locations to illustrate current community services available to patients.

Identifying a location and obtaining a shelf unit to display the educational materials was quite a challenge. However, after obtaining the leadership buy-in to display the educational materials, the uptake of materials was quite high. One team member counted the number of brochures taken to measure the success of the intervention. Patients also reported appreciation for the educational material.

### Organization

**Intervention:** Build an Epic BPA to identify obesity.

Cleveland Clinic implemented a BPA into Epic to alert physicians when a patient had a BMI  $\geq 30$  and did not have a documented diagnosis of obesity. To increase use of the BPA, the team educated physicians about the BPA and obtained buy-in to add obesity diagnosis when appropriate during the office visit. Finally, physicians agreed to refer patients with a BMI  $\geq 30$  to the shared medical appointment.

### Care Team

**Intervention:** Develop and implement a shared medical appointment.

The SMA development process was truly a team effort. The SMA paired providers with a certified diabetes educator, dietitian, physical therapist, and health coach to facilitate a group appointment with patients. The educational material focused on treating obesity and the chronic conditions associated with obesity. Challenges in implementing the SMA included finding space, the appropriate chairs for the space, and an available computer. Workflows were developed for scheduling the patients for the SMA, as well as appropriately documenting the care provided during the SMA. These challenges were discussed during the biweekly meetings and the team worked together to improve the process. The SMA was ultimately so successful that a second one was implemented.

### Patient/Family

**Intervention:** Identify a patient/family advocate to include in the care team.

Cleveland Clinic worked with its HealthCare partners' liaison to identify patients interested in partnering. In total, two HealthCare partner meetings were held and the HealthCare partners were invited to the AMGA group meeting. (One of them attended.) The HealthCare partners provided positive feedback of the current content and flow of the SMAs and several suggestions were identified by the HealthCare partner and are being considered. The HealthCare partners' feedback was very informative and Cleveland Clinic incorporated their suggestions into its SMAs.

## Outcomes and Results

The biweekly meetings were a vital time for the team to discuss process measures and results. These included the number of patients attending the SMA, and the number of brochures taken. SMA patient surveys were used to gauge patient satisfaction and the quality of care provided and identify areas of improvement. To identify the impact of interventions on patient outcomes, Cleveland Clinic reviewed the data submitted to AMGA. For example, Cleveland Clinic successfully increased the percentage of patients with a diagnosis of obesity from 39% to 55% among patients with class 3 obesity.

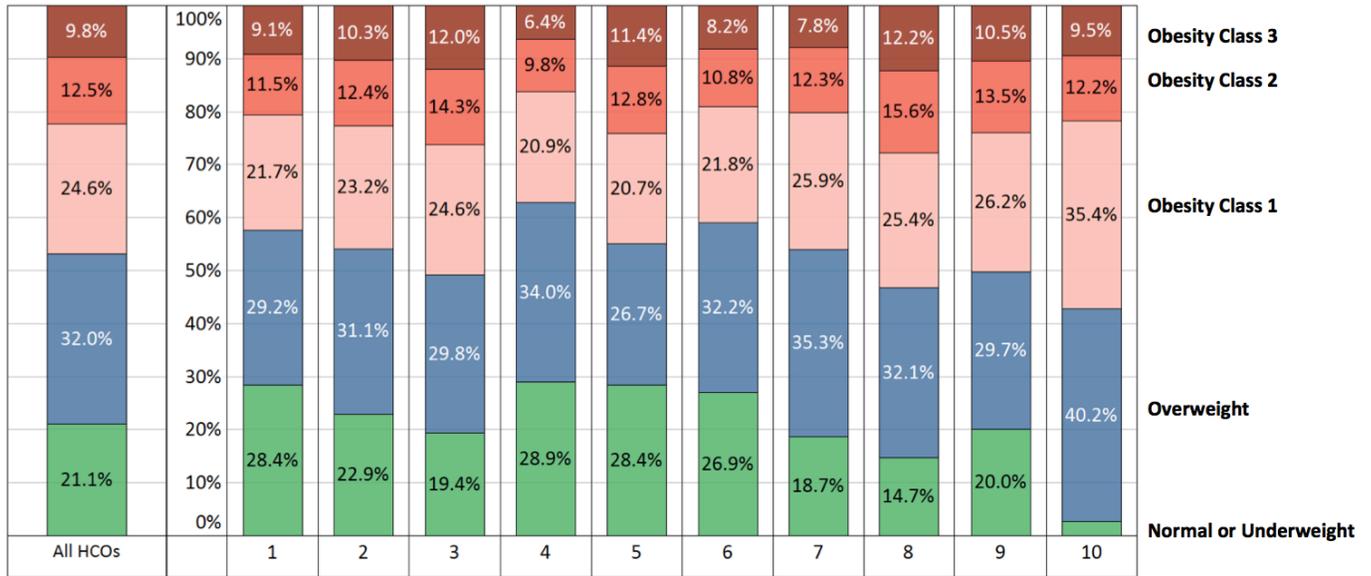
## Lessons Learned and Ongoing Activities

Overall, this has been a challenging and rewarding experience. The interventions developed—including displaying educational materials, identifying a patient/family advocate to be a part of the care team, and implementing an obesity BPA—will be sustained. Cleveland Clinic will be expanding the number of SMAs offered at the pilot site because the demand was quite high and the patients very much enjoyed the SMA. One of the major lessons learned through this process was the importance of a diverse and committed team to implement the interventions. Biweekly team meetings were essential to overcome unforeseen challenges and improve the interventions to make them a success.

## Final Data Report from AMGA Obesity Care Model Collaborative

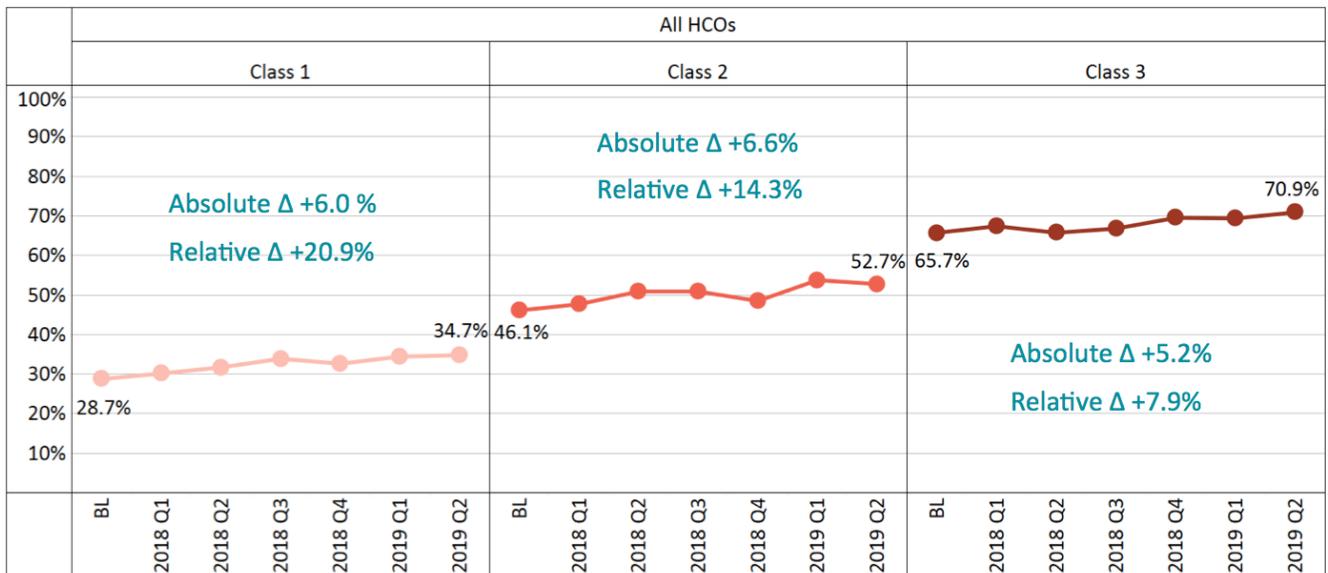
### Prevalence of Overweight and Obesity: 2019 Q2

Targeted clinics for OCMC (~122,000 total patients)



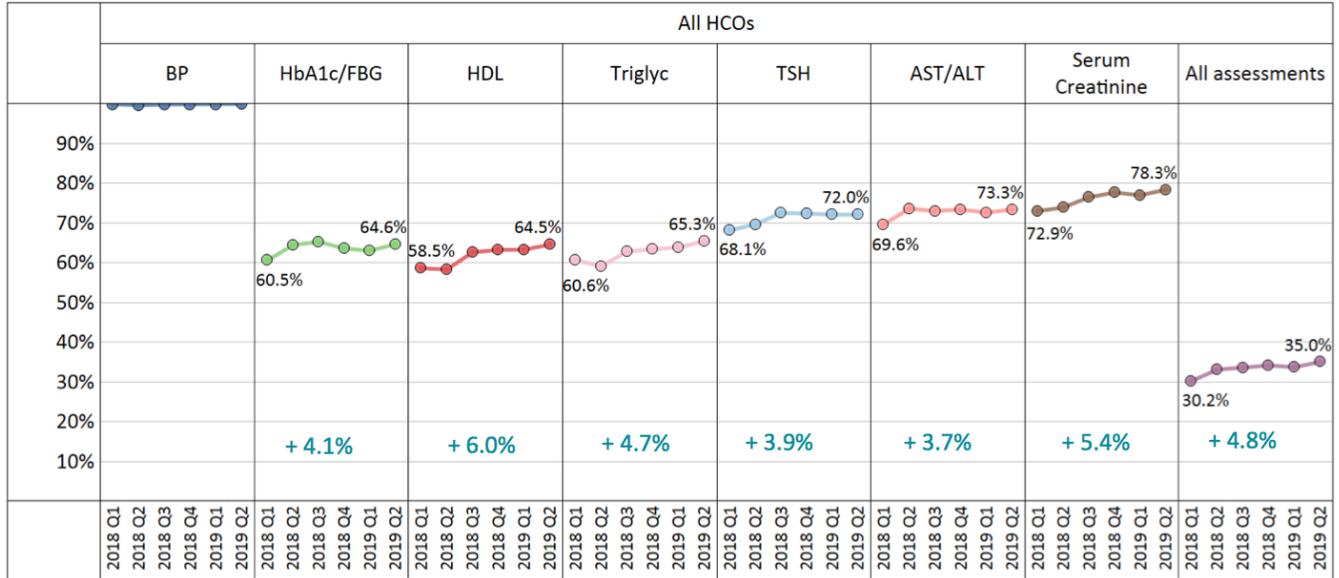
### Collaborative Performance: Documentation of Obesity Diagnosis

- Proportion of patients with BMI ≥ 30 who have a documented obesity diagnosis in Targeted Clinics
- ICD10: E66.01, E66.09, E66.2, E66.8, E66.9



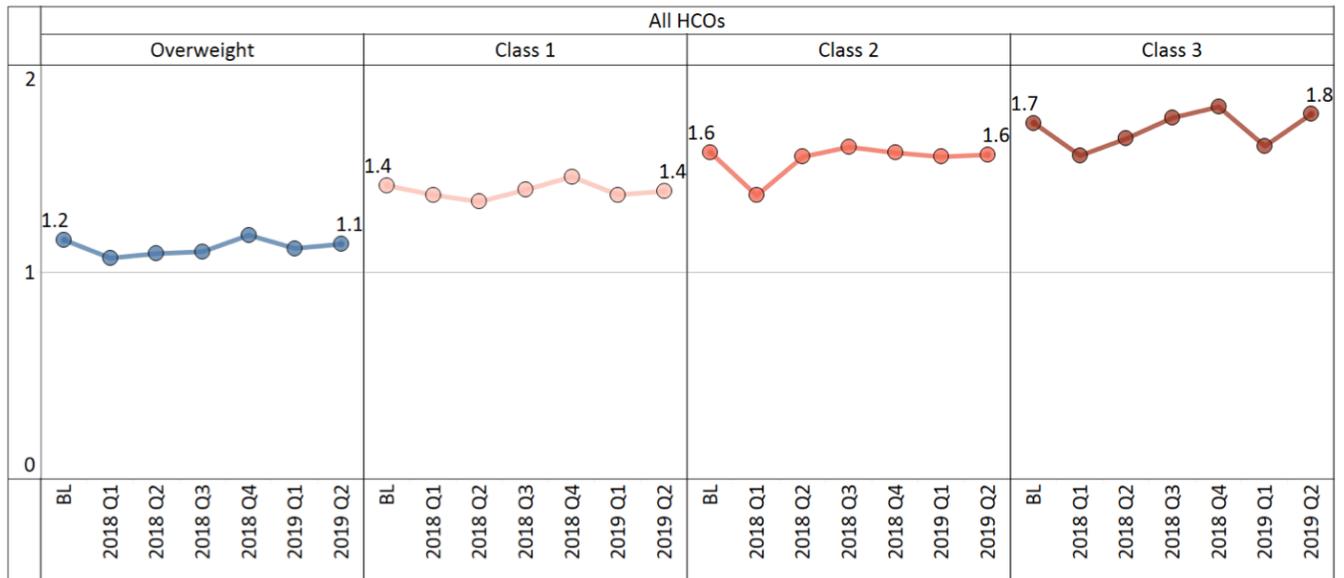
## Assessment for Obesity-Related Complications

- Proportion of patients (BMI ≥ 25) with select laboratory assessments by reporting period, in Targeted Clinics
- ALL assessments remain low but overall improvement since 2018 Q1
- HDL and Serum Creatinine demonstrated some of the largest absolute improvements; 6% and 5%, respectively



## Average Number Obesity-Related Complications Per Patient

- Average Number of obesity-related complications per patient (BMI ≥ 25) by weight class and reporting period
- 6 complications: Type 2 Diabetes, Dyslipidemia, Hypertension, Obstructive Sleep Apnea, Osteoarthritis, Nonalcoholic Fatty Liver Disease



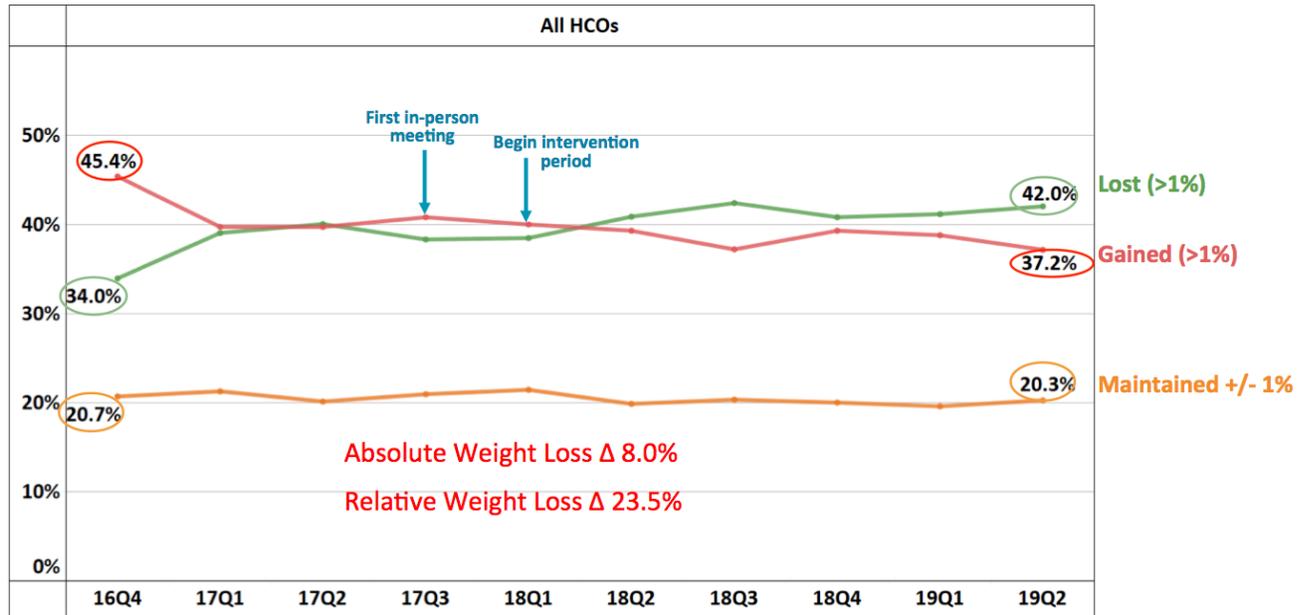
## Obesity-Related Problem Scale

HCO	Pre-Surveys	Post-Surveys	Response Rate	Met Goal Pre	Calculated $\Delta$
9	81	43	64%	Y	Y
5	19	19	24%	N	Y
3	44	7	54%	N	N
8	53	8	60%	Y	N
4	155	NA	73%	Y	N
10	96	NA	98%	Y	N
2	53	NA	100%	Y	N

## Obesity and Weight Loss Quality of Life Instrument

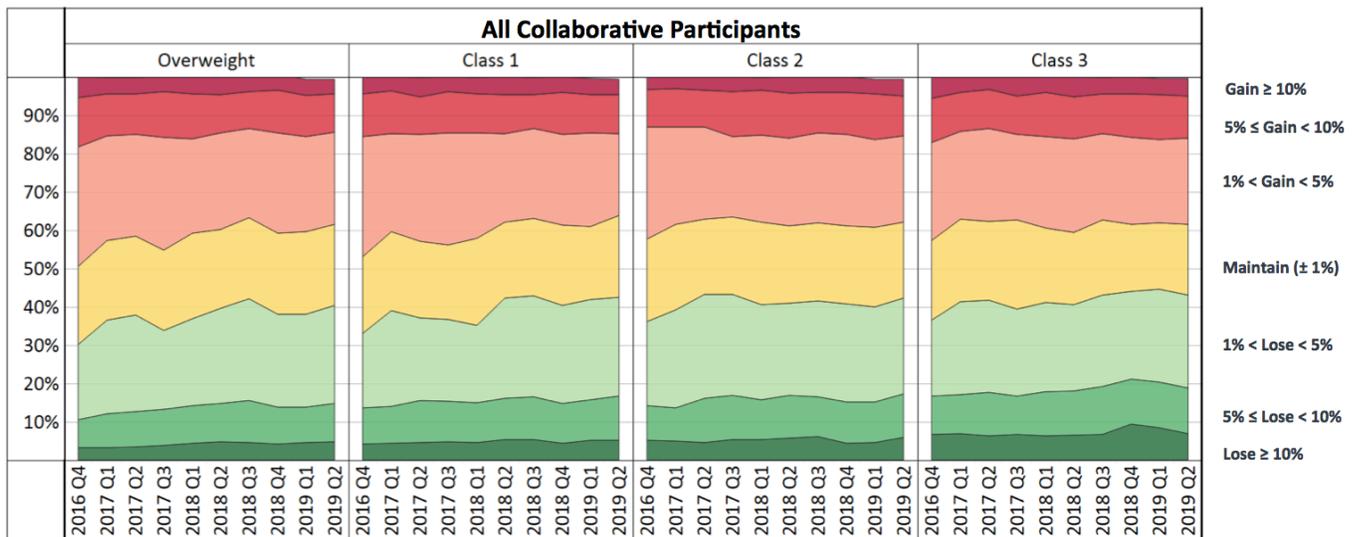
HCO	Pre-Surveys	Post-Surveys	Response Rate	Met Goal Pre	Calculated $\Delta$
9	86	44	68%	Y	Y
5	19	19	24%	N	Y
3	44	7	54%	N	N
4	155	NA	73%	Y	N
10	96	NA	98%	Y	N
2	53	NA	100%	Y	N

## Proportion of patients (BMI ≥ 25) by weight change category and reporting period



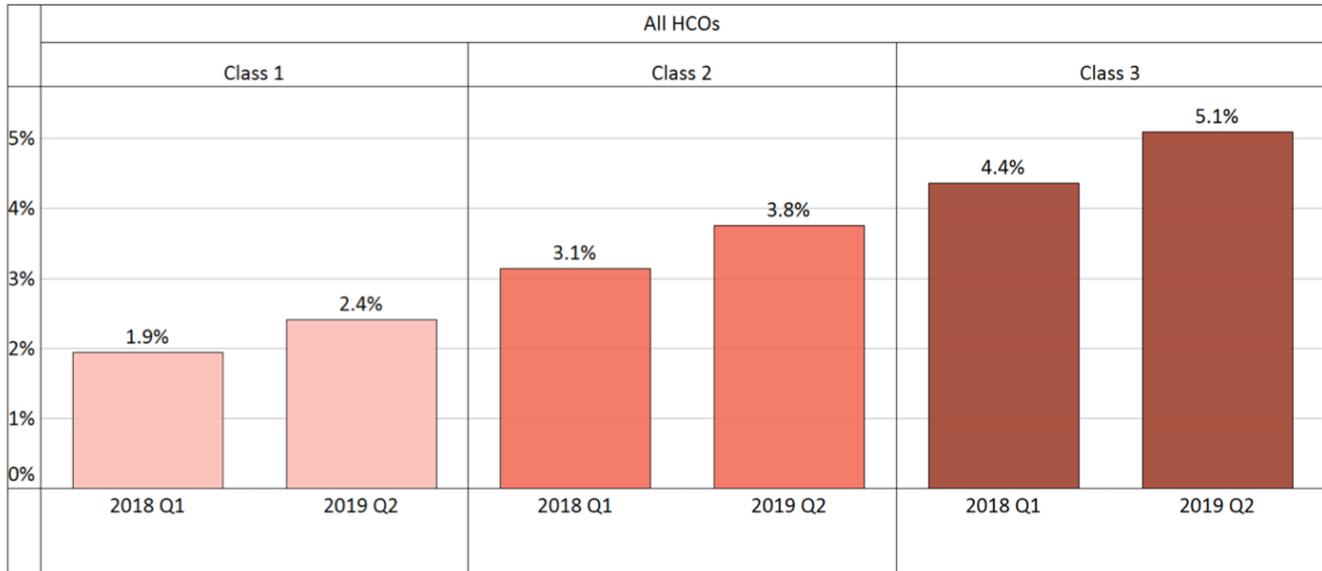
## Measure 6: Proportion of Patients by Percent Weight Change

- By reporting period, weight class and 7 weight categories



## Prescribing Anti-Obesity Medications

- Proportion of patients seen during the time period who have an active Rx for an anti-obesity medication
- Patient-weighted average across all organizations



## Project Team

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