

Improving Obesity Outcomes in an Academic Clinic: A Quality Improvement Study

Anoop Mathew, MD; David Samrah, MD; Jahanavi Ramakrishna, MD; Aman Saleemi, MD; Emecheta Ajaero, MD; Hansan Ilyas, MD; Javaria Asif, MD; Vesna Tegeltija, MD; Zain Kulairi, MD

Department of Internal Medicine, Ascension Providence Rochester Hospital/Wayne State University School of Medicine, Rochester, Michigan

Introduction: Obesity is a chronic disease that affects more than 40% of the population in the United States. The prevalence of severe obesity doubled in the past two decades. Primary care providers are usually the first to screen patients for obesity. According to a 2018 study. Only 55% of adults with obesity were reported to have received the diagnosis of obesity and less than a third of the patients followed up for an obesity-specific visit. The management of obesity is multifactorial with lifestyle modifications and pharmacological and psychological therapies. In our academic clinic, there was a gap in comprehensive satisfactory obesity counseling, which addresses lifestyle modifications and adjunctive pharmacological therapies. Addressing this gap with an obesity-specific visit helps clinicians to discuss available options to manage obesity. Improvement in body weight is linked with improved control of hypertension, diabetes, and heart disease leading to improved health outcomes.

Aim: To improve obesity counseling rates and usage of standardized obesity templates in an academic clinic by 25% in 3 months.

Method: We used the IHI model of improvement using the plan-do-study-act framework to test changes on a small scale and guide the quality improvement study. To better address our aim, we divided our QI project into 2 cycles. For PDSA-1, a thorough chart search for the last 3 months was done to calculate a baseline obesity counseling rate. A root-cause analysis was completed with multi-disciplinary input from faculty, clinic staff, and residents, and several existing barriers that preclude satisfactory obesity counseling were identified. Proposed interventions corresponding to each root cause were plotted on an impact effort matrix. Interventions with the least effort and the most impact were selected as proposed solutions. These included creating a short education session on obesity management and creating an obesity counseling template. Post-intervention, the obesity counseling rates and use of the template were recorded on a run chart. For PDSA-2, we introduced an obesity assessment and plan (A/P) template, with the goal to incorporate all aspects of obesity management, i.e., lifestyle modification, diet, exercise, and screening for disease related co-morbidities.

Results: Satisfactory obesity counseling prior to intervention was 32%. The first PDSA cycle post-intervention showed an improvement in the obesity counseling rates to 56%. About 20% of the clinic notes for the counseled patients used the proposed template. About 8% of the counseled patients agreed to a separate obesity-specific visit. The second PDSA cycle showed 20.1% usage of the standardized A/P plan template. In the group that the template was used, there was 63.6% reduction in BMI; compared to 39.4% BMI reduction in group without template usage. (OR= 2.34, p=0.034.

Next steps: We noted an overall improvement in the obesity counseling rates after our interventions. However, we noticed that the A/P template usage did not meet our goal of 25% usage. We will conduct multidisciplinary team meetings to understand measures that can be undertaken to improve usage of A/P template. Patients will also be encouraged to have an obesity-specific visit.