



Telehealth: Increasing Access to Bariatric Surgery in Minority Populations

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Obesity prevalence has risen dramatically worldwide during the last decades. Recent data from the National Health and Nutrition Examination Surveys showed that over 40% of the adult population is obese in the USA, with non-Hispanic black and Hispanic adults having the highest prevalence of obesity [1]. Obese individuals have a significantly higher risk of hypertension, diabetes, coronary artery disease, stroke, and cancer among other health problems [2]. Compared to medical treatment, bariatric surgery has shown greater likelihood of remission of obesity-related comorbidities [3]. Therefore, improving access to bariatric surgery programs is a critical public health matter.

The COVID-19 pandemic has affected many aspects of the healthcare system. The reduction of face-to-face clinical encounters (whenever possible) along with the development of telemedicine/telehealth platforms was one of the main strategies adopted by many institutions. Interestingly, the “forced” implementation of telemedicine might have helped improving care of patients in different clinical and surgical specialties. Specifically in bariatric surgery, multiple programs adopted the use of telemedicine for delivering healthcare to their patients, and both patients and providers exhibited high levels of satisfaction with this new care modality. For instance, in a recent survey study conducted by a weight management program, over 90% of patients reported feeling comfortable interacting with their provider through telemedicine, around 73% were satisfied with their

visit, and 85% of providers reported spending the same or less time as compared to in-person visits [4].

The traditional model requires patients to travel to health-care facilities in order to seek care. For bariatric surgery candidates, multiple appointments with different members of a multidisciplinary team are often needed during the process (surgeon, nutritionist, dietician, psychologist, etc.). Unfortunately, access to care can be threatened by long travel distances to the facility, lack of logistic resources (e.g., transportation), or socio-economic factors (e.g., inability/fear to obtain time-off from work). In fact, previous research has shown that greater travel distance to the follow-up center was one of the main factors associated with attrition in bariatric aftercare [5]. The telemedicine approach is indeed attractive because it can potentially save time and money to patients while helping overcoming common barriers to care.

In April 2020, due to the COVID-19 pandemic, the University of Illinois at Chicago implemented the telehealth clinics service for patients seeking bariatric surgery. Health-care providers were trained for obtaining competency in delivering care through this modality, and administrative support was available to coordinate and assist telehealth appointments. During April, May, and June, only telehealth visits were allowed. After that, a hybrid system with both telehealth and in-person visits was available. In our health-care network, patients are usually referred to the bariatric surgery team by other providers (mainly primary care physicians). However, no-show rates for the first consultation have been historically relatively high. Interestingly, we noticed that the monthly no-show rates for the first visit considerably declined after the implementation of telehealth (from 39.3 to 16.6%) (Fig. 1). While we are aware that several factors might have played a role in this decline, we strongly believe that the alternative of telehealth visit contributed to the higher show-up rates. For instance, we have noticed in many opportunities that patients were taking a brief break from the work duties or were taking care of their kids during consultations.

Key points

- No-show rates for consultation declined after the implementation of telehealth.
- Telehealth is a powerful tool for delivering effective obesity care.
- Telemedicine should remain as a care option even when the pandemic subsides.

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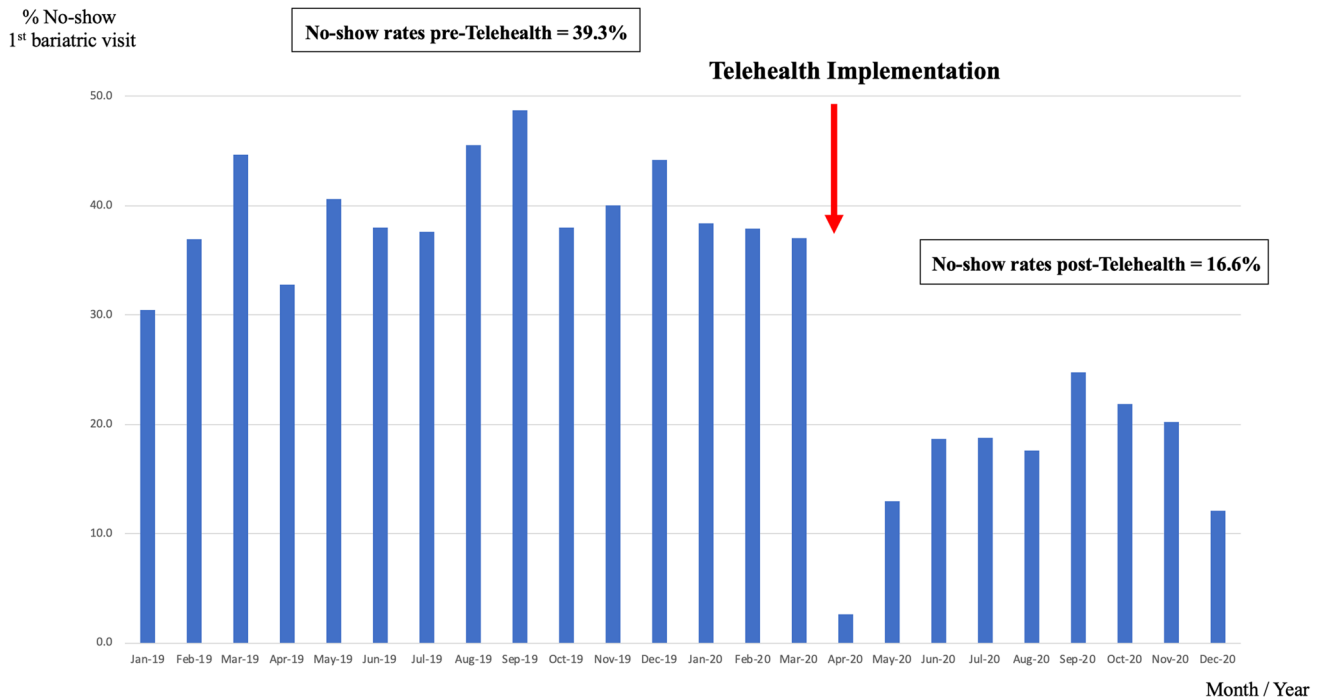


Fig. 1 Monthly no-show rates for the first bariatric surgery consultation at the University of Illinois at Chicago

Access to a computer or mobile device with internet connection and the knowledge needed to use the technology are potential barriers for the use of telehealth. A combination of telemedicine and in-person visit options is thereby a reasonable strategy. Remarkably, our patients' population is mostly represented by African Americans (50%) and Hispanics (20%) [6], who often suffer from healthcare disparities [7]. Even among this vulnerable population, our telehealth platform was associated with increased show-up rates. A recent study on telehealth utilization among patients with obesity showed that older age was inversely associated with telemedicine use and non-Hispanic black were more likely to use telehealth compared to non-Hispanic white [8]. The young mean age of our patients (41.6 years) [6] might also be related to the high adherence to telemedicine.

Considering that less than 1% of the patients who are eligible for weight loss procedures undergo bariatric surgery, and around 50% of patients who initiate the process in a bariatric program do not undergo surgery [9], strategies to improve access to bariatric surgery are much needed. The broad emergence of telemedicine during the COVID-19 pandemic is a great opportunity to explore how the adoption of newer technologies can facilitate access to care. Infrastructure support (building and implementing operational systems), telehealth training for providers, and constant analysis of potential patient-related barriers for the use of telemedicine seemed to be critical to obtain a successful telehealth practice [10].

In our program, implementation of telehealth was associated with a remarkable decrease on the no-show rates of first bariatric surgery consultations. Telehealth is a powerful tool for delivering multidisciplinary and effective obesity care. Therefore, telemedicine visits should remain as a care option even when the pandemic subsides. Further research should be focused on how to effectively embrace, maintain, and enhance telehealth medicine in bariatric surgery.

Declarations

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was waived due to the retrospective nature of the study.

Conflict of Interest The authors declare no competing interests.

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