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Original article

Patient perspectives on emergency department self-referral after bariatric surgery

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Abstract

Background: Reducing avoidable emergency department (ED) visits is an increasingly important target of quality improvement and cost containment efforts in bariatric surgery. Administrative and clinical registry data provide an incomplete picture of the factors contributing to postoperative ED utilization. Patient-centered interviews can help identify intervention opportunities.

Objectives: We sought to understand the circumstances surrounding patient self-referral to the ED after elective, primary bariatric surgery.

Setting: A quality improvement collaborative in Michigan.

Methods: A prospective review of clinically abstracted data and patient interviews was completed across 40 hospitals participating in a statewide quality improvement collaborative. Trained nurses collected data on the circumstances surrounding patients' 30-day postoperative ED visits using a previously validated interview tool. Over a year, 201 of 633 total ED visits met the inclusion criteria, with 78% of those patients being interviewed.

Results: The most common reported chief complaints were abdominal pain and nausea/vomiting. Patients reported high compliance with provider-driven perioperative measures to reduce ED visits. One third of patients stated urgency as the reason for not contacting their surgeon prior to their visit. A majority of patients believed their ED visit was both necessary and unavoidable.

Conclusions: Most patients experienced non-life-threatening symptoms but believed their concerns required immediate medical attention in an ED. Patients did not seek lower acuity alternatives despite the increasing availability of these lower cost options. Urgent care centers are one practical alternative for patients who need expeditious professional evaluation. Focused, patient-centered education and promotion of appropriate lower acuity options may decrease nonurgent ED utilization among postoperative bariatric patients. (Surg Obes Relat Dis 2018;▮:00–00.)

Keywords: Bariatric surgery; Emergency department visits; Patient perspective; Nonurgent ED visits

Bariatric surgery is a safe procedure with less than 3% of patients experiencing a serious complication within 30 days of surgery [1]. Despite low complication rates, the 30-day unplanned emergency department (ED) visit rate following surgery is widely variable across hospitals, with rates as high as 11%, but only 35% of visits result in a readmission [2]. ED visits are costly in both time and

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resources for patients, providers, and payers. A subset of these visits may be described as nonurgent and are potentially preventable. Nonurgent EDz visits can lead to serious issues, including overcrowding of EDs, diminished patient safety, and concerns for public health [3]. Additionally, the average cost of an ED visit for an insured patient is $667, with an average total visit time of 2.5 hours, while a visit to a lower acuity setting such as an urgent care center will cost a patient $60 and an average total visit time of 60 minutes [4]. A recent study estimated that $4.4 billion could be saved annually if the estimated 10% to 30% of nonurgent ED visits were managed in lower acuity facilities, such as primary care offices, clinics, and urgent care centers [5].

Recent work has attempted to understand and reduce preventable nonurgent ED visits and readmissions [2,6–8]. However, a unified framework has yet to be established. Examples of interventions that health systems and payers have implemented include patient education, outpatient follow-up, and ensuring proper medication adherence [9]. Despite these efforts, ED visit rates have continued to rise [10]. A recent study analyzed the efficacy of such perioperative interventions among postoperative bariatric patients and found them to be ineffective [11]. One explanation could be that prior interventions have not adequately addressed the site-specific underlying causes that encourage patients to use EDs for nonurgent conditions. Administrative and clinical registry data have been used to examine this issue, but those data sources provide an incomplete picture of factors contributing to postoperative ED utilization. Patient interviews are a potential tool to complement this data and better understand the root causes of nonurgent ED self-referral. Defining postoperative bariatric patients' reasons for seeking care in an ED and outlining patient barriers to lower acuity care options are critical to solving this problem.

In this context, using patient interviews and clinical registry data from a statewide quality improvement collaborative, we sought to understand the specific circumstances surrounding patient self-referral to the ED after elective, primary bariatric surgery.

Methods

We performed a descriptive, prospective study using clinical registry data and semistructured patient interviews. We examined the underlying factors of patient self-referral to the ED following primary bariatric surgery and attempted to identify common barriers that prevent patients from using lower acuity care options.

Data sources

The Michigan Bariatric Surgery Collaborative (MBSC) is a Blue Cross Blue Shield of Michigan–funded quality improvement program that serves as an externally audited clinical registry for bariatric surgery patients. MBSC is a consortium of 40 hospitals and 75 surgeons performing bariatric surgery in Michigan. The MBSC enrolls approximately 7000 patients annually into its patient registry. The registry currently contains data on more than 70,000 patients since 2006 and includes a wide range of variables, such as demographics, preoperative comorbidities, perioperative processes of care, 30-day complication rates, and weight loss outcomes. Centrally trained data abstractors obtain patient data through chart abstraction using standardized definitions. External auditors from the Coordinating Center conduct annual audits of the data and the registry to ensure accuracy and completeness of registry data.

A patient questionnaire was designed and adapted from the Readmission Patient Interview used by the Cleveland Clinic (Appendix 1) [12]. The questionnaire was piloted at 3 sites with 14 patients who had an ED visit in the past 3 months, then revised and piloted a second time at an additional 4 sites with 22 patients, before being implemented collaborative-wide at all 40 MBSC sites. The trained nurse abstractors conducted both chart abstractions and patient interviews using a standardized protocol.

Study population

Patients undergoing elective, primary bariatric surgery between June 30, 2016 and July 1, 2017 were eligible for inclusion. We were interested in patients who had a 30-day ED discharge, had not called their surgical team prior to their ED visit, and had a bariatric-related reason for their visit. We defined a 30-day ED discharge as any ED visit within 30 days of surgical discharge in which the patient was not readmitted. We categorized patients who were admitted to the hospital to be a nonpreventable ED visit because they required more than ED care. Patients were categorized as self-referred if they did not call their surgical team about their bariatric-related concern before going to the ED. We were only interested in ED visits that were bariatric related. A minimum of 2 attempts were made to contact qualifying patients by phone. Phone interviews were conducted within 90 days of the operating room date.

Primary outcomes

The MBSC database was used to identify patients who met the inclusion criteria, obtain the date of the ED visit, and obtain the patients' type of insurance. Patient charts were used to determine ED treatments, diagnosis at