INTRODUCTION

- Bariatric surgery is a well-established means of treating obesity.
- The prevalence of 30-day readmission after bariatric surgery is 0.6% to 11.3%,1,2,3 with a single hospital readmission nearly tripling the average 180-day cost of the surgery.3
- Nausea, vomiting, dehydration and abdominal pain are the most common, but often preventable causes of readmission after bariatric surgery.4,5,6
- Understanding the underlying reasons for patients’ readmissions, associated factors, and exploring current or future interventions may enable healthcare providers to target their efforts to reduce avoidable early readmission rates.2
- Close postoperative follow-up may allow for early identification of high-risk patients and preventative interventions. Consequently, healthcare providers can deliver timely interventions, potentially reducing avoidable readmissions and reducing the economic burden on patients, hospitals, and payers.

OBJECTIVES/AIMS

This project addressed whether improved clinical follow up within a brief postoperative period of time was effective in reducing early bariatric readmission rates in a large urban hospital that is a Bariatric Center of Excellence. This 7-month QI project was conducted at New York-Presbyterian/Weill Cornell Medicine’s Section of GI Metabolic & Bariatric Surgery. There were 4 specific aims which are outlined below:

1) To develop a revised protocol for post-operative follow up of bariatric surgery patients
2) To pilot the revised protocol
3) To evaluate trends in 30-day readmission rate pre- and post-implementation of protocol
4) To develop recommendations based on pilot findings for revision of the existing postoperative follow up protocol and provide preliminary recommendations regarding care of post-op bariatric patients for dissemination to American Metabolic and Bariatric Surgery (ASMSB) as well as ASMSB’s Certified Bariatric Nurse (CBN) Certification Committee

METHODS

Project augmented follow up post-bariatric surgery: incorporated 2nd post-d/c call (7-10 days) by RD following routine 1st post-d/c call (1-3 days) by APP. Impact on readmission rate examined. 166 participants: men & women ≥18 years of age, status post primary bariatric surgery only.

Aim 1. Increased readmissions & need for protocol revision discussed at monthly meeting. Follow up meeting w/ APPs & RDs scheduled. Instructions re: protocol & script for RDs created & approved. Smart-phrase template created in Epic. 2nd post-d/c call schedule created.

Aim 2. APPs followed original protocol. 2nd post-d/c call conducted by RDs.
- Call duration – 3-5 minutes
- RD’s referred back to telephone encounters documented by APPs
- Use of interpreter documented where it applied
- RDs used same smart-phrase template in Epic
- RD’s routed any concerns through Epic to designated APP

Aim 3. Quality Specialist gathered data regarding 30-day calls & tracked 30-day readmission rates. Pre/post-protocol implementation readmission rates compared using 2-sample test of proportions for decrease in 30-day readmission rate. Monthly meetings with RDs & APPs; staff questionnaire completed at end of project for feedback.


REFERENCES


RESULTS

Proportion of patients experiencing post-surgery hospital readmission or ED visit evaluated across sample, stratified by procedure type & # of calls answered. Post-project readmission & ED visits were compared to NYP Semi-Annual Report (SAR) using 2-sample test of proportions. Downward trend in overall readmission rate for project participants (6.5% (SAR) vs. 4.8% (Project)). Readmission rate related to procedure type: 9.2% (SAR) vs. 7.1% (Project)/Roux-en-Y gastric bypass, & 5.4% (SAR) vs. 4% (Project)/sleeve gastrectomy. Patients who connected only on 2nd d/c had 0 readmission & post-operation ED visits.

Table 1: Readmission proportions

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<thead>
<tr>
<th>Characteristics</th>
<th>Project D/C</th>
<th>SAR D/C</th>
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</thead>
<tbody>
<tr>
<td>All patients</td>
<td>19/16</td>
<td>8/56</td>
</tr>
<tr>
<td>Post-discharge</td>
<td>12/10</td>
<td>6/61</td>
</tr>
<tr>
<td>Only connected on first call</td>
<td>5/5</td>
<td>3/4</td>
</tr>
<tr>
<td>Only connected on second call</td>
<td>7/10</td>
<td>3/16</td>
</tr>
<tr>
<td>Consecutive on both calls</td>
<td>6/6</td>
<td>3/4</td>
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Table 2: ED visit proportions

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Yale SCHOOL OF NURSING

Reducing Early Hospital Readmission Rates After Bariatric Surgery
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