CRITICAL MULTIDISCIPLINARY PROCESS DEBRIEF IMPROVES OPERATING ROOM EFFICIENCY DURING INTRODUCTION OF A NEW SURGICAL PROGRAM

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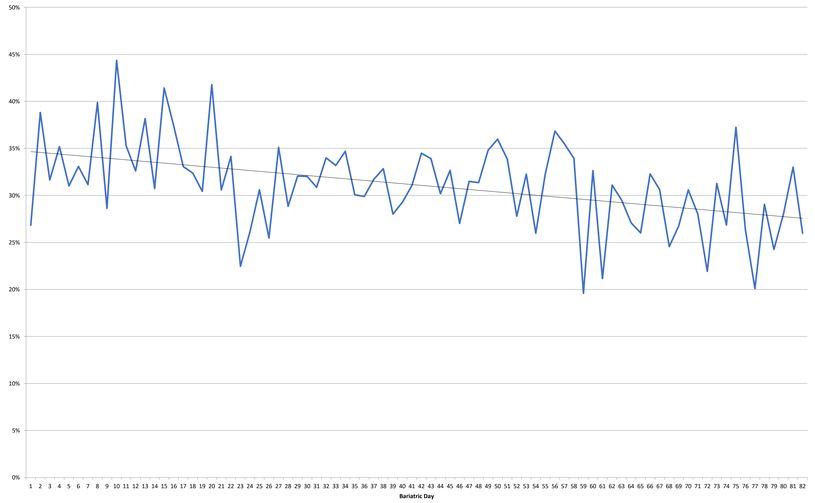
Introduction

A patient's journey through an elective surgical admission is a complex process involving multiple teams and disciplines. One area where multiple disciplines converge is the time spent in the operating room before and after the surgical procedure. With the introduction of a new bariatric surgery program in our institution, anticipating a learning curve associated with new equipment, procedures, positioning, induction technique, and patient flow, we incorporated a critical multidisciplinary process review during the surgical debrief at the end of each procedure. We hypothesized that progressive process improvement could be demonstrated by measuring non-operative room time as a surrogate of multidisciplinary OR efficiency

Methods

Planning for the introduction of a new bariatric program at our institution an extensive process of multidisciplinary input included nursing and hospital staff from all areas of care, surgeons, and an anesthesia champion. Patient flow and perioperative care was standardized, as was surgical equipment and technique. A simulated patient walkthrough or surgical "dress rehearsal" concluded preparations. Beginning with program launch, data was prospectively collected. For this assessment, the non-operative room time, representing the proportion of total room time excluding the incision to closure surgical time, was collected during the first 18-months of the program.

Non Operative Room Time %



Key Points

1- The use of a multidisciplinary approached, simulation-based debrief at the start of a new surgical program may aid in the efficiency of early learning.
2- With the use of the same multidisciplinary team the efficiency will improve over time.

Results

Two surgeons performed a total of 238 bariatric procedures comprising 200 laparoscopic Roux-en-Y gastric bypasses, 26 bypasses with other procedures, and 12 laparoscopic sleeve gastrectomies. Mean BMI was 47.1±7.4 kg/m^2. Mean skin to skin operating time was 116±28min for all procedures. As trainee involvement increased, the operating time for LRYGP alone increased slightly comparing the first 100 cases to the last 100 cases (109±19 vs. 119±26 min, p=0.002) while BMI did not change significantly (46.0±5.9 vs. 47.8±8.1 kg/m^2, p=ns). Mean daily non-operative room time was 30±6% of total room time. There was a significant downward trend in non-operative room time over the first 18 months (r=-0.45, p=0.035) with a 15% relative reduction between the first and last 100 cases.

Conclusion

During the introduction of a new bariatric surgery program, a critical multidisciplinary process debrief led to significant continuous improvement in operating room efficiency as measured by gradual decline in non-operative room time.

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