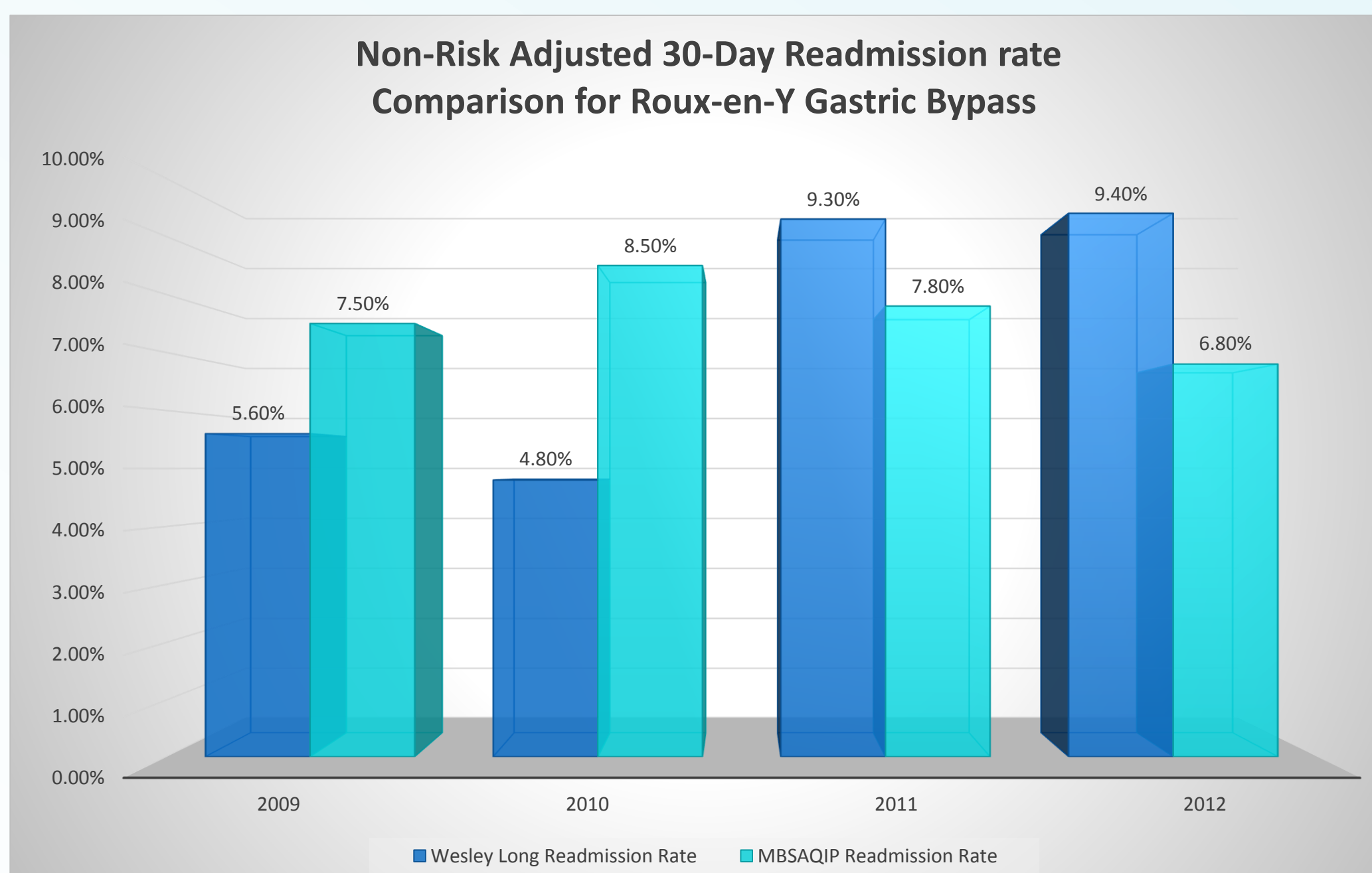


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## Introduction

Approximately 69% of the adult population in the United States is considered overweight or obese (Ogden, Carroll, Kit, & Flegal, 2014). As the predominance of obesity continues to rise, people with obesity are seeking surgical intervention to aid in weight loss. The subsequent increase in surgical weight-loss procedures has led to progressively high standards for quality outcomes such as 30 day readmissions, morbidity, and mortality to maintain insurance and national accreditation standards. In 2003, Wesley Long Hospital and a private surgical practice established a bariatric surgery program. In 2011 and 2012, the Wesley Long Bariatric Program exceeded the national database non-risk adjusted 30-day readmission rate for Roux-en-Y Gastric Bypass. The Wesley Long Bariatric Continuous Process Improvement (CPI) team, a multi-disciplinary team, set out to improve the 30-day readmission rates.



## Purpose

The CPI team posed the question: Could quarterly review of quality data with the multidisciplinary team, increasing patient education focused on the transition from liquids to solids, combined with utilization of standardized care plans, incentive spirometry use, and early ambulation decrease the 30-day readmission rate for Wesley Long Hospital's Bariatric Surgery program?



## Methods

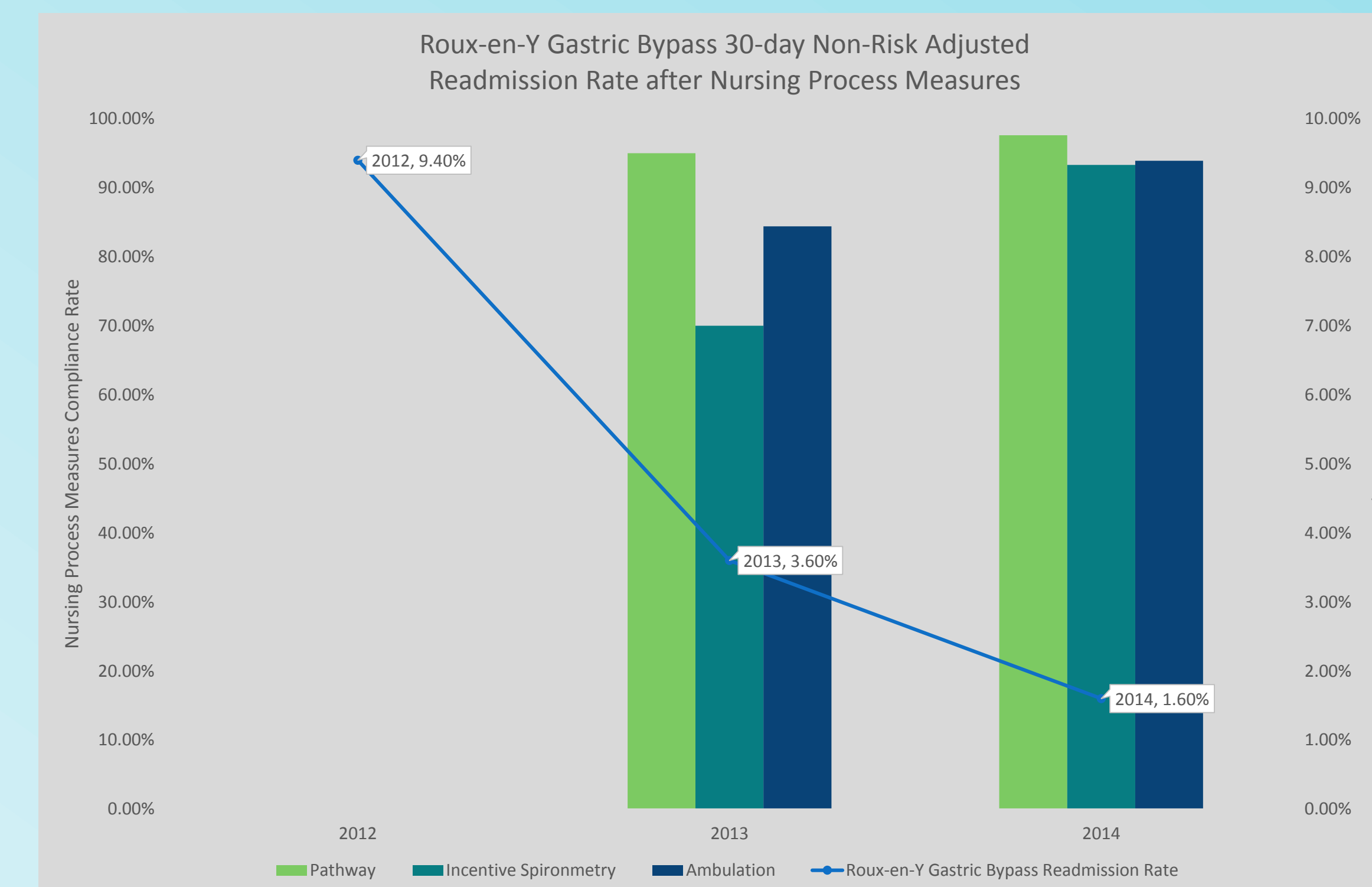
In a correlational-retrospective study the CPI team, determining the majority of readmissions were for fluid, electrolyte, nutritional depletion, reviewed all Roux-en-Y Gastric Bypass 30-day readmissions for fluid and electrolyte depletion between April of 2009 and December of 2014. After reviewing the relevant literature, the CPI team made recommendations for the following practice changes effective November 2012:

- Review of Quarterly Non-Risk Adjusted Quality Outcome Data by team.
- Increased emphasis on hydration during transition to solids
- Initiating chart audit of Nursing Process Measures
  - Correct Clinical Pathway use
  - Early Ambulation
  - Incentive spirometry use

Variable	Mean (n=17)
Age	44.13
Pre-Operative BMI	47.19
Initial Length of Stay	2.76
Pain score at Discharge	4.68
Total Operating time	214.73
Post-operative readmission day	15.76
Readmission Length of Stay	3.53

## Results

Review of quarterly quality data increased awareness of undesired outcomes by the multidisciplinary team. In the initial year of Nursing Process Measure interventions, 2013, there was a sharp decrease in overall readmission rates for Roux-en-Y Gastric Bypass. 2014 saw improvements in compliance rates for nursing staff across all three nursing process measures, leading to a further reduction in 30-day readmission rates.



## Discussion

It is clear that the nursing process measures had a positive effect on patient care, and as these interventions are appropriate for all general surgery patients it should be considered for roll out across the entire general surgery population of the hospital. Although it cannot be determined if the increased emphasis on hydration at the transition to solids had a concrete effect on readmission rates, anecdotally patients have expressed increased satisfaction with the additional education. The results of these interventions are intriguing but cannot be generalized to the entire population of bariatric surgery patients due to the small sample size and volume of the program completing 150-165 cases per year. Further research could be aimed at measuring patients understanding of dehydration and the importance of adequate fluid intake after bariatric surgery.

## References

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