

# Reduced Time to Surgery: Optimizing the Bariatric Surgery Pathway

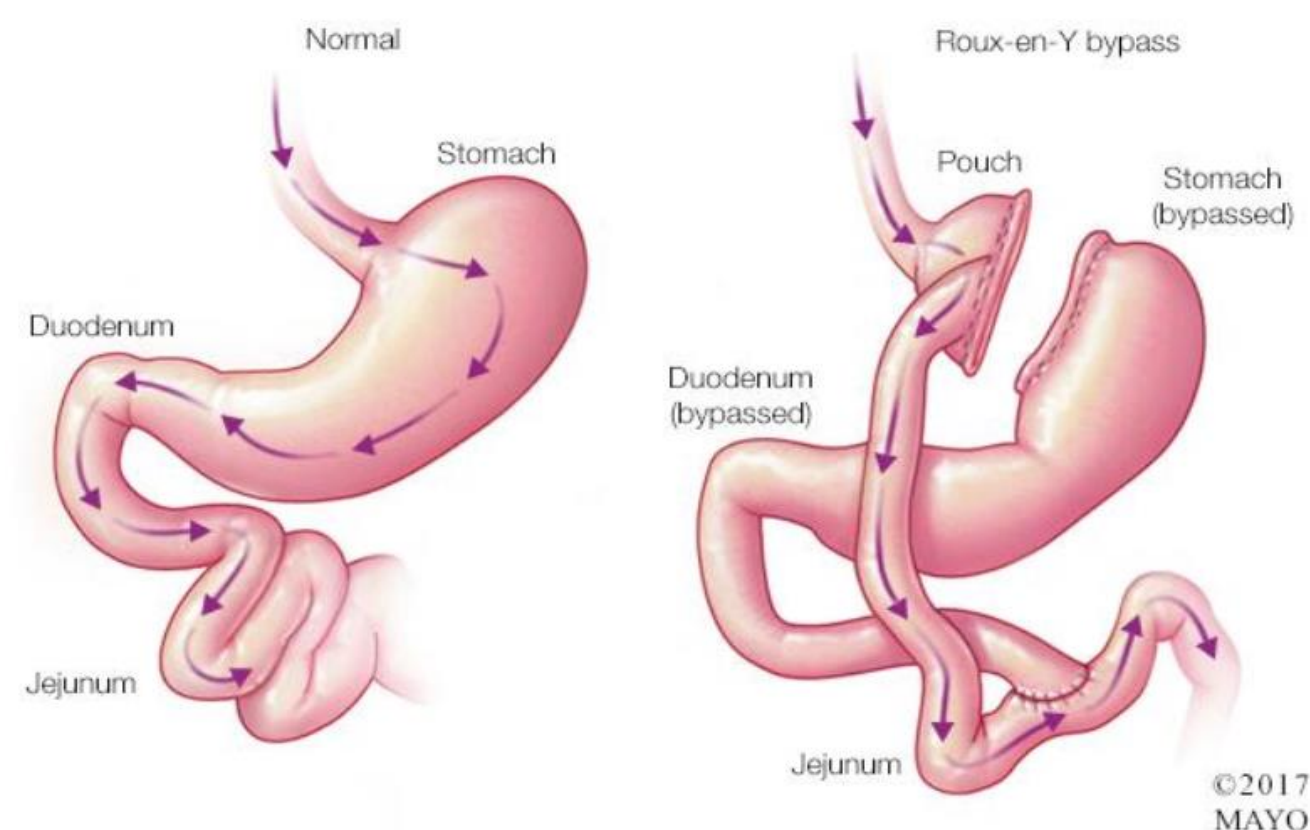
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## BACKGROUND

The Mayo Clinic Rochester Division of Endocrinology serves as an entry point for bariatric patients to receive surgery. Typically, bariatric patients pursue weight management care pathways associated with lifestyle changes, medication management, or surgery to combat the effects of obesity. The Endocrinology team, comprised of physicians, advanced practice practitioners, dietitians, nurses, and psychologists, accommodate all weight management care pathways. For bariatric surgery, the team creates a thorough care plan to ensure the patient is optimized for surgery, limit surgical complications, and establish a healthy lifestyle post-operatively. The most common type of bariatric surgery is gastric bypass shown in Figure 1.

FIGURE 1 – Gastric Bypass



Gastric Bypass is a type of weight-loss surgery that involves creating a small pouch from the stomach and connecting the newly created pouch directly to the small intestine.<sup>2</sup>

## OBJECTIVES

Over the next three years, to increase bariatric surgical case volumes by 65%, from 395 surgeries to 600 surgeries, and reduce time to surgery for patients by 50%, from 6 months to 3 months.

Optimizing the bariatric surgery pathway would also improve patient satisfaction and care team efficiency.

## METHODS

**Form the team:** The multidisciplinary project team was formed composed of scheduling, prior authorization (benefits check), nursing, advanced practice practitioners, physicians, dietitians, surgeons, psychologists, and administrators.

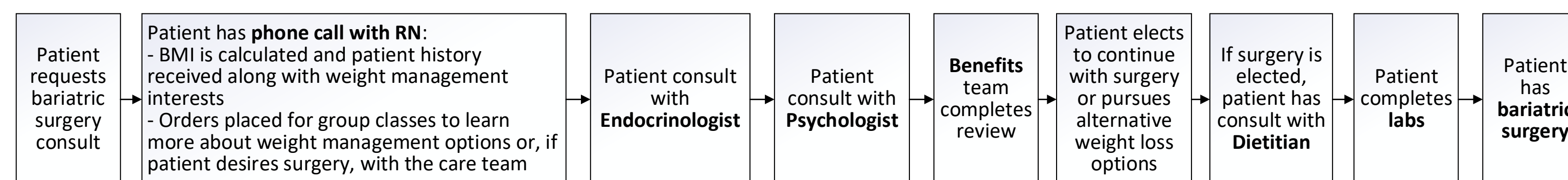
**Current state assessment:** The team performed a comprehensive review of the bariatric outpatient practice to determine opportunities to improve the patient experience, expedite the time to surgery, screen patients appropriately, and ultimately increase surgery case volumes.

- Mapped the current process (Figure 2) and collected baseline data (Table 1)
- The patient process started with a nurse intake call followed by separate appointments with a physician and psychologist. The total process took on average 6 months.

**Analysis:** The team identified several inefficiencies in the process which included:

- 14% of the time, patients did not meet necessary medical thresholds (e.g., BMI) and were obtaining access to the bariatric surgery program.
- 9% of the time, incomplete patient information resulted in patients gaining access to care teams when they were not genuinely interested in pursuing bariatric surgery.
- Lack of a coordinated patient itinerary and workflows resulted in patient and care team frustration and limited the number of surgical patients referred to the surgeons.

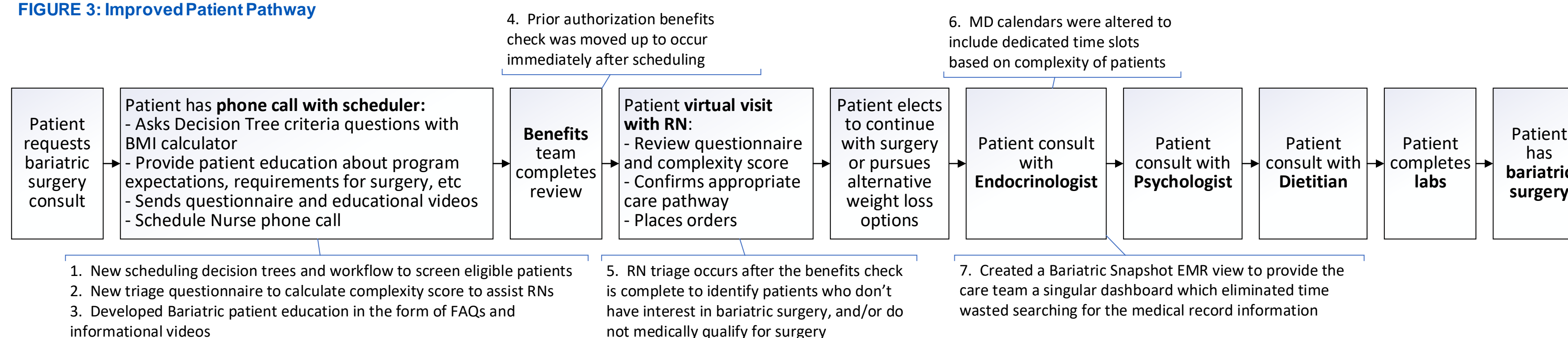
FIGURE 2: Current State Patient Pathway



## IMPLEMENTATION

Beginning in September 2022, changes to care team workflows and the Electronic Medical Record (EMR) were implemented and utilized on the 340 patients on the waitlist. These seven key changes are depicted on the improved patient pathway shown in Figure 3 below.

FIGURE 3: Improved Patient Pathway



## RESULTS

The changes implemented increased surgical volumes and improved efficiency. Surgical patients are now more effectively identified, educated, and prepared for surgery. No incremental FTE was required during the execution of this project.

- Surgical volumes for 2022 increased by 69 cases or 14% compared to 2021 (Figure 4).
- The time to surgery has been reduced by 50%, from 6 to 3 months. These patient pathway improvements are displayed in Table 1 below.
- There were initially 340 patients waiting on a bariatric surgery waitlist prior to the interventions. In 1 month, post intervention, the waitlist was reduced to 0 patients.
- All patients are now triaged through nursing which helps educate patients on surgery complications, medical thresholds, and gauge patient interest in surgery or other non-surgical weight management pathways.

FIGURE 4: Surgical Volume Improvements

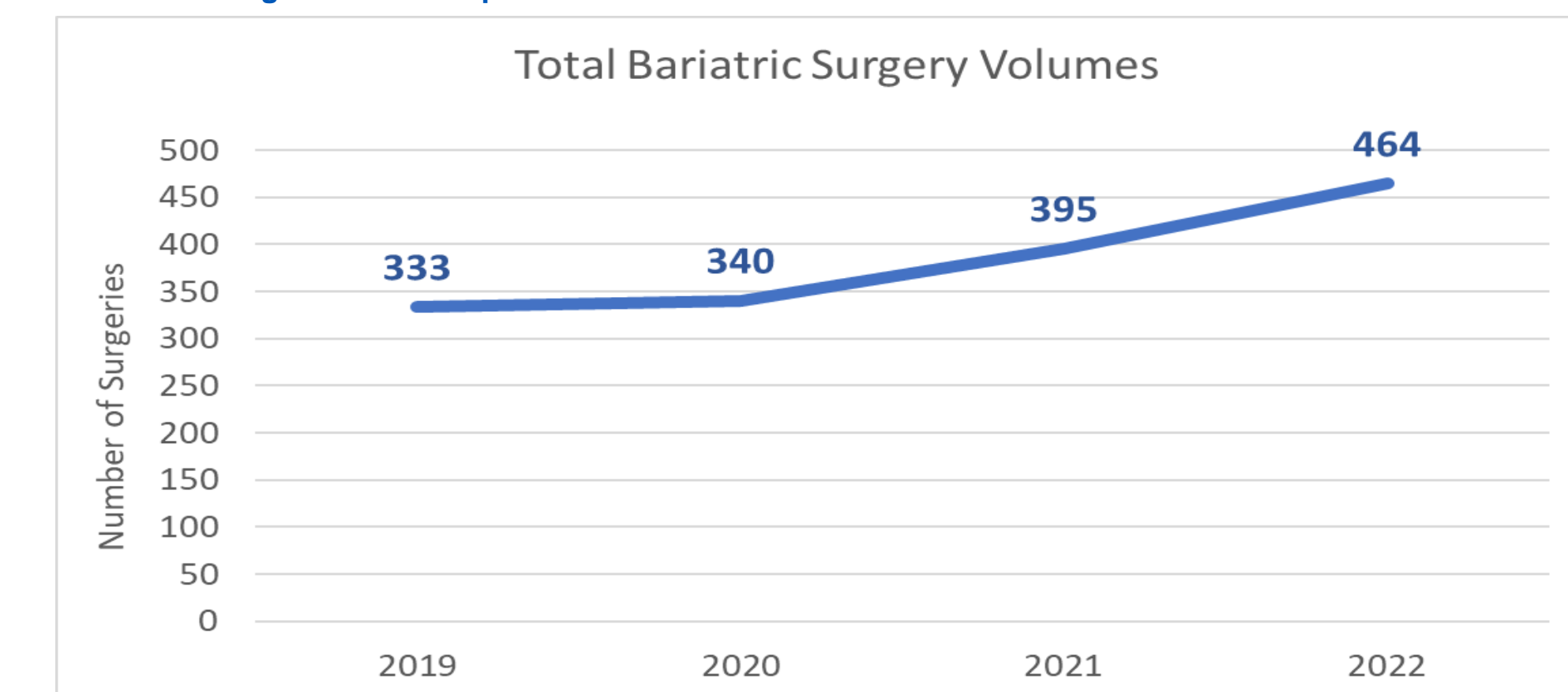


TABLE 1: Patient Pathway Improvements

Metric	Before	After	% Improvement
Patient time to surgery in average months	6	3	50%
Average days from nurse triage to physician appointment	48	21	56%
Average days from physician appointment to psychologist	13.8	3.1	77%
Average days to complete benefits check	28	5.5	80%
Number of patients on the bariatric surgery waitlist	340	0	NA

## DISCUSSION

From 1999 through 2020, US obesity prevalence increased from 35.1% to 41.9%. During the same time, the prevalence of severe obesity increased from 4.7% to 9.2%. Obesity related conditions include heart disease, stroke, type 2 diabetes, and certain types of cancer.<sup>1</sup>

As obesity continues to gain momentum throughout the United States, it will be vital for health systems to create robust and thorough care options for patients. These options will include multidisciplinary teams that support lifestyle habits, medication management, and surgical solutions.

Appropriately identifying the right pathway forward for each patient situation is important to the long-term success in weight management. Surgery will continue to be one option within an array of other service offerings available to treat patients.

## CONCLUSIONS

- The bariatric pathway for patients can be complicated when there are inefficiencies within the care team workflows. The remedy is to actively coordinate patient itineraries, create tools to track patient progress, and stratify patients based on complexity.
- Insurance requirements can often delay time to surgery. Understanding early in the patients journey what insurance requirements they have is important to helping them receive care affordably.
- Not every weight management patient needs or should receive surgery. Other care options (medication, lifestyle, etc) are part of an essential package of offerings for the patient and provider to consider together.
- The new process changes included in this project will allow the Bariatric program to grow and expand to meet the three year surgery target.

## REFERENCES

- Centers for Disease Control and Prevention. (2022, May 17). *Adult obesity facts*. Centers for Disease Control and Prevention. Retrieved February 20, 2023, from <https://www.cdc.gov/obesity/data/adult.html>
- Mayo Foundation for Medical Education and Research. (2022, June 25). *Gastric Bypass (roux-en-Y)*. Mayo Clinic. Retrieved February 20, 2023, from <https://www.mayoclinic.org/tests-procedures/gastric-bypass-surgery/about/pac-20385189#:~:text=Gastric%20bypass%2C%20also%20called%20Roux,directly%20to%20the%20small%20intestine>