



CASE STUDY JOINT HEALTH



Engaging Patients for Better Orthopedic Outcomes

29%

DECREASE
in call
volume

53%

REDUCTION
in ED visits

7%

FEWER
same-day
cancellations

10%

DECREASE
in length
of stay

Results based upon a comparison of patients who used Twistle's patient engagement platform to support a surgical event, and those who did not.

The automated communication pathways have fostered a shorter length of stay, while also reducing readmissions by supporting patients as they recover at home. The ability to safely manage surgical patients post-discharge reduces costs, increases patient satisfaction, and has been particularly valuable amidst COVID-19.

Board Certified Orthopedic Surgeon

CLINICAL PRIORITY

The orthopedic physicians' group at large academic healthcare system in the Midwest had long embraced the principles of Toyota's Lean management system to streamline their surgical pathways, ranking as one of the most efficient practices in the country. The system embarked upon a new quality improvement project for knee and hip surgeries in 2019 to:

- Reduce practice call volume by improving pre and post-procedure patient education
- Reduce same day cancellations from 4% to 2% through better patient preparation and screening

The team also wanted to ensure a seamless technology experience for patients and staff including touch-free automation with EMR integration and single sign-on.

APPROACH

The organization chose Twistle to deliver education and reminders, and gather assessment data before and after surgical procedures. Patients receive messages, watch videos, submit wound photos, and enter subjective and objective information throughout their preparation and recovery.

An extensive library of clinical best practices and communication protocols were tapped and modified to incorporate specific preferences and details of the practice. The implementation process encompassed two-days to gather requirements and one week to build and test the solution.

Patient training on the tool has been incorporated into office visit protocols. Pathways launch automatically based on Scheduling and ADT feeds.

Twistle has improved our office staff workflow by significantly reducing phone call volume. The automated delivery of routine education and reminders has allowed our practice to quickly identify and manage patient care issues.

Clinical Nurse Coordinator

STUDY DESIGN

The team compared the patient population undergoing surgical knee or hip replacement from January through August 2019– the control group, with those treated from September 2019 through February 2020– the experimental group.

RESULTS

- The practice has experienced high patient adoption rates and many of their patient's questions are addressed proactively. The average number of phone calls per patient decreased from 14 to 10, a 28.6% reduction in phone call volume.
- Better patient preparation for surgery has decreased the overall length of stay by 10%. The most significant LOS impact has been the ability to discharge 26% more patients requiring an inpatient stay within 24 hours of surgery, which increases bed availability and the opportunity to add case volume.
- The team observed a significant reduction in 30-day re-activity including 6% fewer readmissions and a 53% decrease in ED visits. The automated communication pathway helped patients manage common issues after surgery and fostered early intervention by the team.
- The 7% decrease in same-day cancellations did not meet the anticipated goal and will be the focus of future refinement.



CONCLUSION

This large academic health system improved the orthopedic patient experience to increase compliance with surgical preparation, reduce complications and generate additional revenue. The program improves quality of care by delivering clinical pathway-based education, reminders, and assessment data collection forms that keep patients on track while facilitating early intervention when they deviate from the plan of care. High patient adoption rates are driven by the program's meaningful and relevant content and as sense of connectedness with the care team.

ABOUT TWISTLE

Twistle automates patient-centered, HIPAA-compliant communication between care teams and patients to transform the patient experience, drive better outcomes, and reduce costs. Twistle offers "turn-by-turn" guidance to patients as they navigate care journeys before, during, and after a care episode. Patients are engaged in their own care and follow best practices, communicate as needed with their care teams, and realize measurably better outcomes. Twistle integrates sophisticated automation with multi-channel communication, engaging patients through secure text messaging, interactive voice response, patient portals, or the health system's digital applications.