



Case Study



An OrthoAlliance Partner Practice

Empowering Recovery Through Data: How South Bend Orthopaedics Used PatientIQ to Study Nutrition's Role in Joint Replacement Outcomes

About South Bend Orthopaedics

South Bend Orthopaedics (SBO) has provided advanced orthopedic care to the South Bend, Indiana region for over 75 years. With a team of fellowship-trained specialists and a commitment to research and innovation, SBO serves patients with a wide range of musculoskeletal needs, from sports medicine to complex joint reconstruction.

The Challenge

As one of the nation's leading orthopedic practices, South Bend Orthopaedics sought to enhance recovery and patient satisfaction in total joint arthroplasty (TJA). While surgical techniques continued to advance, the team recognized that perioperative nutrition was an underexplored yet potentially transformative factor in recovery outcomes.

The clinical team needed a way to:

- **Provide patients with timely and evidence-based** nutritional guidance.
- **Measure the impact of a nutrition intervention** on patient satisfaction and perceived recovery.
- **Collect and manage high-quality, patient-reported outcomes (PROs)** at scale.
- **Generate publishable insights** grounded in real-world data from their own TJA population.

They launched a prospective study on the adoption and acceptability of a perioperative nutrition program among joint replacement patients—but needed a streamlined, scalable, and research-grade platform to support it.

What is perioperative nutrition?

Perioperative nutrition refers to the targeted use of nutritional strategies before, during, and after surgery to improve patient outcomes. It includes interventions such as preoperative carbohydrate loading and postoperative protein supplementation to support healing, and enhance recovery. By optimizing a patient's nutritional status around the time of surgery, perioperative nutrition can support stronger healing, muscle health, and return to activity.

What is ENROUTE®?

ENROUTE® is a clinically designed perioperative nutrition program that delivers evidence-based formulas to enhance patient optimization. Its protocol includes specific specifically tailored formulas to address pre-operative nutrition risk factors and nutrition to support post-operative surgical recovery and wound healing.

The Solution

To power their research, SBO leveraged PatientIQ as the centralized platform for recommending ENROUTE® for perioperative nutrition as well as collecting, managing, and analyzing patient-reported outcomes.

SBO surgeons recommended ENROUTE® to surgical patients via patient communication pathways developed and managed by PatientIQ. This solution ensured that patients received the recommendation for ENROUTE® at the right time in their care and recovery journey.

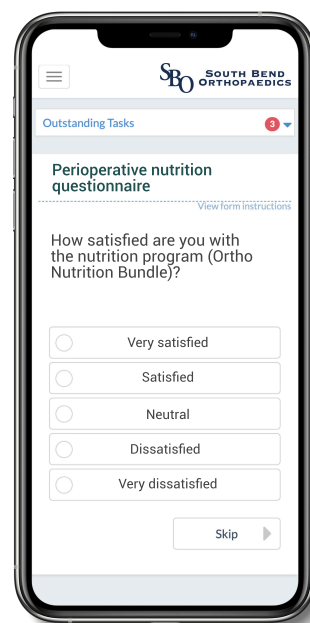
The SBO team then developed a custom questionnaire within PatientIQ tailored to the study's goals. This included questions on:

- **Program participation** and whether patients completed the nutrition protocol.
- **Satisfaction with the intervention**, including ease of use and perceived value.
- **Perceived impact on recovery**, enabling SBO to capture subjective benefit.
- **Barriers to participation**, such as cost or timing, to inform future iterations.

Using PatientIQ's flexible survey tools and EHR-integrated workflows, SBO was able to:

- **Deploy the questionnaire digitally** at appropriate pre- and post-operative intervals.
- **Use automated reminders** to drive high patient response rates.
- **Instantly collect and visualize results** for ongoing analysis and eventual publication.

Because PatientIQ de-identifies and structures data natively, the SBO team could easily export analytics for statistical evaluation and confidently assess how the nutrition intervention influenced patient-reported recovery.



Example of a SBO survey question delivered via PatientIQ

"By listening to our patients through outcomes data, and optimizing their health through nutrition, we're able to elevate not just surgical technique, but the whole healing journey."

Derek Yocum, PhD
Research Director at SBO

The Results

The study, now published in Frontiers in Health Services, included:

- 208 patients that consented to participate.
- 105 patients enrolled in the 4-week perioperative nutrition program- consisting of a protein multi-nutrient supplement consumed twice daily, and a preoperative complex-carbohydrate drink.

Of those who participated:

- **78.7% were satisfied** with the program.
- **65.7% believed it helped** their recovery.

These insights give SBO and the broader orthopedic community a clearer path toward improving recovery through nutrition—and **showcase how robust, automated PRO collection can accelerate research.**