

## CASE STUDY

# MedTech Robotics UI Test Automation Maturity Assessment



## AT A GLANCE

- A surgical robotics company selected QA Consultants due to its deep software test automation capabilities and online case studies demonstrating successful outcomes and positive recommendations
- The client included QA Consultants' recommendations in their improvement strategy plan and have already implemented some suggestions

This surgical robotics company develops innovative breakthroughs in 3D digital robotic-assisted surgical microscopy.

Its primary goals are to enhance surgical procedures and improve patient outcomes.



We selected QA Consultants for their quality engineering expertise and deep automation experience. QA Consultants provided a set of automation recommendations for improving test coverage for our main product. We have since implemented their ideas, which resulted in immediate benefit – notably, **capturing potentially expensive defects before production.**

HEAD OF SOFTWARE QUALITY ASSURANCE



## THE CHALLENGE

This surgical robotics company's signature product is a vital surgical tool that can impact the life or death of a patient if performance is anything less than perfect. This requires comprehensive testing of both hardware and software applications. Immediate challenges included test coverage (automating almost three hundred test cases for the UI) and speed to release for product upgrades and software patches. Test automation was critical to enhancing both coverage and speed to release.



QA Consultants is the nation's preeminent test automation and quality engineering firm due to its quality engineering advisory intellectual property, deep software test automation capabilities, and proven successful outcomes. Leveraging its proprietary Quality Maturity Framework methodology to deliver assessment programs customized to each client's application environment, schedule, and budget, QAC aligns every assessment with each client's quality engineering environment improvement strategies. [Learn more at qac.com](http://qaconsultants.com)

## OUR DELIVERABLES

- Executable road map
- Design of an automation strategy
- Gap analysis
- Automation recommendations
- Automation investment alternatives
- Post-assessment consultations



## THE SOLUTION

The high-stakes, comprehensive test automation maturity assessment evaluated the surgical robotics company's current state of automation, such as the discovery of artifacts, tools, processes, and skills.

### PROJECT GOALS WERE TWO-FOLD

**Improve robotic surgical arm user interface test automation framework.**

**Transition the framework and automation management knowledge to the engineering team.**

QA Consultants' team, which included the chief automation architect who interacted with the surgical robotics company's head of engineering, reviewed current tools and processes to deliver an actionable assessment.

## THE RESULTS

**DEVELOPED** alternatives for a near-term automation solution

**25%+** increase in testing coverage, improving defect prevention

**CONTRIBUTED** to reduction in treatment delivery risks

**ENABLED** improvements in robotic surgical accuracy

INTERESTED IN SIMILAR OUTCOMES FOR YOUR MEDICAL TECHNOLOGY PRODUCTS?

