



Baptist Health South Florida

# Optimizing operation room planning



**Baptist Health South Florida partnered with Fujitsu to create the optimum operating room (OR) schedule – uncovering new surgery time and boosting utilization rates. No guesswork. No missed opportunities. Just intelligent recommendations driving precision perioperative block scheduling.**

## Challenge

Baptist Health South Florida needed to transform surgical capacity utilization in order to address pressure on payer remuneration, staffing shortages and to provide greater access to the community.

## Solution

Fujitsu's Surgical Capacity Optimization targeted the root cause of surgical block time inefficiencies by creating highly tailored, mathematically validated recommendations to change operating room (OR) schedules.

## Outcomes

- 37 percent improvement in available prime-time minutes over a three-month period
- Amounting to 231 new full-day blocks within the existing OR infrastructure

**“Fujitsu's solution challenges the conventional way of managing OR utilization. It targets the root cause, not the symptoms, revolutionizing OR schedules to yield the best outcome for both hospitals and patients.”**

Barry Katzen, M.D., Chief Medical Innovation Officer, Baptist Health South Florida



## **Right-sizing surgical capacity**

At the heart of a hospital's financial sustainability is the financial health of its surgical services discipline and this comes down to operational efficiency and the manner in which surgical services leaders maximize utilization of OR capacity in the delivery of high-quality patient care. But times are hard post-COVID. Not only are hospitals struggling with a general economic downturn, they are also facing rising costs and burned-out staff.

"As the economic environment for hospitals has become more challenging, the need for operating efficiency has become more necessary," explains Dr. Katzen, chief medical innovation officer at Baptist Health. In response, there is a drive to digitally transform the surgical services domain and a growing awareness that a data- and insights-driven approach offers significant improvements in terms of patient outcomes and cost savings.

Significant prime time OR capacity is hidden by the inherent inefficiencies in how surgical blocks are arranged in a hospital's OR infrastructure. This is not surprising, because blocks have typically been created and scheduled in hospitals without the aid of advanced analysis.

"Surgery scheduling is very complex. Historically, surgical leaders used their own intuition to make decisions about the flow of patients through the surgery process. Using Fujitsu's Surgical Capacity Optimization means we now use data to make those decisions," explains Robert Choquette, director, surgical centers, Baptist Health Doctors Hospital.

## **Taking the guesswork out of decision-making**

Fujitsu and Baptist Health South Florida have transformed operating room scheduling with a newly launched solution to boost utilization rates and the financial health of the surgical discipline. Fujitsu's solution gives perioperative teams the data-driven insights they need to create optimum OR schedules, boost case volume and pursue productivity targets.

Through Surgical Capacity Optimization, surgical leaders can leverage decision science and optimization technology and know-how to carefully evaluate past, present and future block utilization patterns and then intelligently create alternate block schedules that are fully optimized. By empowering productive communication based on precise, historical and scheduled data, Baptist Health ensures block time allocations truly reflect demand.

"Fujitsu's solution challenges the conventional way of managing OR utilization. It targets the root cause, not the symptoms, revolutionizing OR schedules to yield the best outcome for both hospitals and patients," Dr. Katzen explains. "It also gives perioperative teams solid, easily accessed data to support change, so that by the time they propose reorganizing schedules or have to negotiate difficult conversations with providers, they have total confidence they're doing what's right."

Industry:  
**Healthcare**

Location:  
**USA**

Website:  
**BaptistHealth.net**

## About Baptist Health South Florida

Baptist Health is on Fortune's List of America's Most Innovative Companies 2024. It offers an extensive range of medical, surgical and technological services — including cancer, neuroscience, heart and vascular, sports medicine and orthopedics. Baptist Health is the largest healthcare organization in the region, with 12 hospitals, more than 27,000 employees, 4,000 physicians and 200 outpatient centers, urgent care facilities and physician practices.



# 231

Equivalent of 231 new full-day blocks within the existing OR infrastructure freed up

## Revolutionizing utilization with quantum-inspired optimization

Through joint innovation efforts, the profound complexity of the surgical capacity planning and optimization process was uncovered – so many scheduling variables resulted in a massive number of possible scheduling options – far too many for the human brain or traditional tech solutions to handle.

The inherent complexity made this a particularly suitable use case for Fujitsu's quantum-inspired computing, Digital Annealer, designed for solving difficult optimization problems with high precision. This is especially useful in a surgical services setting because surgical leaders can efficiently perform data analysis tasks that would otherwise require multiple resources, including staff for data review and reconciliation from various sources. This has a direct effect on patient satisfaction as delays and cancellations caused by equipment and resources conflicts can be eliminated.

“The reason we chose Fujitsu was their reputation and focus on safety, quality and innovation,” explains Maria Cabrera, director, surgical services, Baptist Health Doctors Hospital. In trials at Doctors Hospital across 14 operating rooms, the solution delivered a 37 percent improvement in available prime-time minutes over a three-month period, amounting to 231 new full-day blocks within the existing OR infrastructure.

Fujitsu's solution gives everyone the data needed to make the smartest allocation decisions – resulting in a better-utilized, high-performing department that benefits all staff, providers and patients. The new platform represents part of Fujitsu's ongoing efforts to contribute to the creation of a healthy society as part of its vision for “Healthy Living” under Fujitsu Uvance.

Innovation Partner:



**Fujitsu**

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May 2024