Case Study
Hôpital Montfort

"Thanks to the Lean improvements and the increased efficiency, we can effectively do one extra case at the end of every day. We always have people on the emergency list, so it frees us up to help them within our existing resources."

Dr. Guy Moreau, Chief of Medical Staff and Orthopedic Surgeon, Hôpital Montfort

The customer
Hôpital Montfort is a university teaching hospital affiliated with the University of Ottawa. It delivers short-term primary and secondary healthcare in French and English to over 1.2 million residents of Eastern Ontario. Montfort is the only hospital in Ottawa administered in French and the only Francophone academic healthcare institution west of the province of Quebec. It has 300 beds and around 300 physicians.

The challenge
In 2008, the hospital introduced Lean methodology in its emergency department – a systematic approach to streamlining and improving services – while eliminating inefficiencies. This proved so successful that the hospital wanted to roll it out in other areas. With pressure from Ontario’s Ministry of Health to improve costs for common operations, the surgical department was the next place to transform. Hip and knee replacement surgeries being a priority at Government level and a more easily accessible internally, the orthopedic surgery room (OR) was the ideal place to start.

“Our costs per hip and knee replacement were among the highest in the province, and patient feedback showed that it was common to spend hours waiting for preassigned appointments,” explains Lucille Perreault, Vice President of Clinical Services at Hôpital Montfort. “Ingrained habits, processes and culture built up over the years and needed to be reviewed to create better outcomes for patients and improved quality of life for the staff.”

Although the organization had amassed considerable experience over the last six years using the Lean approach in the ER, the hospital wanted to bring in external consultants to ensure the project went smoothly.

“We had good in-house knowledge but strategically we knew this project would involve entering a sacred area in terms of surgeons and how they work,” says Perreault. “Even with our own experience, we wanted to be accompanied by an expert team that would enhance our abilities.”

The hospital drew up a list of criteria for its prospective partner, not the least of which was superior expertise of Lean and experience in surgical work flow. It also wanted a consultant that covered the entire scope of the process rather than single components. Finally, the right cultural fit was critical.
“Fujitsu came to us with a highly skilled methodology and a team that included a former OR physician so we knew they had the surgical knowledge,” says Perreault. “They also had proven results and recommendations within the healthcare sector and competitive costs.”

The solution
Fujitsu began by performing a comprehensive diagnostic, analyzing the existing processes. This involved interviewing more than 200 patients, and analyzing the data. The Fujitsu team then facilitated a strategic Kaizen session with the CEO, hospital executives, and then operations planning session with mid-management and physicians. This enabled the Fujitsu team to establish a detailed picture of current processes where they could be improved and a consensus on how to proceed to achieve the clearly identified strategic goals.

“By using a combination of one-on-one interviews and workshops, and applying the Lean methodology, Fujitsu was able to come up with a clear-sighted and accurate view of how we worked within the OR,” says Lise Vaillancourt, Director of Clinical Services at Hôpital Montfort and a Lean Six Sigma Black Belt in her own right. “We worked together to develop a five year plan that covered multiple projects, all of which would improve the workflow and patient outcomes.”

This plan is now being implemented and takes into account every aspect of the patient journey – from initial consult to tracking patients within the hospital, and post-operative care.

The benefit
There was an immediate positive impact across several parts of the OR environment. Process-driven improvements regarding surgical instruments kits have enabled the hospital to decrease the number needed by 36 percent, meaning fewer to clean and wrap, saving the hospital time and money.

Reduced surgery delays from 69 percent to 42 percent, improving the patient experience
Reduced number of surgery instruments kits required by 36 percent for certain types of surgeries, leading to cost and time savings as well as a reduction in instrument contamination rates from 0.89 to 0.29 percent
Reduced number of patient visits required, with 20 percent of pre-op interviews now taking place over the phone, mitigating the inconvenience of patient travel for in-person meetings
Improved communication by deploying a patient tracker in the waiting room to allow patients and their families to view status in real-time

The changes outlined in the Fujitsu Lean analysis enabled the hospital to reduce the changeover time for each surgery from 65 minutes to 45 minutes, allowing the surgical team to see more patients in the same timeframe. At the same time, the 78 percent of surgeries that previously began late is now reduced to 45 percent.

“Thanks to the Lean improvements and increased efficiencies, we can effectively do one extra case every day,” says Dr Guy Moreau, Chief of Medical Staff and Orthopedic Surgeon at Hôpital Montfort. “We always have people on the emergency list, so that frees us up to help them more quickly.”

Conclusion
With the Lean roadmap being rolled out in the OR, the hospital is now looking at other departments where they can apply the Lean approach and more effectively meet the needs of their internal and external stakeholders including physicians, hospital administrators, patients and their families.

“The other departments are jealous of the orthopedics team because they can see the tangible improvements,” concludes Perreault. “We’ll continue to work hard to provide measurable benefits across as much of the business as possible.”

“Fujitsu gave us a very dynamic, interactive experience backed up by hard work, which forced our own team to be disciplined. We are really happy with the outcome.”
Lucille Perreault, Vice President of Clinical Services, Hôpital Montfort

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In addition, the contamination rate for these instruments has declined from 0.89 percent to 0.29 percent.

“The attention to the finer points of surgical procedures really made a difference, enabling us to save money and deliver more effective patient care,” comments Vaillancourt. “We’ve also made more direct changes, such as conducting 20 percent of pre-op interviews by phone, which saves hundreds of patients the hassle of visiting in person. And, when they are here, a new real-time patient tracker screen in the waiting room lets everyone know the status of every patient.”