

## St. Michael's

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## Research project summary

The Functional Improvement Trajectories After Surgery (FIT After Surgery) Study: A Multicentre Prospective Cohort Study to Evaluate the Incidence, Trajectories, Risk Factors, Impact and Healthcare Costs Related to Significant New Disability after Major Elective Surgery

- Principal Investigators: Duminda Wijeysundera, Shabbir Alibhai, Peter Jüni, Daniel McIsaac
- Co-Investigators: William Beattie, Rodney Breau, Vincent Chan, Peter Choi, Stephen Choi, Hance Clarke, Irfan Dhalla, Hossam El Beheiry, Ronald George, Wanrudee Isaranuwatchai, Sindhu Johnson, Erin Kennedy, Karim Ladha, Manoj Lalu, Gerald Lebovic, David Mazer, Stuart Mccluskey, Martine Puts, Alice Wei.
- Awarded \$1,388,474 from the Canadian Institutes of Health Research (CIHR) in January 2018

About 190 million people have surgery every year in developed countries. Many of them are older and have pre-existing health problems, such as heart disease. A good understanding of their risks with surgery is critical. Such information guides patients and healthcare teams on which operation is the best option, and helps identify people who need help to recover well after surgery. At present, doctors simply tell patients about their risks of death or complications within 30 days after surgery. This practice is problematic. Few patients (less than 3%) die shortly after surgery, but many more (30-40%) have major complications that lead to long-term health problems, such as heart disease or stroke. These problems can cause significant disability such that, even months afterwards, some patients can no longer take care of themselves, live in their own home, or work. Thus, understanding how often and why major disability occurs after surgery is important, especially since most people want to both survive surgery and function well. We will therefore conduct the FIT After Surgery Study to understand the risks, underlying reasons and impact of significant new disability in people who are aged 65 years or more, and having major surgery. The study will include 2000 patients having major surgery at 10 hospitals across Canada. Using special interviews and tests, participants will be followed for 1 year after surgery to find out if they develop a significant new disability. We will measure the risk and impact of significant new disability after surgery, and identify which types of patients, operations and complications are likely to lead to disability. Our study will help patients to make better-informed decisions about having surgery, and help identify patients needing help to recover after surgery. It will also identify which complications research and quality improvement must focus on. The FIT After Surgery study will thus improve the care of



surgical patients worldwide. Back to summary of all grants awarded to The Ottawa Hospital in this
competition (January 2018)