Healthcare Operations Management: An Overview and Outlook

Vedat Verter, Ph.D.
Desautels Faculty of Management, McGill University

Healthcare has been among the top three sectors that account for a significant portion of Canada’s GDP for the past decade. Congestion at healthcare facilities - which prohibits timely access to health services - is among the major challenges facing healthcare providers and policy makers. Each province has committed to implement policies for better management of wait times and for reduction of wait times in the event that they are longer than medically acceptable. In 2007, the federal government announced patient wait-times guarantees for at least one of the following areas in each province: cancer care, hip and knee replacement, cardiac care, diagnostic imaging, cataract surgeries and primary care. These developments at the governmental level are necessary but not sufficient for achieving tangible success on the ground; healthcare providers and decision makers must implement the health policies through concerted and sustained efforts at the operational level. It is important that the current levels of congestion at healthcare facilities prohibit timely access to health services and pose health risks for the patient population.

I will first provide a brief account of the most recent developments in the Canadian health sector. I will also summarize the current state of healthcare operations management research initiatives in the country. Most of the plenary, however, will be devoted to reporting on the research trends we have observed through a systematic survey of the academic literature. I plan to provide an overview of the state of the art in (i) emergency department operations management, (ii) management of surgical services, (iii) hospital operations management, and (iv) the design and improvement of chronic care services. Perhaps more importantly, I will make an effort to highlight the interactions among these problem areas and the related literature. I will conclude by discussing a few fruitful avenues for future research. Based on the drastic expansion of the field in the past decade, healthcare operations management certainly has a bright outlook.

About the speaker: Vedat Verter is a Full Professor of Operations Management at Desautels Faculty of Management, McGill University. His specializes on the application of operations research for tackling challenges in the public sector. His areas of research are service chain design, hazardous materials logistics, sustainable operations and healthcare operations management. His work in these four areas is well recognized through top tier journal publications as well as invited presentations around the globe. In the area of healthcare, he focuses on preventive, primary, emergency, acute and chronic care processes, as well as their interaction. He is Director of McGill’s MD-MBA Program and Director of the NSERC CREATE Program in Healthcare Operations and Information Management, a seven-University PhD/PDF training program across Canada. Professor Verter is also Editor-in-Chief of Socio-Economic Planning Sciences, an international journal focusing on public sector decision making.