



UNIVERSITY
OF ALBERTA

CPA Speaker Series - Business Analytics

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Monday, February 5, 2024

9:30 AM - 11:00 AM

Location: BUS 4-06

Scheduling -induced Health Inequality: The Role of Deprivation in Managing Elective Waiting Lists

ABSTRACT

When demand for timely access to healthcare exceeds supply, physicians rely on available clinical information to prioritize patients at highest risk of adverse health outcomes. For many conditions, however, a patient's level of deprivation will also affect their risk. Do doctors consider deprivation in their prioritization? Using a high-volume urological procedure as case study, we provide evidence that patients living in the most deprived neighborhood quintile wait as long as anyone else for surgery, despite having a 41% (95% CI [27%, 58%]) higher risk of emergency complications. This constitutes an avoidable health inequality. We argue that this health inequality cannot be addressed alone by prioritizing patients better based on existing clinical information, but that deprivation is a risk in its own right for our studied urological procedure. Building on these observations, we propose a queuing model to help administrators account for deprivation when scheduling surgeries.