

SEMINAR SERIES

**Department of Operations & Business Analytics
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The Impact of EMR Capability on Hospital Performance

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Abstract: Intense pressure to control costs and improve patient care quality is driving hospitals to increasingly look to information technology for solutions. Partly driven by a governmental mandate (i.e., the HITECH act), numerous hospitals have recently embarked on a journey to adopt electronic medical records (EMR) systems - a comprehensive application environment which enables the paperless recording of a patient's encounter with a care delivery organization. The impetus of the legislation is the belief that an EMR system will warrant improved clinical outcomes, fewer medical errors, and, ultimately, lower the cost of care for patients. Using a sample of 80 hospitals that are in advanced stages of their EMR implementation, we perform an event study to determine the impact of EMR on several clinical, operational, and financial measures of hospital performance. Our findings suggest that advanced EMR capability does indeed lead to better operational (as measured by higher throughput and labor productivity) and financial (as measured by operating income per adjusted discharge) hospital performance but, surprisingly, to a higher adjusted mortality rate.

Bio: Dr. Bogdan Bichescu is an Assistant Professor of Operations Management in the College of Business Administration at the University of Tennessee. He holds a BSc degree in Management Science and a MSc degree in Project Management from the Academy of Economic Studies in Romania, as well as a MSc in Quantitative Analysis and a PhD in Operations Management from the University of Cincinnati. His teaching and research interests include supply chain analysis, lean operations, healthcare operations, decision analysis, and project management. Dr. Bichescu's research has appeared in journals including *Production and Operations Management*, *Omega*, and *OR Spectrum*.

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