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ABSTRACT

Technology investment in the healthcare industry has targeted both *transaction support systems*, such as Electronic Medical Records (EMR), and *decision support technologies*, such as clinical data warehouses and data mining software. While EMR technology adoption has received considerable attention in research studies, decision support technology adoption determinants have received less attention. This study aims to investigate the determinants of adoption of decision analytics systems in hospitals and the resulting impact on hospital performance. Using the Heckman selection model (to correct for discrete strategic decision-making endogeneity) on a cross-sectional and representative set of U.S. hospitals integrated from various data sources, we examine the determinants of choice and resulting quality performance impacts of adopting clinical analytics systems. We find that EMR systems implementations are good predictors of clinical analytics systems adoption. We also find that the performance impacts of process enabled EMR systems are partially influenced by adoption of analytics software.

Keywords

Hospital technology adoption, analytics, Electronic Medical Record, EMR, determinants of choice, performance impacts, Heckman sample-selection