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Impacts of Health Information Exchange and Health Information Organization on Hospital Efficiency: A Data Envelopment Analysis

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Completed Research Paper

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ABSTRACT

This paper aimed to determine if hospitals that participated in Health Information Exchange (HIE) and Health Information Organization (HIO) were more efficient than hospitals that did not participate. This study collected sample data from the 2017 American Hospital Association (AHA) U.S. Hospital Annual Survey dataset and the 2017 AHA IT Survey dataset. We created a DEA model to measure hospital efficiencies. Mann-Whitney Test performed the hypothesis test. Evidence showed that HIE/HIO participating hospital group had a significantly higher efficiency score than the non-participating hospital group.

Keywords

HIE, HIO, hospital efficiency, data envelopment analysis, 2017 AHA dataset.