## Hospital Competition and Quality: Evidence from the Entry of the High-Speed Train in South Korea\*

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## Abstract

This paper leverages the entry of a high-speed train (HST) system in South Korea as a quasi-experiment to establish the causal effect of competition among hospitals on consumer welfare and health care quality. We implement a difference-in-differences research design that exploits the differential effect of the HST entry on hospitals based on their distance to train stations. Our results show that hospitals located closer to train stations experience lower mortality rates after the introduction of the HST, thus suggesting that increased accessibility resulted in improved clinical outcomes. To formally evaluate the impact of competition on quality, we estimate a demand model of hospital choice wherein patients evaluate the tradeoff between hospital quality and travel costs when selecting from different hospitals. The model results reveal that patients living closer to HST stations experienced positive gains in welfare as a result of the entry of the HST. Further, we show that the expansion of patients' consideration sets not only resulted in improved health outcomes due to better patient sorting, but also prompted increased competition among hospitals to increase their quality, which in turn also had a significant impact on health outcomes.

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