

MISQ Archivist

The Impact of Health Information Sharing on Duplicate Testing

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Abstract

Recent healthcare reform has focused on reducing excessive waste in the U.S. healthcare system, with duplicate testing being one of the main culprits. We explore the factors associated with duplicate tests when patients utilize healthcare services from multiple providers, and yet information sharing across these providers is fragmented. We hypothesize that implementation of health information sharing technologies will reduce the duplication rate more for radiology tests compared to laboratory tests, especially when health information sharing technologies are implemented across health organizations. We utilize a unique panel data set consisting of 39,600 patient visits from 2005 to 2012, across outpatient clinics of 68 hospitals, to test our hypotheses. We apply a quasi-experimental approach to investigate the impact of health information sharing technologies on the duplicate testing rate. Our results indicate that usage of information sharing technologies across health organizations is associated with lower duplication rates, and the extent of reduction in duplicate tests is more pronounced among radiology tests compared to laboratory tests. Our results support the need for implementation of health information exchanges as a potential solution to reduce the incidence of duplicate tests.

Keywords: Duplicate testing, health information sharing, health information exchange, quasi-experiment, radiology test, laboratory test