HIT or Miss: The application of healthcare information technology to managing uncertainty in clinical decision-making

Running Title: Why HIT is an integral dimension of quality and care improvement

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This paper was based on the findings of a study funded by a grant from the Maryland Health Services Cost Review Commission (HSCRC) for the period 2006 – 2008.

Acknowledgments

The authors thank Mr. Robert Murray, Executive Director of Maryland’s Health Services Cost Review Commission (HSCRC) for his continuous support of academic work based on the HSCRC initiatives.
Abstract
Objective: To discuss the usefulness of Health Information Technology (HIT) in assisting care providers minimize uncertainty while simultaneously increasing efficiency of the care provided.

Study Design: An ongoing study of HIT, performance measurement (clinical and production efficiency) and their implications to the payment for care represents the design of this study. Since 2006, all Maryland hospitals have embarked on a multi-faceted study of performance measures and HIT adoption surveys, which will shape the health care payment model in Maryland, the last of the all-payor states, in 2011.

Methods: This paper focuses on the HIT component of the Maryland care payment initiative. While the payment model is still under review and discussion, “appropriateness” of care has been discussed as an important dimension of measurement. Within this dimension, the “uncertainty” concept has been identified as associated with variation in care practices. Hence the methods of this paper define how HIT can assist care providers in addressing the concept of uncertainty, and then provides findings from the first HIT survey in Maryland to infer the readiness of Maryland hospital in addressing uncertainty of care in part through the use of HIT.

Results: Maryland hospitals show noteworthy variation in their adoption and use of HIT. While computerized, electronic patient records are not commonly used among and across Maryland hospitals, many of the uses of HIT internally in each hospital could significantly assist in better communication about better practices to minimize uncertainty of care and enhance the efficiency of its production.