



Financial Model for Informing Value-Based Payment Decisions

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SUMMARY

Researchers led by David Johnson from the Department of Urologic Oncology and the West Los Angeles Veteran’s Affairs Medical Center have developed an interactive web platform that predicts the financial outcomes for various stakeholders (physicians, hospitals, and payers) of transitioning from fee-for-service to bundled payments for robotic radical prostatectomy.

BACKGROUND

Currently, the American healthcare system uses a fee-for-service payment model where patients pay for services provided by their physician separately. This incentivizes physicians to provide more treatments since payment depends upon quantity of care as opposed to quality. However, there is a push by Medicare to transition into bundled payments or episode payment models in which the price of an episode of care is predetermined. This provides both a benefit and a risk in which the hospital assumes the risk of covering costs if they go above this target price or they share in the savings if they keep costs below this target price. Healthcare systems lack the ability to accurately predict the financial impact and potential risk/reward of transitioning into a bundled payment system. Furthermore, these institutions potentially enter these bundled payment agreements without knowing the financial implications or which particular episodes of care may be most favorable for these types of payment systems.

INNOVATION

Researchers led by David Johnson from the West Los Angeles Department of Veteran’s Affairs and the Department of Urologic Oncology have developed an interactive web platform that predicts the financial outcome for physicians, hospitals, and payers for an episode of prostate cancer surgery in fee-for-service and episode-based bundled payment models under current-state clinical practice patterns and cost structures. Their web platform allows healthcare stakeholders to dynamically adjust payment model parameters (gain-sharing, risk-bearing, stop-loss arrangement, bundle price, Medicare incentive payments, etc.) to determine their impact on financial outcomes under the new payment structures. Additionally, the model allows stakeholders to prospectively evaluate the financial impact of modifying episode- and institution-specific clinical cost drivers (operating room time, length of stay, chance of complications, etc.) This innovation is a tool to 1) predict financial outcome of transitioning from fee-for-service to episode-based payments, 2) guide value-based care redesign by quantifying the impact of different cost inputs on financial outcomes under different reimbursement models, and 3) create episode-based payment parameters that appropriately allocate risk/reward.

APPLICATIONS

- Predict institution- and stakeholder-specific financial outcomes of transitioning from fee-for-service to an episode-based payment for specific episodes of care under current clinical conditions and cost structures
- Facilitate stakeholder engagement in the design of value-based payments by quantifying the impact of payment model parameters on financial outcomes
- Inform value-based care redesign efforts to optimize performance in current fee-for-service and emerging value-based payment models

ADVANTAGES

- Easy to use, interactive web-based platform
- Designed to be stakeholder-facing to facilitate engagement
- Clinical and financial parameters are customizable making it replicable and scalable, yet specific to clinical episode and health care organization

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INVENTORS

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OTHER INFORMATION

KEYWORDS

Medicare, fee-for-service, bundled payments, Monte Carlo simulation, healthcare, costs, clinical episodes, payment models

CATEGORIZED AS

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