Oral Defense Announcement
University of Missouri – St. Louis Graduate School

An oral examination in defense of the dissertation for the degree
Doctor of Business Administration with an emphasis in Accounting

Michael R. Wieck

M.S. in Strategic Finance, August, 2013, Indiana University Southeast
B.S. in Business, August, 2011, Indiana University Southeast
B.A. in Mathematics, August, 2011, Indiana University Southeast
A.A. in Physics, August, 2011, Indiana University Southeast

Profitably Risky: A Study of Medicare Capitation Contracts for Primary Care Medical Practices

Date: July 22, 2021
Time: 2:00 PM to 4:00 PM
Place: 103 Anheuser Busch Hall and Remote

Abstract
To encourage the delivery of high-quality healthcare while containing costs, the Centers for Medicare and Medicaid Services is seeking to move medical providers from a fee-for-service reimbursement model to a value-based reimbursement model. One form of value-based reimbursement involves capitation payments to primary care providers with financial incentives based on services rendered and patient outcomes. Prior attempts at capitation, however, are alleged to have resulted in financial failures for medical practices. In this dissertation, we studied the financial risks that accompany capitation contracts. We employed Poisson regression to estimate health care utilization of individual beneficiaries under the care of primary care providers with varying levels of capitation. Then, we calculated capitation contract results for primary care practices using custom Monte Carlo simulations. We used three methods to predict medical payments for beneficiaries: (1) empirical probability distributions of total annual medical payments for individual beneficiaries, (2) theoretical probability distributions of total annual medical payments, and (3) accumulated costs from simulating individual medical services received. We found that Medicare Advantage beneficiaries under the care of primary care physicians engaged in capitation contracts experienced significantly fewer visits in inpatient, outpatient, carrier, home health, and skilled nursing facility health care venues. Their visit counts were 48.2%, 57.6%, 35.0%, 74.3%, and 66.2% fewer for the respective venues, compared with Traditional Medicare beneficiaries under the care of fee-for-service primary care providers. Reducing service utilization was the greatest determinant of achieving positive financial rewards under a capitation contract. Stop-loss provisions were, however, essential to protect practices from extreme costs that occurred for a few very sick patients. We found that, with appropriate contract provisions and proven reductions in healthcare utilization by contracted patients, primary care practices could have been protected from the financial failures of prior capitation attempts. Even single-physician practices can help to reduce healthcare costs and realize financial benefits from capitation without exposure to serious financial risk when contracts are formulated appropriately.

Defense of Dissertation Committee
L. Douglas Smith, Ph.D.
Stephen R. Moehrle, Ph.D.
Ekin K. Pellegrini, Ph.D.