

Daeho Kim

Department of Economics, Brown University
Box B, Providence RI 02912
401-837-3034 (Mobile), daeho_kim@brown.edu
http://www.econ.brown.edu/students/daeho_kim

Education

Ph.D., Economics, Brown University, May 2012 (expected)
M.A., Economics, Brown University, 2007
B.A., Statistics, Korea University, 1999

References

Professor Kenneth Y. Chay (Chair)
Department of Economics, Brown University
kenneth_chay@brown.edu (401) 863-6296

Professor Anna Aizer
Department of Economics, Brown University
anna_aizer@brown.edu (401) 863-9529

Professor Brian Knight
Department of Economics, Brown University
brian_knight@brown.edu (401) 863-1584

Professor Kaivan Munshi
Department of Economics, Brown University
kaivan_munshi@brown.edu (401) 863-9331

Research and Teaching Fields

Health Economics, Public Economics, Labor Economics

Job Market Paper

“Medicare Payment Reform and Hospital Costs: Evidence from the Prospective Payment System and the Treatment of Cardiac Disease”

Medicare’s Prospective Payment System (PPS) reform in 1983 tied hospital payments to the national average cost of each medical technology with the expectation of reducing health care costs. I show that an unintended consequence of PPS was to generate financial incentives for hospitals to expand treatments that had average costs greater than marginal costs due to sizable fixed investments – i.e., the Medicare payment would be greater than the treatment cost at the margin. In the context of cardiac treatments, coronary artery bypass graft (CABG) surgery has a greater average-to-marginal cost ratio than angioplasty, whose ratio is greater than drug therapy’s. I document that the PPS reform induced a profit margin that was five times higher for CABG than for angioplasty. I derive a simple model that allows each treatment’s effectiveness to vary by patient illness severity. The model predicts that hospitals, in response to PPS, will expand CABG use by treating patients for whom angioplasty is more cost-effective in order to exploit the greater economies of scale. To identify the impact of PPS on cardiac procedures, I exploit the discontinuity in Medicare eligibility at the age of 65. Utilizing data from *before-and-after* the PPS reform, I find a discontinuous change in CABG use at age-65 after the reform that implies an increase of 50 to 60 percent. Nearly all of the increase is driven by a composition change in the patients who receive CABG, with treatment expanded to patients who are observably healthier (i.e., fewer grafts or no comorbidity). Possible competing hypotheses do *not* exhibit changes at the age-65 threshold (e.g., disease incidence, insurance rates). The increased CABG use was not cost effective – the lower bound estimate of the cost per quality-adjusted life year was over one million dollars. The average cost payments of PPS provided incentives for hospitals to expand the use of technologies that have high fixed costs; an expansion that increased health care costs with possibly little health benefits.

Working Paper

“Medicare, Hospital Utilization and Mortality: Evidence from the Program’s Origins” (with Kenneth Chay and Shailender Swaminathan)

We examine changes in hospital utilization and mortality rates after Medicare's introduction in July of 1966 with the most comprehensive data ever used. The analysis applies the “age discontinuity” design of recent research to data both before and after Medicare’s introduction, which allows us to account for pre-existing trends that vary by age. We find: i) clear evidence that Medicare increased hospital care utilization and costs among the elderly, but at a lower rate than previously found; ii) significant mortality reductions in the eligible population that exhibit an age discontinuity only after Medicare's introduction – patterns not found in nations that did not introduce a Medicare-style program in the 1960’s; and iii) the sharpest mortality reductions in acute causes of death (heart disease). We estimate that Medicare’s introduction had a cost-per-life year ratio below \$200 (in 1982-84 dollars). We then analyze changes over time in the characteristics of the "marginal" person who benefited from Medicare coverage. We find that the age-65 discontinuity in insurance rates fell over time, more so for blacks, the less-educated, poor and disabled. We also document a sharp increase in the mid-1980s in the use of coronary artery bypass graft (CABG) surgery on the Medicare eligible, which coincided with an increase in the relative Medicare reimbursement rate for this procedure.

Research in Progress

“The Black-White Gap in Educational Attainment: Suggestive Evidence on the Role of Hospital Desegregation”

“Return to Work: The Effects of Medical Care on Labor Supply”

Research and Professional Experience

Fall 2008, 2009, 2010

Research Assistant to Professor Kenneth Chay

1999-2006

Economist, Bank of Korea

Teaching Experience

Spring 2009, 2010

Teaching Assistant to Professor Kenneth Chay, Labor Economics

Awards and Fellowships

Fall 2011-Spring 2012

Dissertation Completion Award, Brown University

Spring 2011

Merit Dissertation Fellowship, Brown University

Summer 2010

Summer Dissertation Fellowship, Brown University

Fall 2007-Fall 2010

Graduate Assistantship, Brown University

Fall 2006-Fall 2007

Merit-based Fellowship, Bank of Korea

Presentations

Nov 2011

Applied Microeconomics Seminar, Brown University

Oct 2011

Brown Bag seminar, Brown Center for Gerontology and Healthcare

Apr 2011

Applied Micro Lunch, Brown University