Data Appendix

Hospital Cost Analysis:

We calculate our dependent variable—the average hospital costs per insured county inhabitant—as follows.
First, we use the universe of hospital discharge records from the Massachusetts Case Mix database, which covers inpatient, outpatient, and emergency room visits from 2004-2009. The Massachusetts Case Mix database is confidential, so we do not include it here. We drop discharge records of uninsured hospital patients (patients whose payer type indicates "Self Pay" or "Free Care") and keep discharge observations that range from $0 to $300,000 for the nonelderly adults aged 18-64.

Second, we use hospital cost-to-charge ratios from the Health Care Utilization Project (HCUP) cost-to-charge ratio files for the years 2004-2009. We merge the facility-year level cost-to-charge ratio to the Case Mix database in two steps. First, we use a specific linkage file to add facility name and address from the annual American Hospital Association (AHA) survey. Second, we use name and address information to link the cost-to-charge ratio to the Case Mix data. We are missing the HCUP cost-to-charge ratio for a very small number of hospital sites in the Case Mix data. In these cases, we assigned the average cost-to-charge ratio in the given year. Finally, we multiply the discharge rates with the facility-year-specific cost-to-charge ratio and add up the derived discharge level hospital costs by the patient's county of residence and year. This gives us the total hospital costs for the insured population aged 18-64 at the county-year level.
We do not observe hospital visits in the last quarter of 2009, which is why we use a county-specific scaling factor from 2008 to extrapolate our 2009 cost estimates to the full year. The scaling factor is simply the annual hospital cost amount in 2008 divided by the total cost amount that was accumulated by the third quarter of 2008 by county. We multiply the accumulated discharge rates in 2009 by this factor.

Third, we deflate the derived hospital costs into 2011 dollars using the medical care consumer price index provided by the Bureau of Labor Statistics (BLS) and drop the county-year level hospital cost estimates for the reform years 2006 and 2007.

Fourth, we add a) population estimates from the Census and b) county-year specific coverage estimates from the Small Area Health Insurance Estimates (SAHIE) and the American Community Survey (ACS) to calculate the number of insured non-elderly county residents aged 18-64. We average the county-year level population estimates over our empirical sample period years (2004, 2005, 2008, and 2009) to avoid using inaccurate intertemporal changes in population estimates. We use the SAHIE estimates from 2005 as our pre-reform coverage measure (for the years 2004 and 2005) and use the ACS estimates from 2008 and 2009 for the post-reform years. We multiply the county population estimates by the respective coverage estimates to quantify the number of insured persons at the county-year level. Finally, we divide our total hospital cost estimate by the number of insured individuals in the county and use the result as our dependent variable in the empirical analysis, which we describe in the attached do-file: "Cost-Analysis.do".

Analysis of Health Measures and Behaviors:

We describe the empirical analysis in "Health-Behaviors.do".