

THE IMPACT OF HEALTH REFORM IN MASSACHUSETTS: LESSONS & IMPLICATIONS FOR NATIONAL REFORM

Amanda Kowalski

Assistant Professor

Yale Department of Economics

What We Have Learned From Massachusetts And Implications for National Reform

Overview of My Research (Many Papers)

Overview of Massachusetts Reform and the ACA
Impact on Coverage

Studying the Impact of National Reform

- I. Impact on Hospital and Preventive Care
- II. Impact on the Labor Market
- III. Was There Adverse Selection into Insurance Before Reform?

Learning about National Reform Using Massachusetts Reform

□ “...the fact of the matter is, we used the same advisers, and they say it’s the same plan.”

-President Obama,

First Presidential Debate 2012

Key Provisions of Massachusetts Reform and ACA

Massachusetts Reform, April 2006

- Individual mandate
 - Penalty is up to 50% of basic plan by months without coverage
- Employers mandated to provide coverage
 - >10 FTEs
- Medicaid expansions
 - Up to 100% of FPL for adults
 - Up to 300% of FPL for children
- Subsidized private plans through exchanges
 - Subsidies up to 300% of FPL
- Insurance exchange
 - Administered by the “Connector”
 - Benefit tiers Bronze-Gold and Young Adult Plans (YAPs)

Key Provisions of Massachusetts Reform and ACA

Massachusetts Reform, April 2006

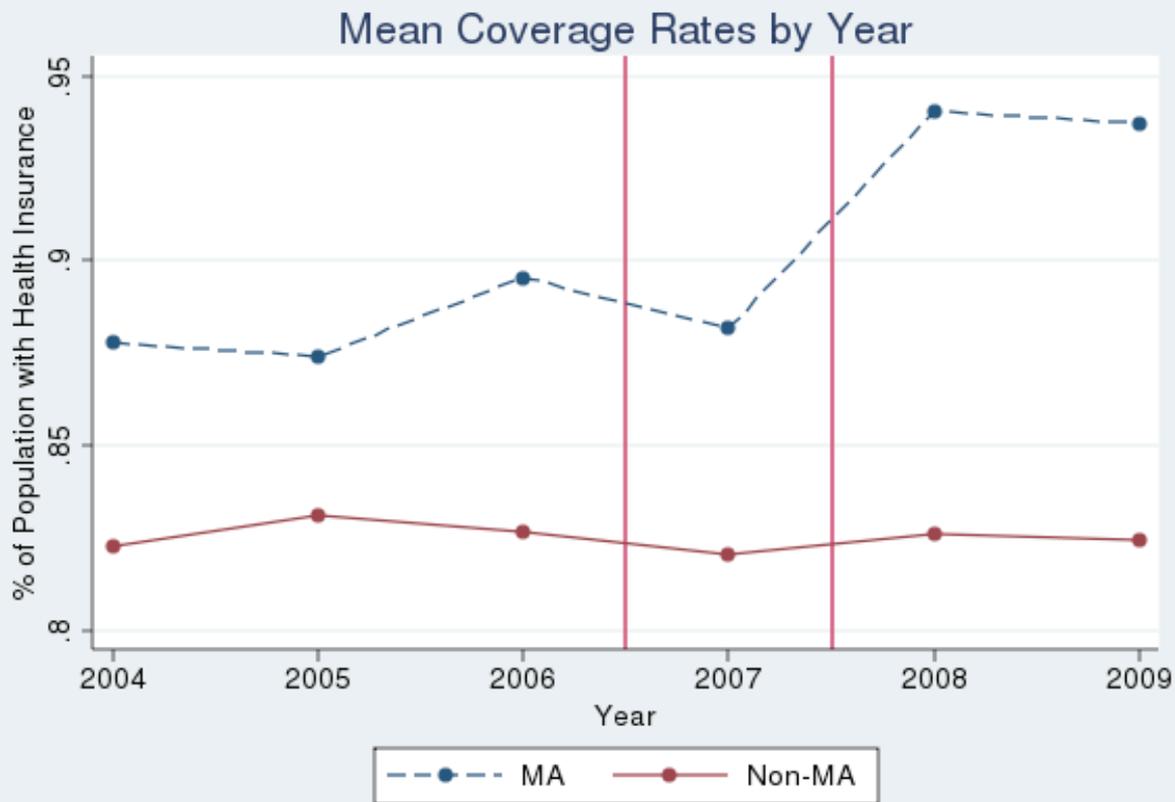
- Individual mandate
 - Penalty is up to 50% of basic plan by months without coverage
- Employers mandated to provide coverage
 - >10 FTEs
- Medicaid expansions
 - Up to 100% of FPL for adults
 - Up to 300% of FPL for children
- Subsidized private plans through exchanges
 - Subsidies up to 300% of FPL
- Insurance exchange
 - Administered by the “Connector”
 - Benefit tiers Bronze-Gold and Young Adult Plans (YAPs)



National Reform, March 2010

- Individual mandate
 - Penalty is higher of 2.5% of income or \$2,085
- Employers mandated to provide coverage
 - >50 FTEs
 - >200 FTEs automatically enroll
- Medicaid expansions
 - Up to 133% of FPL
- Subsidized private plans through exchanges
 - Subsidies up to 400% of FPL
- Insurance exchanges
 - State level administration
 - Benefit tiers Bronze-Platinum and Catastrophic
- Cost control measures

First Order Impact of Reform: Coverage in MA Increased



- Significant decline in uninsurance
 - 49% reduction relative to MA pre-reform
- Magnitude of increase after reform was similar for ESHI and Medicaid coverage

Paper I. Impact on Hospital and Preventive Care

- *Kolstad, Jonathan and Amanda Kowalski "The Impact of Health Care Reform on Hospital and Preventive Care: Evidence from Massachusetts." forthcoming, Journal of Public Economics (earlier version NBER Working Paper 16012. May 2010.)*

Approach

- Compare Massachusetts to other states before and after reform
 - ▣ Impact on coverage
 - ▣ Impact on total volume and patient mix
 - ▣ Overall impact on hospital outcomes
 - Length of stay
 - Admissions from emergency room
 - Preventive care
 - Costs
 - ▣ Incidence by age, gender, income, and race
- *Data sources: CPS, BRFSS, HCUP NIS*

Length of Stay Decreased



- 1% in levels
- 0.1% in logs – gives more weight to shorter stays – bigger reduction in longer stays
- Consistent with more management of care, changes in treatment patterns or capacity constraints
- Not consistent with moral hazard

Hospital Admissions from ER Decreased Most for Low Income

Emergency Admit

Patient's Zip Code in First (Lowest) Income Quartile (28% of sample)

Ma*After -0.0570
[-0.0703,-0.0436]***

Mean MA Before 0.4665

Patient's Zip Code in Second Income Quartile (26% of sample)

Ma*After -0.0190
[-0.0297,-0.0083]***

Mean MA Before 0.4437

Patient's Zip Code in Third Income Quartile (23% of sample)

Ma*After -0.0107
[-0.0392,0.0178]

Mean MA Before 0.3671

Patient's Zip Code in Fourth (Highest) Income Quartile (21% of sample)

Ma*After 0.0098
[-0.0324,0.0519]

Mean MA Before 0.3189

- Overall, 2% less likely to be admitted from ER (5% decline relative to baseline)
- Lower income less likely to have coverage before reform
- Lowest income quartile ER admissions declined by 12% relative to baseline
- Reduction is 5x larger in lowest income zip code relative to third income quartile

Some measures of prevention improved – reflects access to primary care

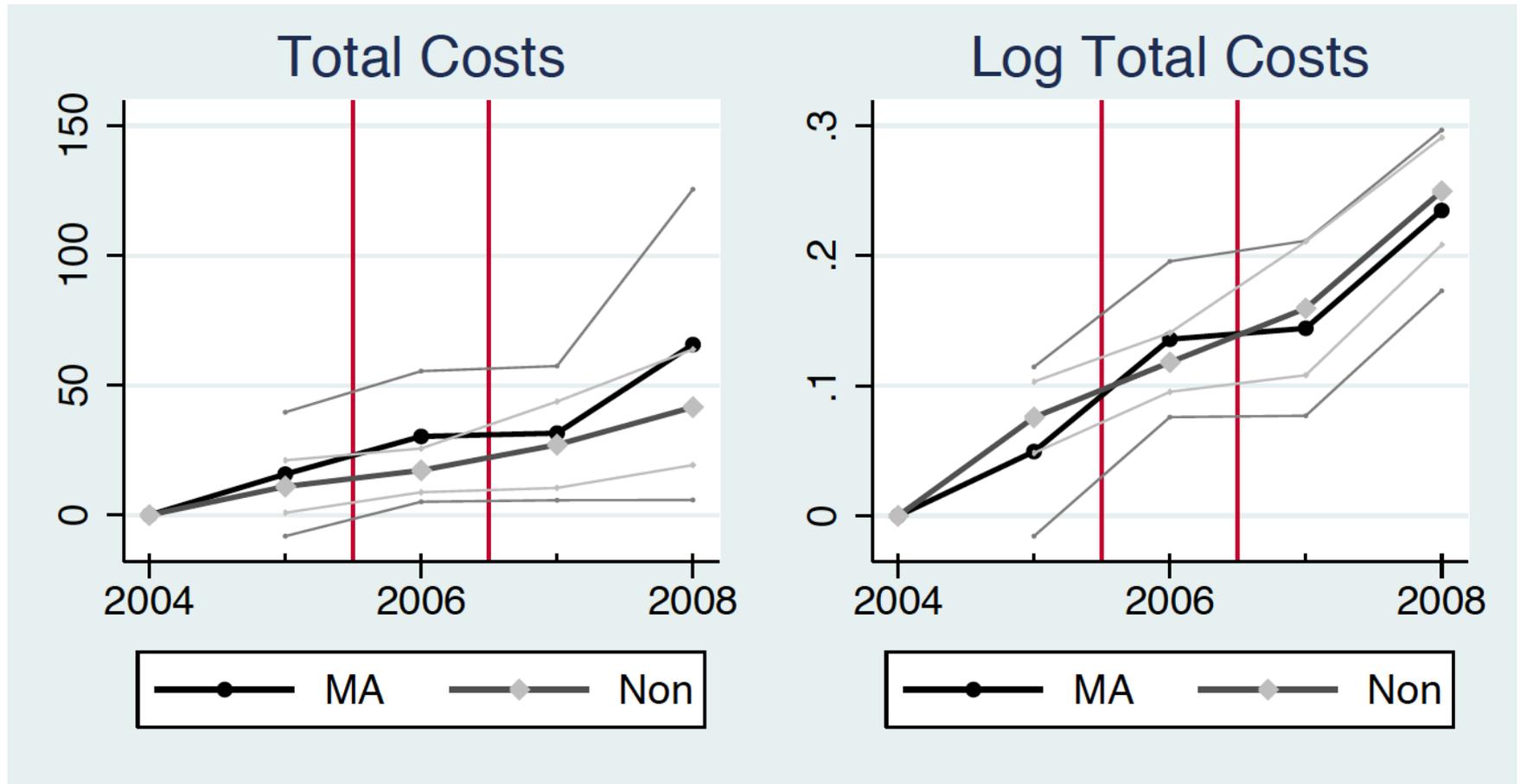
Approach:

- Cannot measure outpatient preventive care with inpatient data
- Can use measures developed by AHRQ to measure frequency of diagnoses that should not appear in inpatient setting if adequate preventive care has been obtained
 - Ex: perforated appendix, adult asthma, lower-extremity amputation
- We expect improvements in prevention quality since newly insured should be able to access outpatient care

Results:

- Significant improvements in 3 of 13 measures without risk adjustment (perforated appendix, adult asthma, lower-extremity amputation) but little decline in overall measure
- Reduction in overall volume of preventable admissions and 6 of 13 specific measures controlling for severity
- BRFFS results also consistent with increase in preventive care

Rate of Growth of Hospital Costs in MA Unchanged Relative to Other States



Implications for National Reform

- Expansions to near universal coverage
 - ▣ Likely to reduce LOS, reduce admissions from ER, and may improve preventive care
 - ▣ Unlikely to raise hospital costs beyond predicted growth rate
- Presence of some benefits is a precursor to the reform satisfying a cost-benefit analysis

Paper II. Impact on the Labor Market

- *Kolstad, Jonathan and Amanda Kowalski “Mandate-Based Health Reform and the Labor Market: Evidence from Massachusetts.” NBER Working Paper #17933 (newer version on our websites)*

Approach

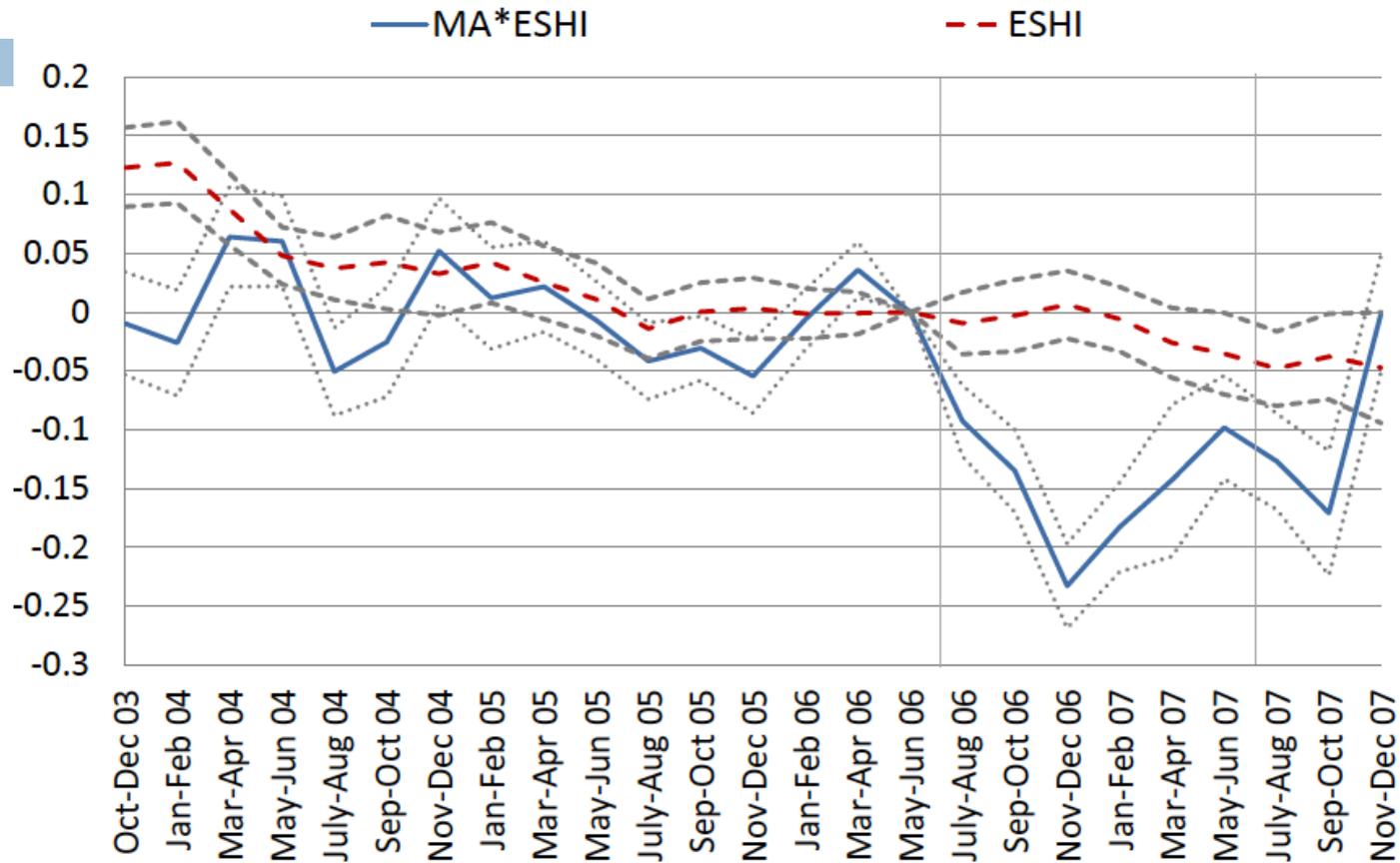
□ Theory:

- ▣ Model the impact of individual and employer mandates and subsidies on wages and employment
- ▣ Quantify the welfare impact of “mandate-based” reform versus alternate approaches to expanding coverage (for example, a tax on wages)

□ Empirics:

- ▣ Test for wage reductions with health insurance in MA
 - Identify model by examining impact on people who switch from NO ESHI to ESHI during reform, relative to endogenous switchers
 - Longitudinal data is key → Look at the same person with and without ESHI

For individuals who switch to ESHI, wages decline by the cost of ESHI to employers



- Estimate a reduction in wages in moving to ESHI of \$6,058
- KFF Survey from 2007 suggests average premium of \$4,479 and \$12,106 for individual and families respectively
 - ▣ Weighted average is \$6,105

Findings from MA and Implications for National Reform

- If anything, aggregate wages increased in MA relative to other states, aggregate hours were unchanged and employment increased
 - ➔ Little overall impact on the labor market
- For people who switch to ESHI, wages decrease by almost the full cost to employers, and hours change little
 - ➔ Combination of intrinsic value from health insurance and the mandate penalty led to high valuation
 - ➔ Could explain why we see crowd-in to ESHI
- Estimates suggest mandate-based reform is efficient
 - ▣ DWL of mandate-based reform is 2% of a wage tax-financed reform, under strong assumption of no tax-benefit linkage

Paper III. Was there Adverse Selection Into Insurance Before Reform?

- *Hackmann, Martin, Jonathan Kolstad, and Amanda Kowalski “Testing for Adverse Selection Using Regulatory Changes” American Economic Review (Papers and Proceedings). May 2012.*

Approach

□ Theory

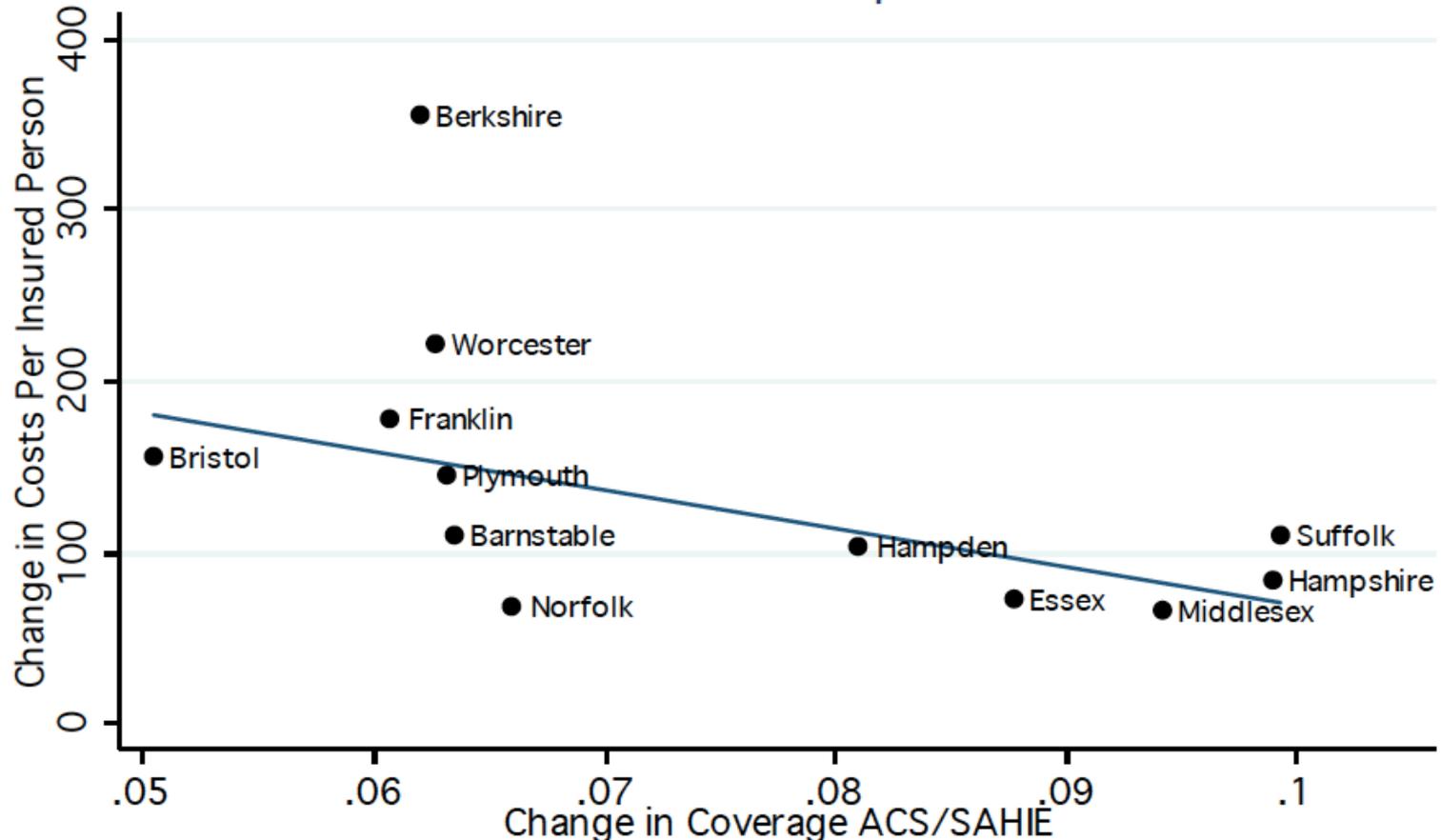
- If there is adverse selection, insured are sicker than the uninsured
- Mandate is traditional “solution” to adverse selection
- After mandate, if there was adverse selection, average health of the insured should increase
- We extend the “downward sloping cost curve test” of Einav, Finkelstein, and Cullen (2010)

□ Empirics

- Using data within Massachusetts, use variation in initial coverage levels across counties
- Examine changes in average costs and indicators of underlying health for the insured across counties
- Data sources: Massachusetts Hospital Discharge Data, BRFSS, MEPS

Counties with Greater Increases in Coverage Saw Greater Decreases in Costs of Insured

Evidence from Hospital Costs



— Linear Fit • Change in Costs

Summary and Implications for ACA – Mandate mitigated adverse selection in MA

- We find evidence for adverse selection into health insurance (extensive margin selection)
 - ▣ Newly insured healthier than previously insured
 - ▣ Mandate lowered average cost due to hospital care by \$124 per person before loading (approximately 3% of 2007 national avg. individual premium of \$4,479)
- Results broadly consistent with actual change in premiums
 - ▣ Premiums in employer-sponsored plans followed the national trend (KFF 2009)
 - ▣ Premiums in the non-group market decreased by 20% (AHIP 2007, 2009)
 - ▣ Broadly consistent with the 3% change in overall costs that we observe
- MA already had community rating regulations, which will be established by national reform

Overall Conclusions and Implications for the ACA

- Impact on hospital and preventive care
 - ▣ Reduction in LOS, admission from the ER
 - ▣ Increase in preventive care in outpatient setting
 - ▣ No change in hospital cost growth
- Impact on wages and employment
 - ▣ No impact on overall wages or employment
 - ▣ Newly insured saw wages decline by \$6,055 annually, but very little reduction in employment
 - ▣ People value the health insurance they receive through employers (\$.75 to \$1 for every \$1 of health insurance)
- Impact on insurance market functions
 - ▣ Reduced adverse selection
 - ▣ Demonstrates role of mandate with community rating/guaranteed issue