

Have Gender Gaps in Insurance Coverage and Access to Care Narrowed under Health Reform? Findings from Massachusetts

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As a result of its landmark 2006 health reform legislation, Massachusetts has achieved near universal health insurance coverage, along with significant gains in access to and use of care and in the affordability of care (Long and Stockley 2010). Improvements have been documented for the population as a whole, as well as for vulnerable subgroups, including lower-income adults, racial and ethnic minorities, and adults with chronic health conditions. This paper examines the impacts of the state's health reform initiative on women and men, and the gender gaps in coverage and access. We focus on the impacts of health reform on differences in insurance coverage, access to and use of health care, and the affordability of health care between fall 2006, just prior to the implementation of health reform in the state, and fall 2009, the most recent year for which data are available.

Gender differences in health care needs and use of health care are well established. Women tend to have a greater need for health services than men, in large part due to women's reproductive health care needs at younger ages and the greater incidence of chronic conditions among women at older ages (Cara J. James et al. 2009). Women are also more likely to have health insurance coverage than men, likely reflecting both their higher health needs and the availability of Medicaid coverage for pregnant women and lower-income families with children. Consistent with those differences, women tend to use more health services than do men (Sheila D. Rustgi,

Michelle M. Doty, and Sara R. Collins 2010). Women, who have lower incomes than men on average, also tend to spend a greater share of their income on medical care and report more difficulties with the affordability of health care. In particular, women report more problems paying medical bills and more medical debt, and are more likely to go without needed care because of costs (Rustgi, Doty, and Collins 2010). It is not clear *a priori* how health reform in Massachusetts, with its push toward universal health insurance coverage along with expanded standards for this coverage, affected the differences in health insurance coverage and access, use, and affordability of care between men and women that existed prior to health reform.¹

I. Data and Methods

We use data from the Massachusetts Health Reform Survey to examine changes over time in insurance coverage, access to and use of health care, and affordability of care for women and men age 18 to 64 years. The surveys, which have been conducted every fall since 2006, are based on stratified random samples, with oversamples of the low- and moderate-income and uninsured adults who were the primary focus of many elements of the Massachusetts health reform initiative (Long 2009).

Our analytic approach compares gender differences in outcomes for cross-sectional samples of men and women in fall 2006, just prior to the implementation of key elements of health reform, and fall 2009, the most recent

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¹ Under its health reform initiative, Massachusetts introduced new standards for health insurance coverage, called minimum creditable coverage, which require that insurance cover prescription drugs, and cover some doctor visits and check-ups prior to applying the deductible, set limits on the amount of the deductible, and set limits on out-of-pocket health care spending, among other things.

postreform year for which data are available.² Under this pre-post framework, changes in gender differences between fall 2006 and fall 2009 are attributed to the state's reform efforts. We report estimates based on multivariate regression models that control for demographic, health and disability, and socioeconomic characteristics, as well as region fixed effects.³ In the models of gender differences in the pre- and postreform periods, we use data from the specific pre- or postreform year (2006 or 2009, respectively). In testing whether gender differences changed over the study period, we estimate difference-in-differences (DD) models using data for all four years of the survey to test if the gender differences in 2009 were significantly different from the gender differences in 2006. We estimate separate models for all nonelderly adults and for subgroups based on age (18–45 and 46–64) to determine if gender disparities and changes in gender disparities differed between younger and older adults. In presenting the estimates of the impacts of health reform, we report on the actual outcomes for women in fall 2006 and fall 2009 and the regression-adjusted differences from men in the same age group. For ease of comparison across models, we estimate linear probability models. We control for the complex design of the sample using the survey data analysis procedures (svy) in Stata 11 (StataCorp 2009).

The primary concern with this type of analysis is that other factors beyond health reform changed differentially for women and men over the study period, which could bias the estimates of the impacts of health reform on gender disparities. For example, if the recession that began in December 2007 affected women more severely than men, or vice versa, this could affect trends in our outcome variables, biasing our results. The regression models control for socioeconomic factors, including employment status and family income, but other unmeasured socioeconomic factors that may have changed

differentially over the period could have an impact on our estimates. Another change over the study period was the continuing increase in health care costs in the state, a national trend that predates health reform. Again, this would only affect our estimates of the changes in gender disparities if this trend affected men and women differentially.

II. Gender Difference Prior to Reform

Prior to health reform in Massachusetts, women were much more likely to have insurance coverage than men, especially younger women relative to younger men (Table 1). This reflects, in part, the greater availability of public coverage for women in the state prior to health reform through coverage for pregnant women and lower-income families. Women in the state were also more likely to use care more than men, again, particularly among younger women relative to younger men. This is not surprising, given younger women's higher levels of insurance coverage and the reproductive health care needs of women in their child-bearing years. Despite their much higher levels of insurance coverage, women were just as likely as men to report unmet need for health care, including unmet need because of costs, and more likely to have had problems affording care prior to health reform. In addition, older women were significantly more likely to have had problems paying medical bills. These findings suggest that insurance coverage provided less financial protection for women than men with the same health status and financial resources prior to health reform.

III. Changes in Gender Differences under Reform

Under health reform, both men and women experienced gains in coverage, access to and use of care, and the affordability of care (online Appendix Tables 3 and 4). While there were gains among adults of all ages, the improvements were greater for younger women and younger men relative to older women and older men.

Table 2 presents estimates from the difference-in-differences models of the changes in gender differences over time under health reform. As shown, health reform narrowed the gap between men and women significantly in terms of coverage, as more men (particularly younger

² The fall 2006 survey was fielded as the Commonwealth Care program, a new subsidy program for lower-income adults, was beginning for adults with family income under the federal poverty level; however, enrollment started slowly.

³ Online Appendix Tables 1 and 2 (<http://www.aeaweb.org/articles.php?doi=10.1257/aer.101.3.640>) report on the characteristics of the men and women in fall 2006 and fall 2009, respectively.

TABLE 1—REGRESSION-ADJUSTED GENDER DIFFERENCES PRIOR TO HEALTH REFORM, FALL 2006

| | Ages 18–64 | | Women-men dif- ference, ages 18 to 45 | Women-men dif- ference, ages 46 to 64 |
|---|------------|------------------------|---|---|
| | Women | Difference from men | | |
| <i>Insurance coverage</i> | | | | |
| Any insurance coverage | 91.1 | 7.8*** | 11.5*** | 2.5* |
| ESI coverage | 68.0 | 5.4*** | 5.9** | 5.4** |
| Public or other coverage | 23.1 | 2.4 | 5.6** | –2.9 |
| <i>Access and use in past 12 months</i> | | | | |
| Has a usual source of care (excluding ED) | 90.0 | 5.4*** | 8.3*** | 1.4 |
| Any doctor visit | 84.7 | 6.1*** | 7.2** | 5.0* |
| Any specialist visit | 56.4 | 10.4*** | 11.3*** | 9.0*** |
| Any dental care visit | 72.0 | 9.1*** | 8.8*** | 8.2*** |
| Took any prescription drugs | 62.0 | 10.2*** | 14.1*** | 5.7* |
| Unmet need for any reason | 27.4 | 3.5 | 2.0 | 4.9 |
| <i>Costs in past 12 months</i> | | | | |
| Had problems paying medical bills | 22.3 | 2.8 | 0.4 | 6.5** |
| Unmet need because of costs | 17.9 | 1.7 | 1.3 | 2.9 |

Notes: ESI is employer-sponsored insurance. ED is emergency department.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Source: 2006 Massachusetts Health Reform Survey ($N = 2,925$ for adults 18 to 64; $N = 1,476$ for adults 18 to 45; $N = 1,445$ for adults 46 to 64).

men) gained coverage relative to women. There was also a significant narrowing of the gender gap in unmet need for care among older adults. None of the other difference-in-differences estimates were statistically significant, suggesting little change in these other gender differences under health reform.

IV. Gender Differences after Reform

While women and men both gained under health reform, substantial differences in access and use of health care persisted in 2009 (Table 3). Overall, younger and older women continued to use more care than men under health reform. In addition, women experienced more problems affording health care after reform than men, particularly younger women compared to younger men. Younger women were 5.8 percentage points more likely to report unmet need due to cost and 5.3 percentage points more likely to have problems paying medical bills relative to younger men in fall 2009. Given that younger women were 4.5 percentage points *more* likely to have insurance coverage, this is indicative of worse financial protection from health insurance coverage for younger women relative to younger men.

V. Conclusions and Lessons for National Reform

Both men and women gained under health reform in Massachusetts, with evidence of improvements in insurance coverage, access, use, and affordability of care for both genders. Furthermore, the gender gap in insurance coverage narrowed significantly as men increased their levels of coverage relative to women with Massachusetts's push toward universal coverage. Insurance coverage is now at 97 percent for women, and men have made strides toward achieving a similarly high level of coverage.

The financial effect of these gains under health reform, however, appears to have had a less protective effect for women relative to men. Unmet need due to costs was reduced for both genders, but despite higher levels of coverage in 2009, women were more likely to report an unmet need for health care and problems affording care than were men, particularly among younger adults. These results suggest that insurance coverage might confer stronger financial protections for men than women, perhaps reflecting the fact that coverage does not guarantee access to and affordability of care. This may be particularly true for population groups with higher health

TABLE 2—REGRESSION-ADJUSTED DIFFERENCE-IN-DIFFERENCES ESTIMATES OF THE IMPACT OF HEALTH REFORM ON GENDER DIFFERENCES, FALL 2006 TO FALL 2009

| | Ages 18 to 64 | Ages 18 to 45 | Ages 46 to 64 |
|---|---------------|---------------|---------------|
| <i>Insurance coverage</i> | | | |
| Any insurance coverage | -4.7*** | -8.1*** | 0.2 |
| ESI coverage | -2.4 | -1.8 | -1.9 |
| Public or other coverage | -2.3 | -6.3 | 2.1 |
| <i>Access and use in past 12 months</i> | | | |
| Has a usual source of care (excluding ED) | -1.1 | -3.8 | 2.9 |
| Any doctor visit | -0.1 | 3.3 | -4.0 |
| Any specialist visit | 3.0 | 6.5 | -1.8 |
| Any dental care visit | 1.2 | 2.8 | -0.3 |
| Took any prescription drugs | -0.8 | -0.4 | -1.9 |
| Unmet need for any reason | -0.7 | 2.8 | -6.0* |
| <i>Costs in past 12 months</i> | | | |
| Had problems paying medical bills | 2.4 | 4.5 | -0.9 |
| Unmet need because of costs | 1.7 | 5.0 | -3.3 |

Notes: ESI is employer-sponsored insurance. ED is emergency department.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Source: 2006–2009 Massachusetts Health Reform Surveys ($N = 12,709$ for adults 18 to 64; $N = 5,887$ for adults 18 to 45; $N = 6,790$ for adults 46 to 64).

TABLE 3—REGRESSION-ADJUSTED GENDER DIFFERENCES AFTER HEALTH REFORM, FALL 2009

| | Ages 18–64 | | Women-men difference, ages 18 to 45 | Women-men difference, ages 46 to 64 |
|---|------------|---------------------|-------------------------------------|-------------------------------------|
| | Women | Difference from Men | | |
| <i>Insurance coverage</i> | | | | |
| Any insurance coverage | 97.1 | 3.7*** | 4.5*** | 2.3*** |
| ESI coverage | 68.7 | 3.2 | 2.9 | 5.1*** |
| Public or other coverage | 28.4 | 0.5 | 1.6 | -2.8 |
| <i>Access and use in past 12 months</i> | | | | |
| Has a usual source of care (excluding ED) | 92.8 | 5.6*** | 6.3*** | 4.9*** |
| Any doctor visit | 90.7 | 8.0*** | 13.2*** | 0.5 |
| Any specialist visit | 60.1 | 14.4*** | 19.6*** | 7.2* |
| Any dental care visit | 79.1 | 9.2*** | 9.9*** | 8.1*** |
| Took any prescription drugs | 64.1 | 10.4*** | 17.9*** | -0.1 |
| Unmet need for any reason | 21.2 | 1.3 | 4.2* | -2.3 |
| <i>Costs in past 12 months</i> | | | | |
| Had problems paying medical bills | 22.2 | 4.4** | 5.3** | 3.4 |
| Unmet need because of costs | 13.6 | 2.3** | 5.8*** | -1.4 |

Notes: ESI is employer-sponsored insurance. ED is emergency department.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Source: 2009 Massachusetts Health Reform Survey ($N = 3,041$ for adults 18 to 64; $N = 1,297$ for adults 18 to 45; $N = 1,735$ for adults 46 to 64).

care needs, such as women. As Massachusetts, and the nation, turn their attention toward cost containment in the next wave of reform, issues of how to ensure affordability of care for those

with insurance coverage will be a key part of the discussion.

In 2009, 18.4 percent of men in the United States were uninsured, compared to 15.0 percent

of women (US Census Bureau 2010). The Medicaid expansions and subsidies to purchase coverage mandated by the new Patient Protection and Affordable Care Act should narrow the national gender gap in insurance coverage. However, state differences in standards of care for coverage suggest that there may be greater gender disparities in access to care in other parts of the country than those existing in Massachusetts prior to health reform. Unlike many other states, Massachusetts has long had high coverage standards for contraceptives and screening services for women (Tracey Hyams and Laura Cohen 2010). Understanding why women have more difficulties obtaining the care they need and have more difficulties paying for their care is an important direction for future research.

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