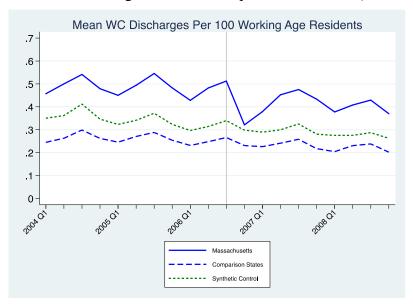
## Health Care Reform and Workers' Compensation: Evidence from Massachusetts

Erin Todd Bronchetti and Melissa P. McInerney

Supplemental Online Appendix

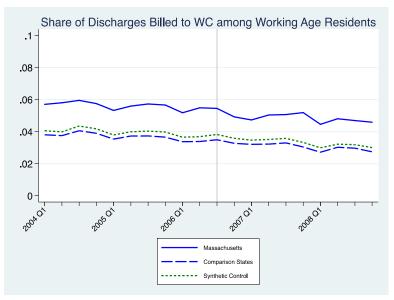
## Trends in WC Outcomes Among the Synthetic Control Group

Figure A.1. ER Discharges Billed to WC per 100 Residents (2004–2008)



*Notes:* The unit of observation is the state. Maryland contributes 10.1%, New Jersey contributes 0%, and Vermont contributes 89.9%. ER, emergency room; WC, workers' compensation.

Figure A.2. Share of Discharges Billed to WC among Working-Age Residents



*Notes:* The unit of observation is the state. Maryland contributes 8.9%, New Jersey contributes 26%, and Vermont contributes 65.1%. WC, workers' compensation.

| Panel A: Per-capita results              |                  |           |           |          |          |
|--|------------------|-----------|-----------|----------|----------|
|  | Total            |           |           |          |          |
|  | discharges       | WC        | Uninsured | Private  | Medicaid |
| DD coefficients                          |                  |           |           |          |          |
| Implementation period × MA               | -0.559***        | -0.030**  | -0.329*** | -0.161** | 0.166*** |
|  | (0.062)          | (0.006)   | (0.021)   | (0.063)  | (0.043)  |
| Post period × MA                         | -0.721***        | -0.040*** | -0.534*** | -0.105*  | 0.350*** |
|  | (0.062)          | (0.003)   | (0.033)   | (0.061)  | (0.047)  |
| Pre-reform MA mean                       | 8.649            | 0.486     | 0.997     | 3.84     | 1.74     |
| Effect sizes (DD coefficient as a % of p | re-reform mean)  |           |           |          |          |
| Implementation period                    | -6.5%            | -6.2%     | -33.0%    | -4.2%    | 9.5%     |
| Post period                              | -8.3%            | -8.2%     | -53.6%    | -2.7%    | 20.1%    |
| County-quarter observations              | 1,460            | 1,460     | 1,460     | 1,460    | 1,460    |
| $R^2$                                    | 0.964            | 0.946     | 0.982     | 0.877    | 0.970    |
| Panel B: Share of discharges billed to   | different payers | ;         |           |          |          |
|  | Total            |           |           |          |          |
|  | discharges       | WC        | Uninsured | Private  | Medicaid |
| DD coefficients                          |                  |           |           |          |          |
| Implementation period × MA               | _                | -0.000    | -0.028*** | 0.019*** | 0.028*** |
|  | _                | (0.001)   | (0.002)   | (0.004)  | (0.002)  |
| Post period × MA                         | _                | -0.001    | -0.042*** | 0.038*** | 0.046*** |
|  | _                | (0.001)   | (0.002)   | (0.004)  | (0.002)  |
| Pre-reform MA mean                       |                  | 0.056     | 0.115     | 0.453    | 0.194    |
| Effect sizes (DD coefficient as a % of p | re-reform mean)  |           |           |          |          |
| Implementation period                    | _                | 0.0%      | -24.3%    | 4.2%     | 14.4%    |
| Post period                              | _                | -1.8%     | -36.5%    | 8.4%     | 23.7%    |
| County-quarter observations              | _                | 1,460     | 1,460     | 1,460    | 1,460    |
| $R^2$                                    | _                | 0.942     | 0.986     | 0.967    | 0.980    |

Table A.1. Effects of Massachusetts (MA) Health Care Reform on ER Discharges Billed to WC and Other Payers: Standard Errors Clustered by State

Notes: Regressions include 1,460 county-quarter observations from 2004 through 2008. Regressions include controls for implementation period and post period; quarter-by-year fixed effects and county fixed effects; county-level unemployment, median income, and percentage black; and share of discharges representing the following types of injuries: cuts, drownings, falls, fires, firearms, motor vehicles, nature/environment, poisoning, strikes, suffocation, and overexertion. Standard errors clustered by state in parentheses. Regressions are weighted by the county population. Bolded type indicates that the corresponding coefficient estimate used to construct the

effect size is statistically significantly different than zero at the 10% level. DD, difference-in-differences; ER, emergency room; WC, workers' compensation.

\*\*\* *p* < 0.01; \*\* *p* < 0.05; \* *p* < 0.1.

| Panel A: Per-capita results               |                  |           |           |          |          |
|---|------------------|-----------|-----------|----------|----------|
|   | Total            |           |           |          |          |
|   | discharges       | WC        | Uninsured | Private  | Medicaid |
| DD coefficients                           |                  |           |           |          |          |
| Implementation period × MA                | -0.559***        | -0.030*** | -0.329*** | -0.161** | 0.166*** |
|   | (0.156)          | (0.008)   | (0.044)   | (0.079)  | (0.058)  |
| Post period × MA                          | -0.721***        | -0.040*** | -0.534*** | -0.105   | 0.350*** |
|   | (0.317)          | (0.011)   | (0.057)   | (0.147)  | (0.120)  |
| Pre-reform MA mean                        | 8.649            | 0.486     | 0.997     | 3.84     | 1.74     |
| Effect sizes (DD coefficient as a % of pr | e-reform mean)   |           |           |          |          |
| Implementation period                     | -6.5%            | -6.2%     | -33.0%    | -4.2%    | 9.5%     |
| Post period                               | -8.3%            | -8.2%     | -53.6%    | -2.7%    | 20.1%    |
| County-quarter observations               | 1,460            | 1,460     | 1,460     | 1,460    | 1,460    |
| <i>R</i> <sup>2</sup>                     | 0.964            | 0.946     | 0.982     | 0.877    | 0.970    |
| Panel B: Share of discharges billed to    | different payers | ;         |           |          |          |
|   | Total            |           |           |          |          |
|   | discharges       | WC        | Uninsured | Private  | Medicaid |
| DD coefficients                           |                  |           |           |          |          |
| Implementation period × MA                | _                | -0.000    | -0.028*** | 0.019*** | 0.028*** |
|   | _                | (0.001)   | (0.004)   | (0.006)  | (0.004)  |
| Post period × MA                          | _                | 0.000     | -0.042*** | 0.038*** | 0.046*** |
|   | _                | (0.001)   | (0.004)   | (0.011)  | (0.006)  |
| Pre-reform MA mean                        |                  | 0.056     | 0.115     | 0.453    | 0.194    |
| Effect sizes (DD coefficient as a % of pr | e-reform mean)   |           |           |          |          |
| Implementation period                     | —                | 0.0%      | -24.3%    | 4.2%     | 14.4%    |
| Post period                               | _                | -1.8%     | -36.5%    | 8.4%     | 23.7%    |
| County-quarter observations               | _                | 1,460     | 1,460     | 1,460    | 1,460    |
| R <sup>2</sup>                            | _                | 0.942     | 0.986     | 0.967    | 0.980    |

*Table A.2.* Effects of Massachusetts (MA) Health Care Reform on ER Discharges Billed to WC and Other Payers: Standard Errors Clustered by County

*Notes:* Regressions include 1,460 county-quarter observations from 2004 through 2008. Regressions include controls for implementation period and post period; quarter-by-year fixed effects and county fixed effects; county-level unemployment, median income, and percentage black; and share of discharges representing the following types of injuries: cuts, drownings, falls, fires, firearms, motor vehicles, nature/environment, poisoning, strikes, suffocation, and overexertion. Standard errors clustered by county in parentheses. Regressions are

weighted by the county population. Bolded type indicates that the corresponding coefficient estimate used to construct the effect size is statistically significantly different than zero at the 10% level. DD, difference-in-differences; ER, emergency room; WC, workers' compensation.

\*\*\* *p* < 0.01; \*\* *p* < 0.05; \* *p* < 0.1.