

SUPPLEMENTAL FIGURE CAPTIONS

Supplemental Figure 1: Bias (top) and coverage of the 95% confidence interval (bottom) of 4 estimated provider effects when using different risk adjustment methods. All provider volumes were fixed to 3000 with a total event rate of 10%.

Supplemental Figure 2: Bias (top) and coverage of the 95% confidence interval (bottom) of 9 estimated provider effects when using different risk adjustment methods. All provider volumes were fixed to 3000 with a total event rate of 10%.

Supplemental Figure 3: Bias (top) and coverage of the 95% confidence interval (bottom) of 14 estimated provider effects when using different risk adjustment methods. All provider volumes were fixed to 3000 with a total event rate of 10%.

Supplemental Figure 4: MSE and ratio of average standard error over standard deviation (SE/SD) of B_A and B_C for different total sample sizes. The sample sizes were evenly distributed over providers with a fixed event rate of 10%. Different line colors represent the different risk adjustment methods used.

Supplemental Figure 5: MSE and ratio of average standard error over standard deviation (SE/SD) of B_A and B_C for differing total amounts of events. The total sample size was fixed to 10000 and distributed evenly over the providers. Different line colors represent the different risk adjustment methods used.

Supplemental Figure 6: MSE and ratio of average standard error over standard deviation (SE/SD) of B_A and B_C for differing provider volumes. The total sample size was fixed to 10000. Different line colors represent the different risk adjustment methods used.

Supplemental Figure 7: MSE and ratio of average standard error over standard deviation (SE/SD) of 4 estimated provider effects when using different risk adjustment methods. All provider volumes were fixed to 3000 with a total event rate of 10%.

Supplemental Figure 8: MSE and ratio of average standard error over standard deviation (SE/SD) of 9 estimated provider effects when using different risk adjustment methods. All provider volumes were fixed to 3000 with a total event rate of 10%.

Supplemental Figure 9: MSE and ratio of average standard error over standard deviation (SE/SD) of 14 estimated provider effects when using different risk adjustment methods. All provider volumes were fixed to 3000 with a total event rate of 10%.

Supplemental Figure 10: MSE and ratio of average standard error over standard deviation (SE/SD) of 19 estimated provider effects when using different risk adjustment methods. All provider volumes were fixed to 3000 with a total event rate of 10%.