

Equity and Disparities in Access to Post-mastectomy Reconstruction: Multi-decades in New York

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Background

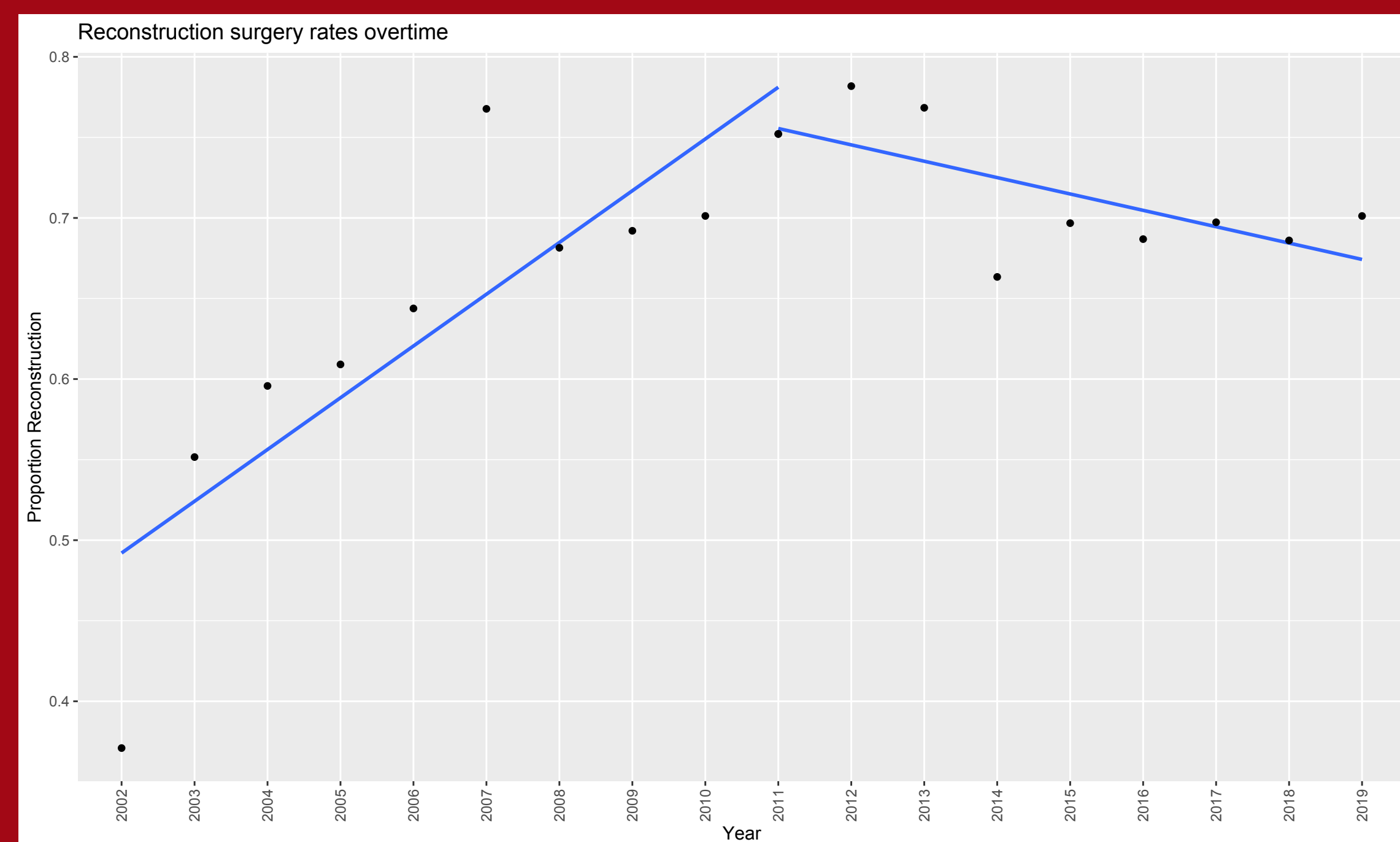
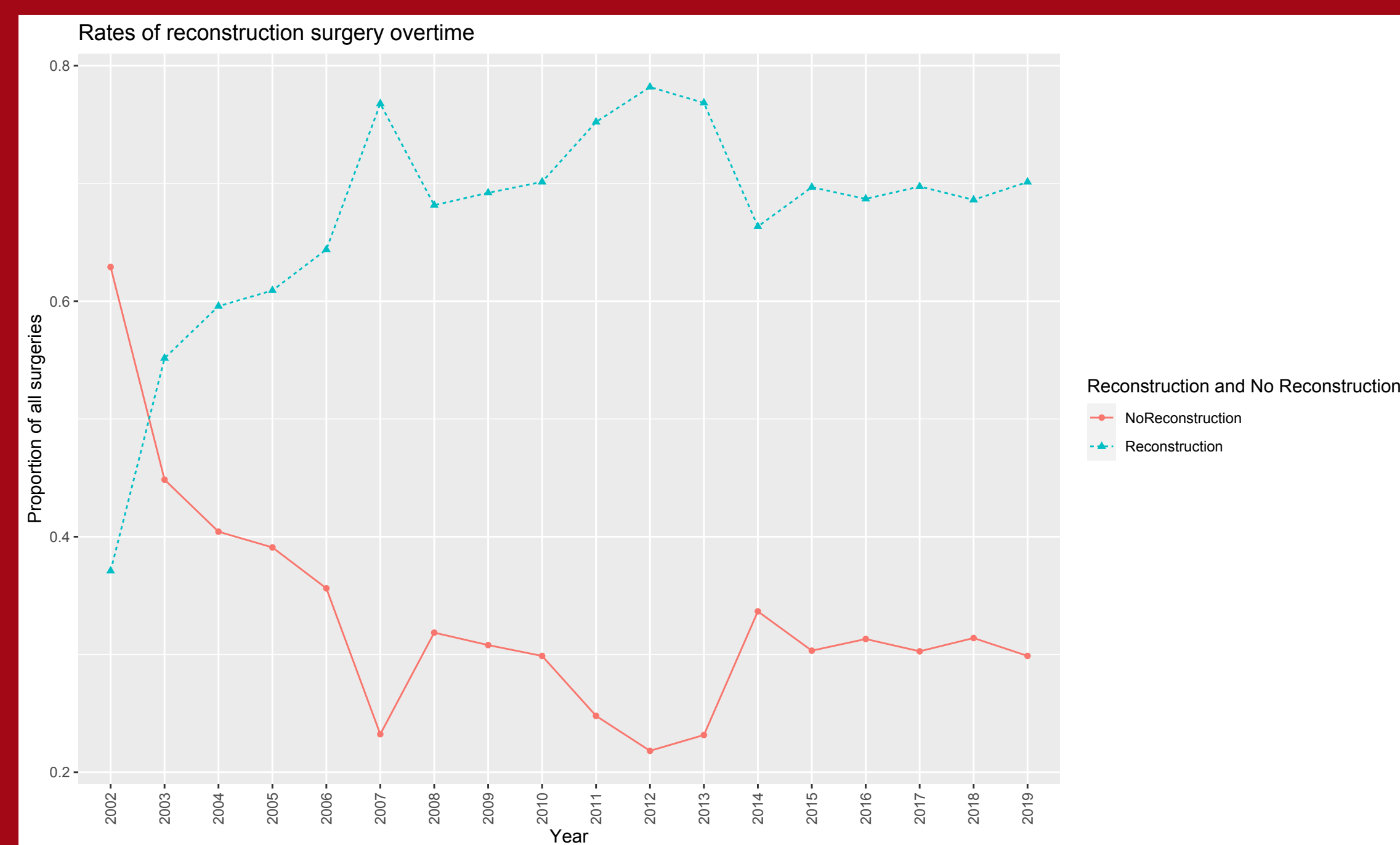
Breast reconstruction has been shown to improve both quality of life and psychosocial wellbeing. There is a paucity of literature that examines rates of post-mastectomy reconstruction across various demographics and clinical profiles on a multi-decade, multi-institutional scale. The aim of this study is to assess the barriers in post-cancer reconstruction at our affiliate institutions and evaluated the effects of the Breast Cancer Patient Discussion Law's implementation in NY.

Methods

We performed a retrospective chart review of patients who had undergone mastectomy at three institutions within the New York Presbyterian system, including Cornell (WCMC), Columbia (CUIMC), and Brooklyn Methodist (BMH) from 1979 to 2019. Patient medical history, demographics and treatments were recorded. Univariate and multivariate logistic regression were used to assess the relationship between the variables and receiving reconstruction after mastectomy. Interrupted time series analysis was used to assess the temporal effects of the law.

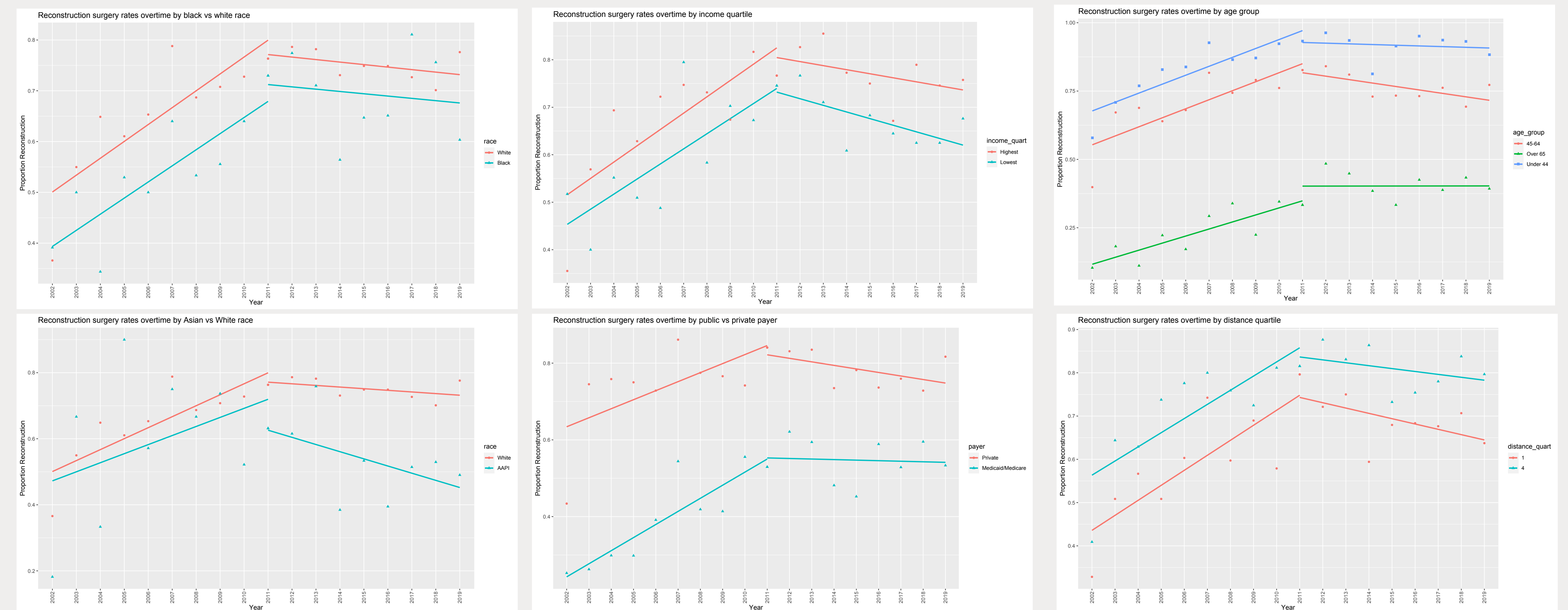
Results

4594 patients with verifiable data were included in the cohort. Older age (OR 0.9), more advanced cancer stage (OR 0.46), and being single compared to married (OR 0.66) were correlated with lower odds of pursuing reconstruction ($p < 0.05$). Compared to their White counterparts, Asian American Pacific Islander (OR 0.21) and Black patients (OR 0.61) were significantly less likely to receive reconstruction ($p < 0.05$). The same trend was not present for Medicare/Medicaid compared to private insurance status.



Results – Interrupted Time Series Analysis

On interrupted time series analysis, with each year leading up to the 2011 law implementation, the odds that any patient undergoes mastectomy with reconstruction increased by 21% (OR: 1.21; CI: 1.16-1.27; $p < 0.01$). With each year following the implementations of the breast cancer provider discussion law, the odds that a patient received reconstruction decreased by 18% (OR: 0.82, CI: 0.77-0.87; $p < 0.01$). Differential ITS comparisons are shown in the figures below.



Conclusion

- The multi-decade data suggests certain racial and social factors may still pose as barriers to reconstruction access.
- However, efforts toward broadening insurance coverage and mandating information regarding access to reconstruction may have begun leveling the field for disadvantaged socioeconomic groups.
- These results highlight the significance of the bill and emphasize the need for its adoption in other states.