

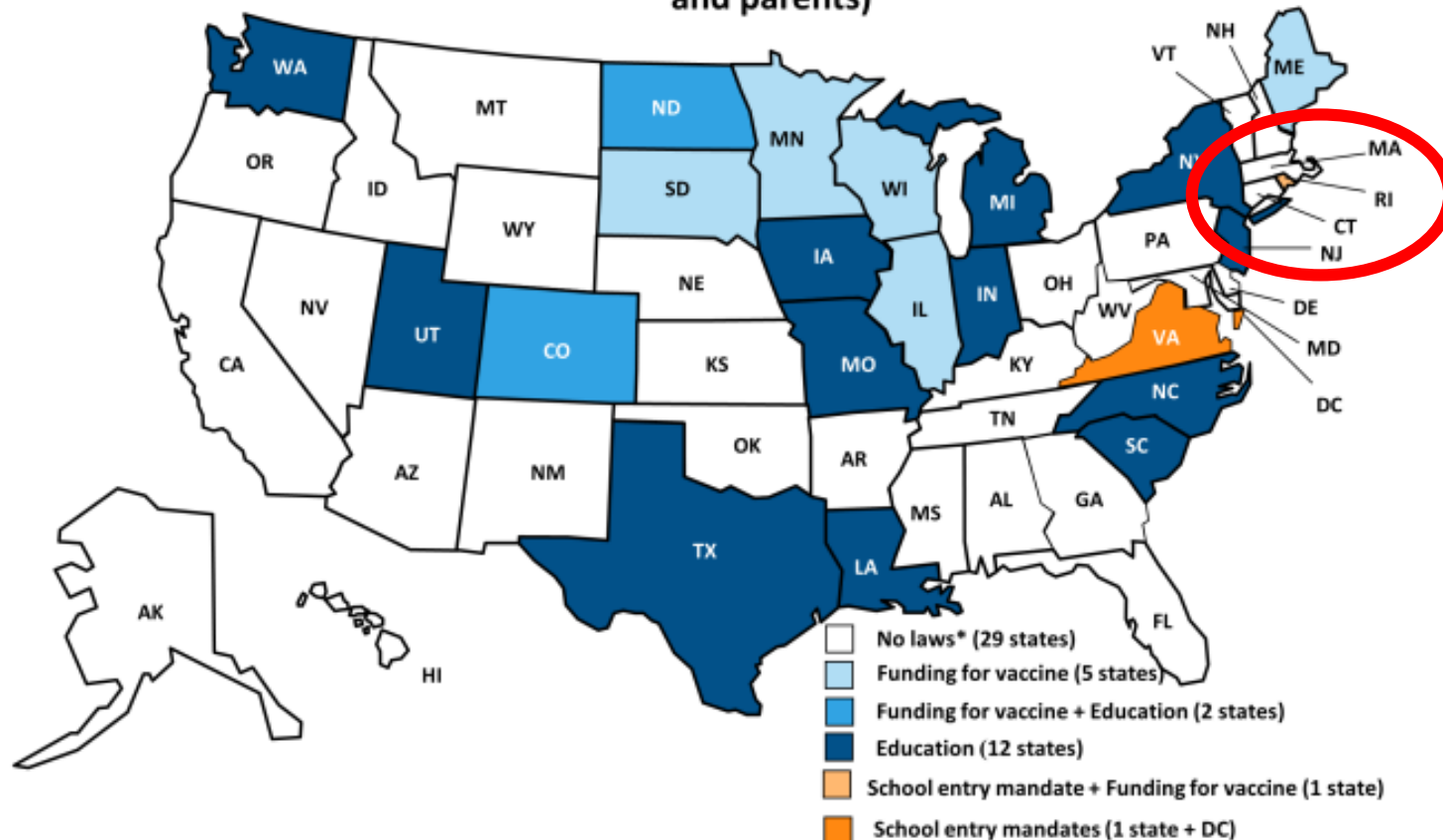
Evaluating Rhode Island's School-Entry Requirement for HPV Vaccination

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HPV Vaccination Policies- Mandates, Education, and Funding

State laws requiring HPV vaccinations for school entry, providing funding to cover the cost of the vaccine, or requiring public education (including for school children and parents)



NOTES: *States may have other laws relating to the HPV vaccine, such as insurance coverage mandates and research initiatives.

SOURCE: National Conference of State Legislatures. (2014). HPV vaccine: state legislation and statutes.

State of Rhode Island Department of Health (2015). Immunization Information for Schools and Child Care Workers.

Objective

We assessed changes in HPV vaccine initiation for adolescent girls and boys in Rhode Island after the policy change compared to all other states.

Approach

- Difference-in-differences, quasi-experimental approach
- Compared RI to all other states

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Dataset

- NIS-Teen 2010-2016
- Parental report of HPV vaccine uptake

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Co-variates

- Stratified by gender
- Controlled for age, race/ethnicity, poverty, mother's education, number of healthcare visits

To evaluate the gender specific effects of Rhode Island's HPV vaccination requirement, we estimated the following linear probability model:

$$Y_{ijt} = \beta_0 + \beta_1 \text{Mandate}_{ijt} + \beta_2 \text{Gender}_{ijt} + \beta_3 \text{Mandate} * \text{Gender}_{ijt} + \beta_4 X_{ijt} + \delta_j + \gamma_t + \text{Gender} * \delta_j + \text{Gender} * \gamma_t$$

PROC SURVEYREG in SAS v9.4.

We also estimated the predicted probability of an HPV vaccination in Rhode Island and the multi-state control group by gender and year.

Gender

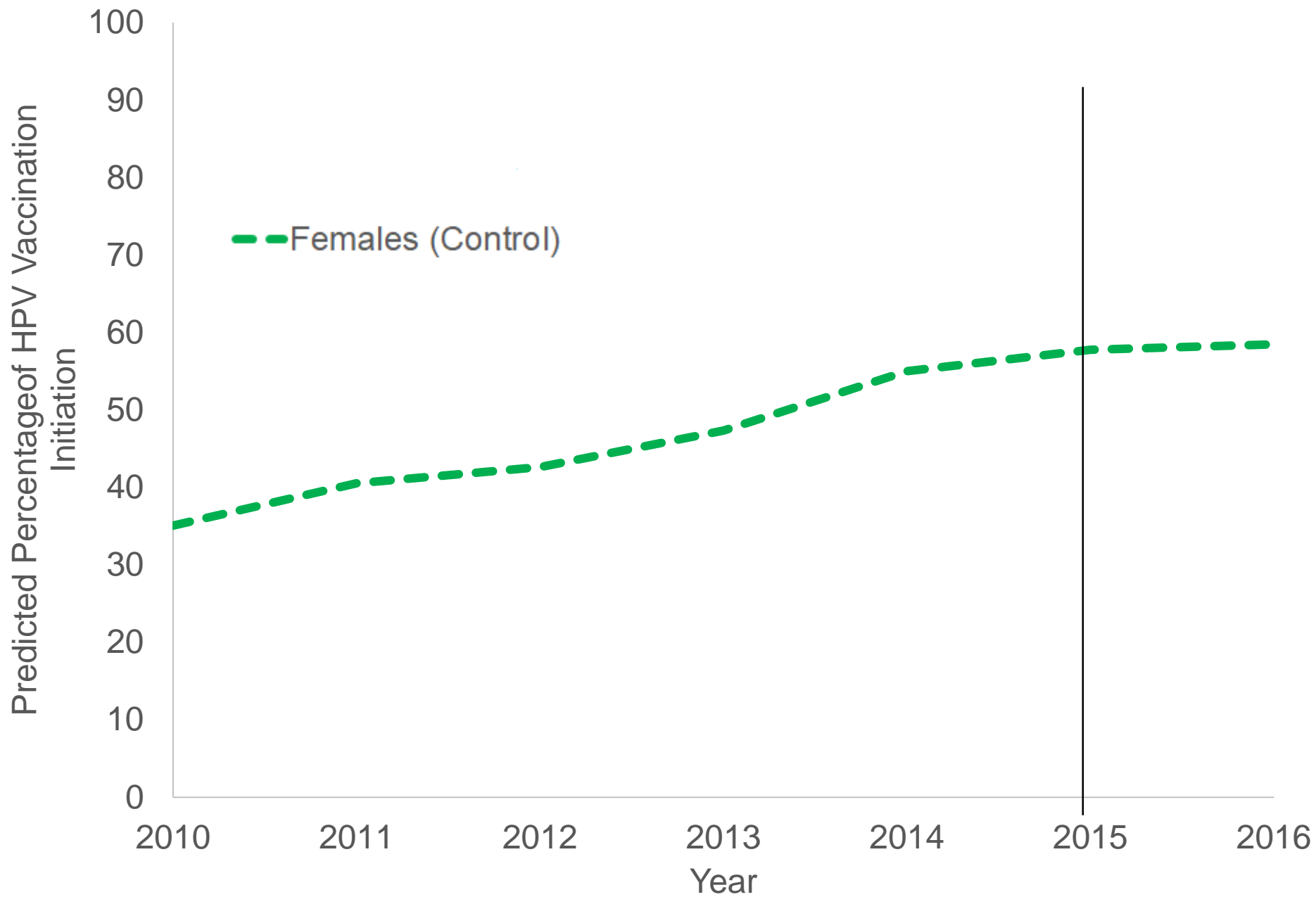
- Difference in the impact of Rhode Island's HPV vaccination requirement by gender ($F_1=7.38, p=0.0066$)

Boys

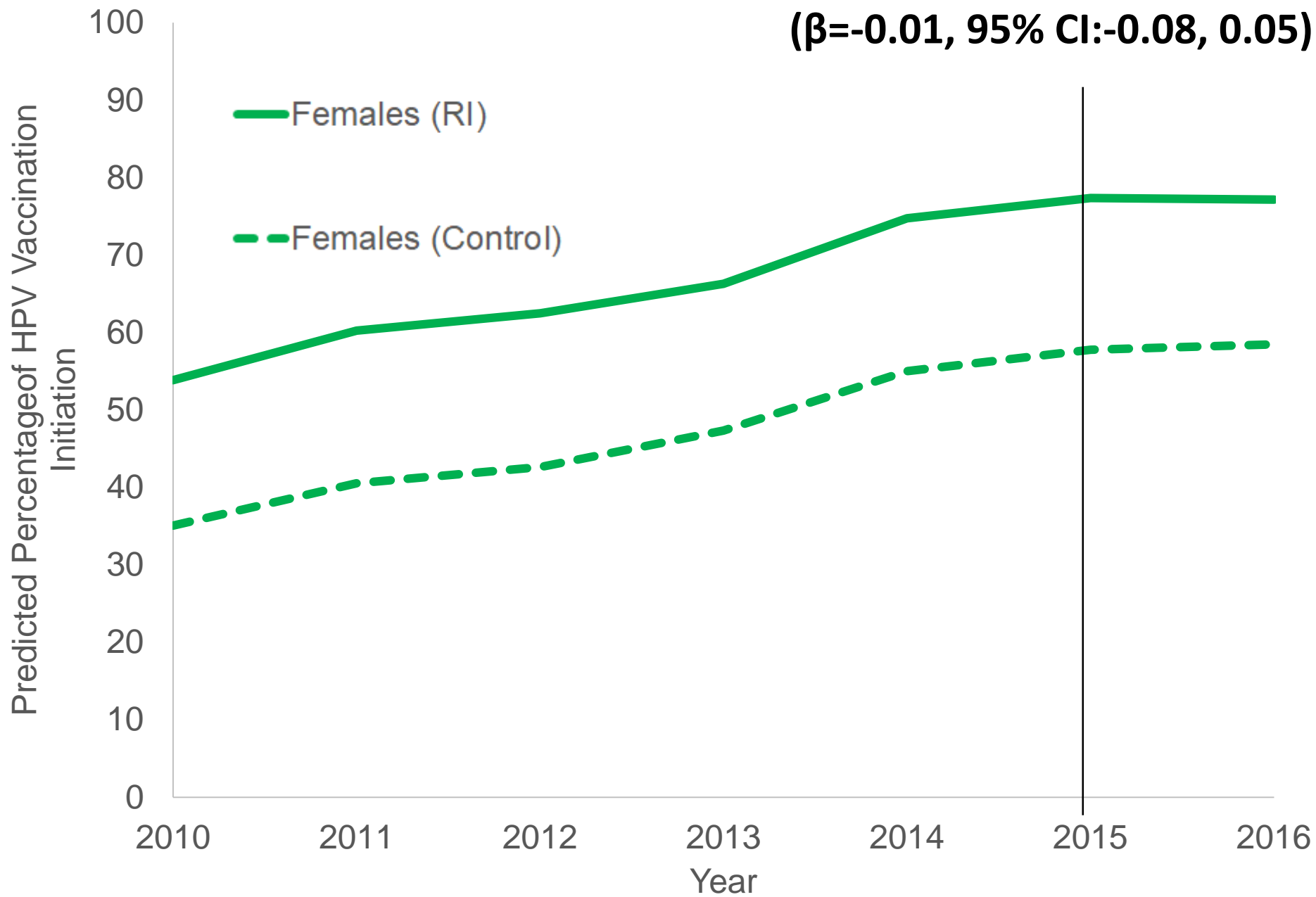
- Significant difference: ($\beta=0.11, 95\% \text{ CI}:0.05, 0.18$)

Girls

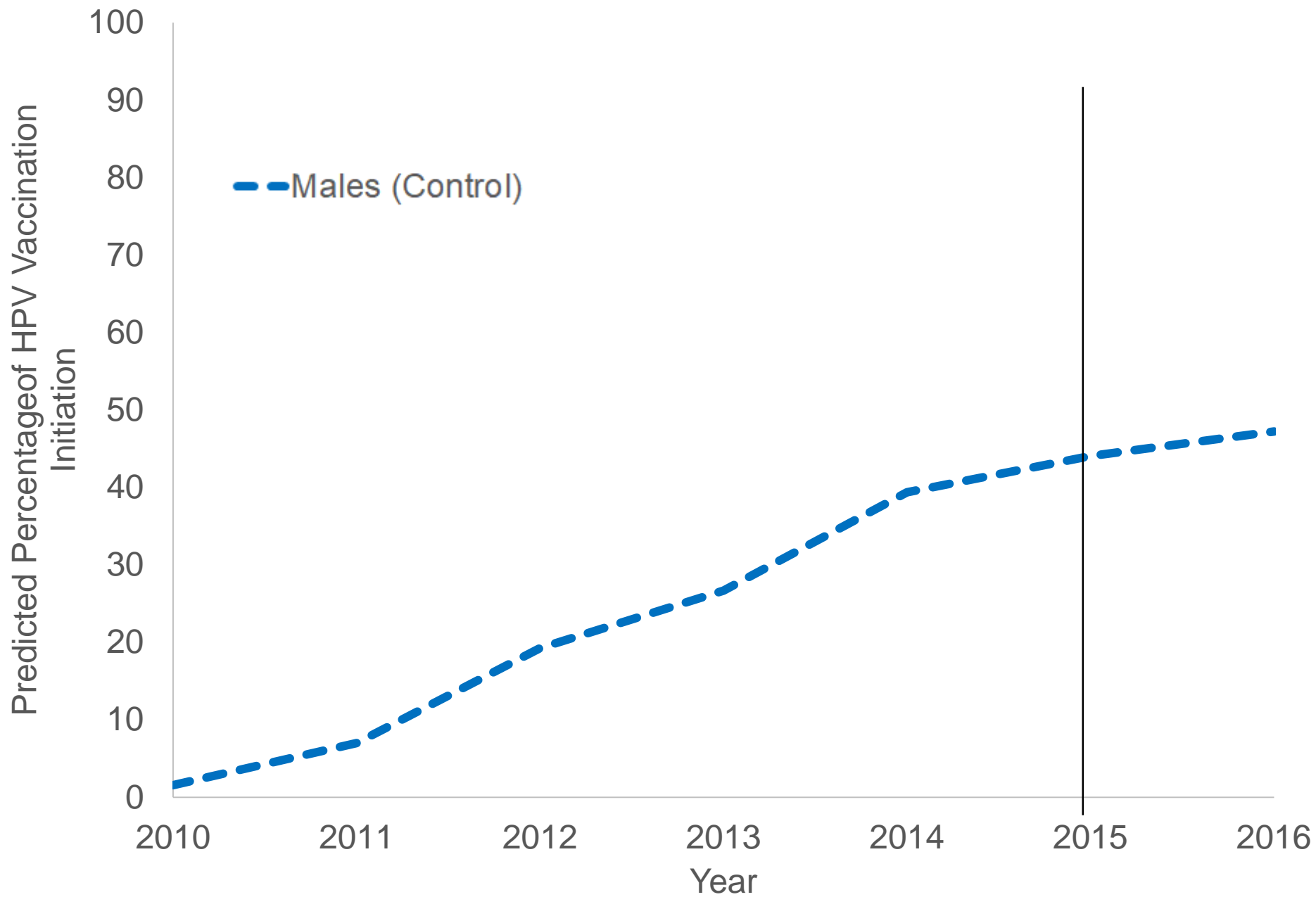
- No difference: ($\beta=-0.01, 95\% \text{ CI}:-0.08, 0.05$)



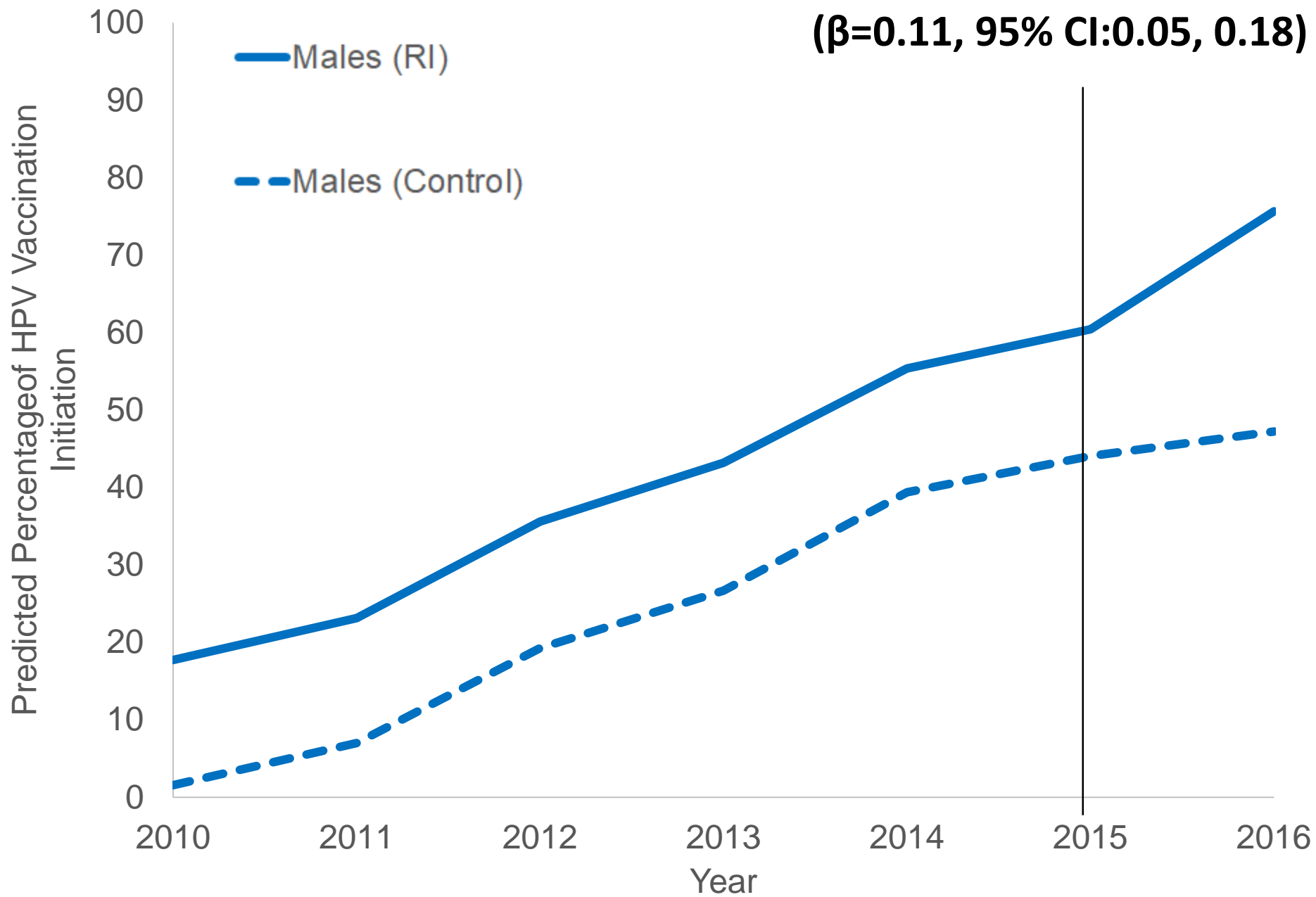
HPV vaccine uptake for adolescents following Rhode Island's school-entry requirement compared to other states: Reducing gender disparities. *AJPH* (In Press).



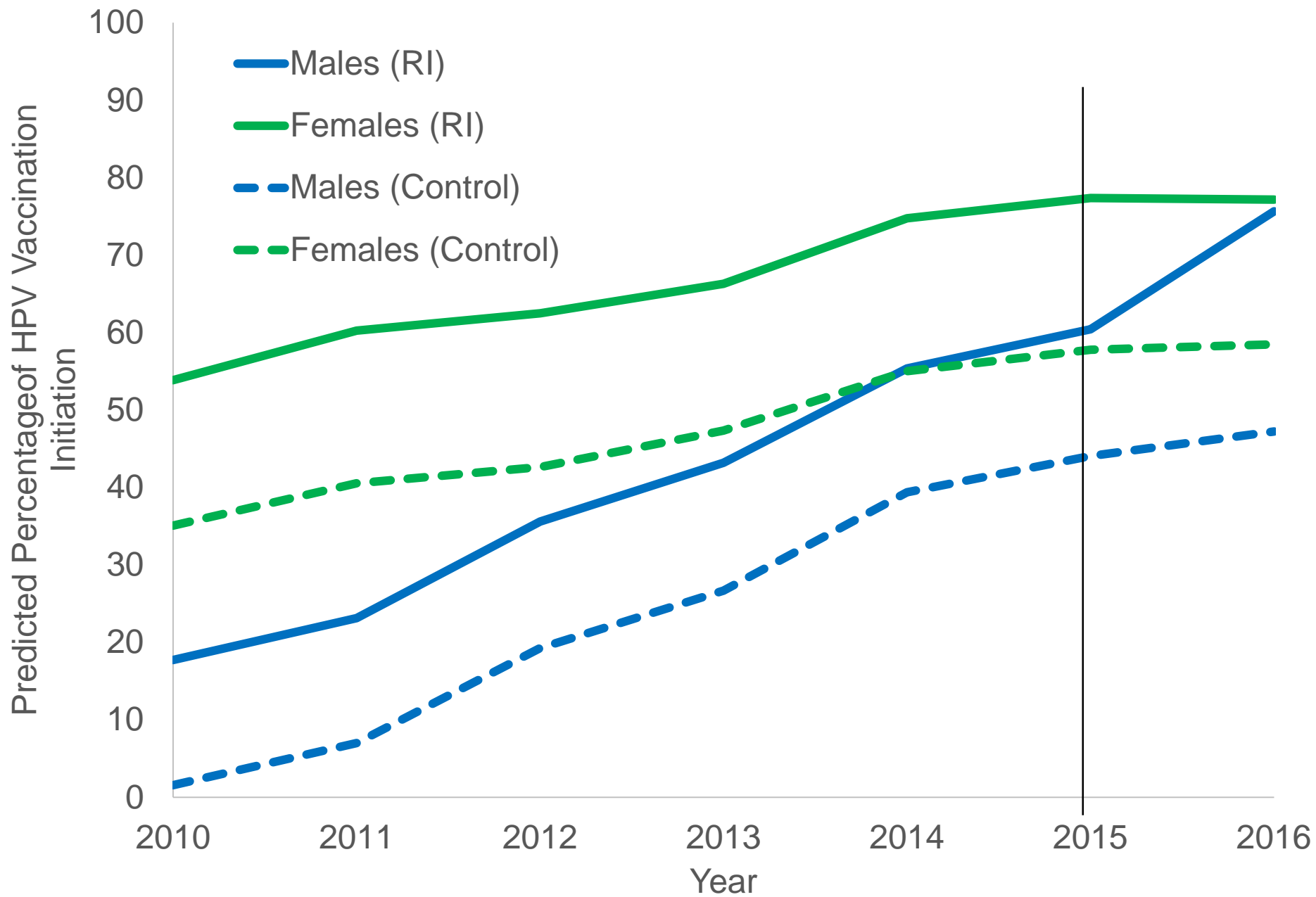
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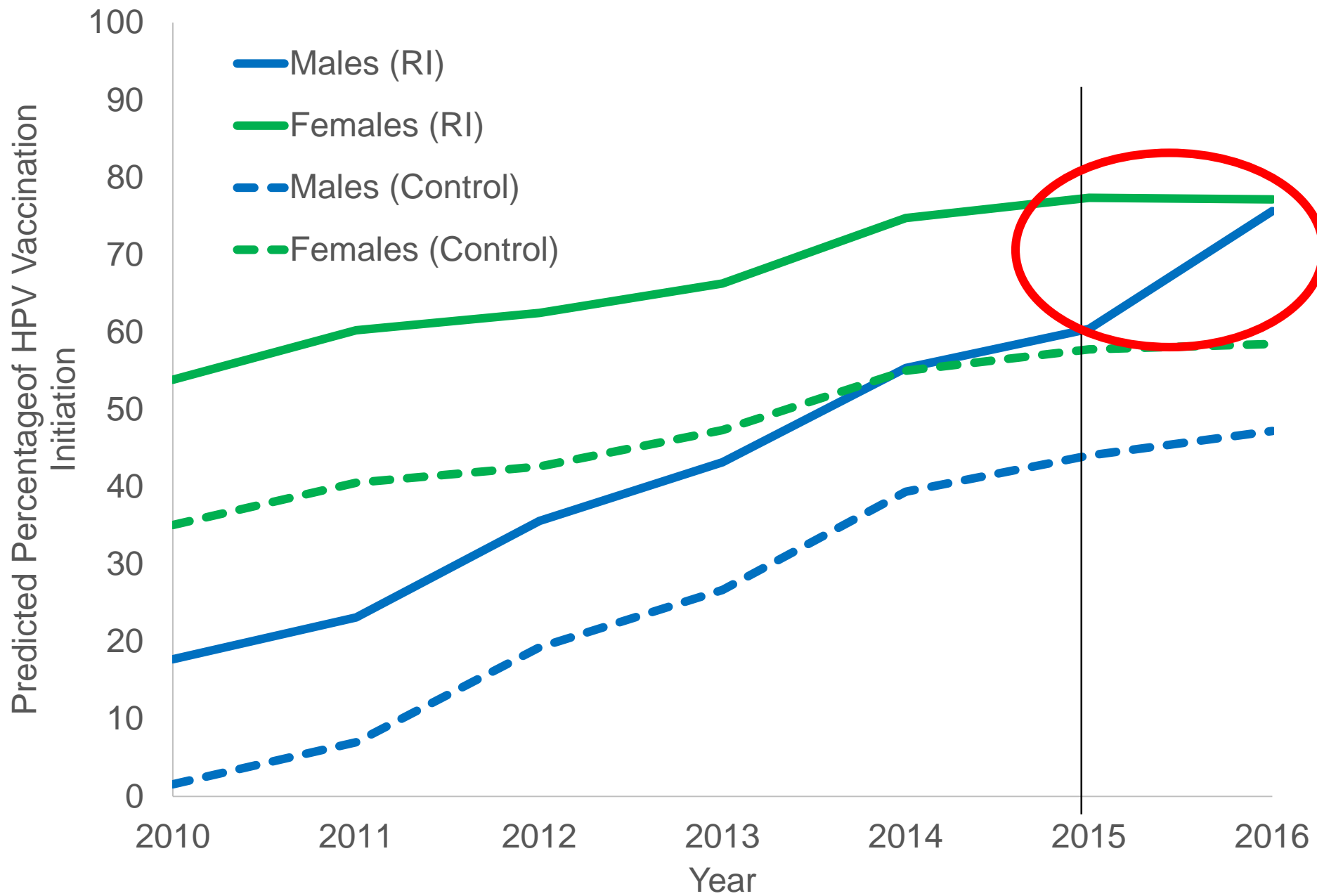
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Limitations

- Did not assess Virginia and D.C. policies
- Self-reported HPV vaccination outcome
- Only evaluated early implementation of policy transition

Implications

- School-entry policies may reduce gender disparities in HPV vaccination in the US.

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- Continued pursuit of public policy for HPV vaccination is needed.
- School-entry requirements with narrow-opt out policies may be more successful.

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