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Effect of Eased Restrictions for Aca-Exempt Short-Term Health Plans on Marketplace Premiums and Uninsured Rate: A Difference in Differences Analysis

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Abstract

The Affordable Care Act (ACA) established broad standards for private health insurance in the United States including requiring minimum essential benefits and prohibiting medical underwriting, but the law also permitted some exceptions. This paper examines one type of exempt plan option, Short-Term, Limited Duration Insurance (STLDI) that is not required to fully meet ACA benefit and underwriting standards. Federal rules governing STLDI plans have changed over time, with more permissive rules in the Trump administration allowing individuals to remain covered for longer durations of time relative to the original Obama regulations. Within applicable federal guidelines, states have also varied STLDI rules. Using publicly available data measuring state-level variations in STLDI regulations, ACA benchmark premiums, uninsured rates, and population characteristics for 2014 to 2021, we estimate difference-in-differences models to examine if more permissible STLDI policies are associated with higher premiums in the fully regulated non-group market and, also, lower uninsured rates. We find that longer duration, more permissible STLDI is associated with higher benchmark premiums in ACA exchanges and no difference in state-level uninsured rates. Trump administration regulations permitting longer duration STLDI plans to make available more affordable ACA-exempt health insurance were associated with higher premium costs in the ACA-regulated non-group market but we did not observe measurable impact on state uninsured rates. While longer-duration STLDI plans may result in lower costs for some, they have negative consequences for others requiring comprehensive coverage with no discernible benefit in overall coverage rates. Understanding these tradeoffs can help guide future policies regarding exceptions to ACA plan requirements.

Keywords

Affordable Care Act, short-term, limited duration insurance, premiums, uninsured rates, health insurance exchanges

What do we already know about this topic?

In 2018, after Trump administration enacted federal regulations aimed at expanding access to ACA-exempt plans (STLDI, AHPs, HRAs), policy analysts predicted increases in premiums in ACA exchanges as a result of deterioration of risk pools.

How does your research contribute to the field?

In contrast to other researchers who estimate simulation-based results of the effects of the ACA-exempt plans on premiums in ACA exchanges, our empirical analysis provides actual estimates based on available data. We demonstrate that in states that embrace Trump administration policies premiums in ACA exchanges are higher than in states that oppose Trump administration policies.

What are your research's implications towards theory, practice, or policy?

Reversing regulations regarding ACA exempt plans can lower Marketplace premiums by improving risk pools.

Introduction

In the United States, the regulation of private health insurance is a shared responsibility of the federal and state governments. At the federal level, the Affordable Care Act (ACA) established minimum essential benefit standards, banned medical underwriting, and imposed other consumer

protections. In 2016, the Obama administration issued federal regulations that allowed exemptions from some of the ACA standards in the form of Short-Term, Limited Duration Insurance (STLDI) plans, Association Health Plans, Health Reimbursement Arrangements, fixed-indemnity products, farm bureau plans, health care sharing ministries, and direct primary care arrangements. States could limit the scope of these exemptions, and many have done so.

ACA-exempt plans such as those above, may have lower premiums than fully compliant plans, which may be especially attractive to consumers with relatively low demand for services such as lower income, younger and healthier individuals. However, the wide availability of exempt plans can fragment risk pools, possibly leading to higher costs and lower take-up for fully compliant plans if lower risk individuals leave the standard ACA market. To explore the impact of policies governing ACA compliance exception regulations on plans in the fully regulated market, this article examines STLDI policies, one of the most widely purchased and controversial categories of ACA-exempt plans. STLDI policies varied from the Obama to the Trump administration; the former issued federal regulation limiting them to 3 months, the latter—3 years, including renewals.

We use 2 sources of regulatory variation to identify policy effects. First, while the Obama administration implemented policies aimed at restricting ACA-exempt plans, the Trump administration adopted much looser regulations. Second, state responses to the flexibility offered in the Trump administration varied with states adopting different durations for the plans from complete ban to 36 months. We use difference-in-differences models exploiting such variation to examine policy impact on premiums in benchmark ACA marketplace plans. We hypothesized that the relaxed regulation of STDLI plans will lead to higher benchmark premiums. Additionally, we hypothesize that states with more relaxed STDLI policies may, by making lower-cost policies available, reduce the number of individuals with low demand for comprehensive plans who would otherwise elect to go without coverage. Accordingly, we conduct difference-in-differences analysis to test this hypothesis by examining association between these policies and uninsured rates across states over time.

Increasing access to affordable health insurance coverage was a primary objective of the ACA which expanded Medicaid eligibility, required most people to purchase coverage or pay a penalty, and offered significant subsidies to eligible individuals. As a result of these policies, the number of uninsured Americans decreased from 44 to 27 million between 2013 and 2016.[1] The ACA also sought to improve access to affordable health services by requiring coverage of essential health benefits, subsidizing cost-sharing for moderate income individuals, and other related measures. While policies allowing broader access to ACA-exempt plans may lower premiums for some individuals, it may raise them for others and may also lead to greater out-of-pocket costs for purchasers of non-compliant plans. Understanding these tradeoffs can help guide future policies regarding exceptions to ACA plan requirements.

In contrast to other researchers who estimate simulation-based results of the effects of the ACA-exempt plans on premiums in ACA exchanges, we provide actual estimates based on available data. Healthcare policy researchers have studied various factors affecting premiums in ACA exchanges, such as concentration in hospital and insurance markets, regional differences (urban vs rural), political partisanship/Medicaid expansion, and the role of federal versus state exchanges. For instance, higher concentration in provider and insurance markets has been shown to lead to higher premiums[2]; states with greater number of insurers (lower concentration) have been sometimes found to have lower premiums[3]; rating areas with monopolistic insurers have higher premiums than areas with lower market concentration.[4] Separately, bundling rural areas into one large coverage region has been found to create problems and unexpected results such as insurers would have to charge additional fees to cover a larger area.[5]

States also tend to have higher premiums in ACA exchanges if they are rural or if they allow widespread sale of ACA-exempt plans within their borders. The dominant political party of a state also appears to play an important role: states, mostly democrat-controlled, that decided to expand Medicaid have lower premiums on average than states that decided not to do so.[6] Republicans are less likely than Democrats to purchase subsidized insurance at federal/state marketplaces,[7] and "red" states, where the ACA is unpopular, experience deterioration of risk pools and higher premiums in comparison to "blue" states.[8] Lastly, states that use federal exchanges have higher premiums than states that run their own exchanges.[9] By evaluating the role of ACA-exempt plans, this article addresses a gap in the literature on the determinants of health insurance premiums and coverage.

To determine whether the Trump administration's ACA-exempt policies, and associated state responses to those policies, led to higher premiums and coverage, this study compares

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premiums and uninsured rates by states over time. It hypothesizes that ACA benchmark premiums would increase as comparatively low-risk (and low-cost) young and healthy individuals shifted from ACA-compliant to ACA-exempt plans, and higher risk (and high-cost) individuals remained in the compliant plans. Even the Trump administration in comments on their proposed rules acknowledged ramifications related to deterioration of risk pools.[10,11] Possible impacts on uninsured rates, however, are less clear. Low premiums for ACA-exempt plans may draw more uninsured individuals with low demand for coverage into the market, but at the same time could reduce affordability of compliant plans, by changing risk composition in the market for standard plans. Cantor et al[12] documents these dynamics in New Jersey's experiment with health insurance access and rating regulations in the 1990s. Chollet[13] found deterioration of risk pools in experience of 30 states implementing high-risk pools for people with severe health problems. Stearns et al[43] reach the same conclusion as Chollet[13] while examining 8 states operating high-risk pools during 1988 to 1994.

We provide estimates based on data analyses, while most of the published literature on ACA-exempt plans has focused on simulated impacts of STLDI and AHP on premiums in individual market and small group markets, respectively. In a microsimulation model, Rao et al[14] predicted that increasing permissible duration of STLDIs without an individual mandate in place would increase premiums in ACA exchanges by 3.6%. A separate study predicted that STLDI policies, in combination with the repeal of individual mandate, would increase premiums by 18% in ACA-exchanges.[15]

STLDI plans and their impacts remain relevant to the current policy discourse. In 2023, 2 million consumers would be expected to purchase STLDI, as Congressional Budget Office (CBO) and Joint Committee on Taxation (JCT) estimates show. Notably, a quarter of those people (500 000) would have no coverage under the CBO definition of health insurance, that is, protection for rare, high-cost medical events. More pessimistic estimates by the Urban Institute predict that 4.2 million Americans will buy STLDI.[16] People who switch from ACA-complaint plans to STLDI can be expected to see a 68% decrease in monthly premiums, owing mainly to looser medical underwriting and limited benefits: 43% of short-term plans in 45 states and District of Columbia do not cover mental health services, 62% do not cover substance abuse treatments, 71% do not cover outpatient prescription drugs, and 100% do not cover maternity care.[17]

As regards projected impacts of permissive AHP policies on premiums, CBO and JCT estimates that full implementation of the new AHP rule will have the following implications. First, in 2023, about 4 million consumers will be enrolled in AHPs; second, 90% of those 4 million would be insured if the rule relaxing the definition of "employer" by allowing sale of AHPs across state borders were not implemented; third, the premiums on individual and group markets will increase by 2% to 3%. By 2022, 3.2 million Americans would be insured through AHPs in part because premiums would be $2900 lower in comparison to ACA small group market and $9700 lower in comparison to unsubsidized individual market plans in the exchanges. The negative ramification would be the loss of coverage by 130 000 Americans because of the rise in premiums in ACA exchanges (3.5%) and small group market (0.5%).[18] In total, the introduction of ACA-exempt plans (STLDI and AHPs) will result in a 2% to 3% increase in premiums for compliant plans absent state restrictions on ACA-exempt plans.[19] Beneficiaries in ACA-exempt plans or those uninsured because of high premium increases will be more vulnerable to high health care costs.

Data and Methods

We conducted a retrospective study using publicly available panel data on STLDI regulations and ACA premiums and state uninsured rates to test for policy impacts. While our quasi-experimental research design adopting a difference-in-differences (DD) framework provides a strong basis for inferring policy effects, we augmented these analyses with a systematic review of actuarial memoranda filed by Marketplace insurers in states with the most lenient STLDI regulations and states with most strict STLDI regulations. The study used only aggregated, publicly available state-level data thus IRB review was not required.

Data

For primary analysis, we created a state-year panel dataset for 50 states and District of Columbia over the period 2014 to 2021. This timeframe includes data from the first year that ACA exchanges became operational until the most currently available year. All dollar values have been adjusted to 2020 levels. We conducted analyses using following R packages[20-25] and STATA BE 17.0.

Outcome and Geographic Unit

We used KFF calculations[26] of the state average premiums in each year for the second-lowest cost silver (benchmark) premium for a 40-year-old in that state and year. We also used data provided by the KFF on state uninsured rate to gage the association between of ACA-exempt plans and uninsured rate in each state. We chose states as the unit of analysis because we are studying state-level policy variations. We do not expect variability across rating areas within states to change over time, thus shifting to rating areas would not be expected to change our findings.

Primary Independent Variables

First, we created a *post* variable (in tables it is Trump policy 2018-2021) which is binary, and indicates the implementation period for Trump's ACA-exempt policies: it takes a value of 1

for the years 2018 to 2021, when the federal government implemented ACA-exempt policies, 0 otherwise. Second, for sensitivity analysis, we have created an additional *transition16* (in tables it is Policy Change in 2016) variable which takes a value of 1 for years 2016 to 2017, 0 otherwise. We utilized this to examine the effects in a counterfactual scenario where the Obama administration implemented Trump's ACA-exempt policy in 2016. To allow for this sensitivity analysis, the study period was divided into 3 subperiods: 2014 to 2015, 2016 to 2017, and 2018 to 2021. Third, we created 5-time invariant STLDI variables to categorize states, depending on the duration of STLDI allowed in that state: *STLDI36* (AL, AK, AZ, AR, FL, GA, ID, IN, IA, KY, MS, MO, MT, NE, NC, OK, PA, SD, TN, TX, UT, WV, WY) for states where the allowed period is 36 months and, similarly, *STLDI24* (KS), *STLDI12* (LA, ND, OH, VA, WI), *STLDI6* (CT, IL, MI, MN, NV, NH), *STLDI3* (DE, DC, MD, NM, OR, VT, WA). *STLDIban* (CA, CO, HI, ME, MA, NJ, NY, RI) indicated states where such plans were not allowed.[27-29] It is important to note that GOP-controlled states immediately announced in 2018 that they are going to follow Trump policy. We selected the 36-month category as the reference category that allowed us to compare the effects of successively stringent policy positions starting with the most lenient ones and improved interpretability.

Other Explanatory Variables

We control for share of young adults (24-36) in each state in each year[30] because they are most likely to shift from ACA-compliant plans to ACA-exempt plans in states with more permissive regulations. We control for per capita income in each state to account for purchasing power using data from the first quarter of 2021[31] for each state. We control for the share of the population uninsured in each state in models evaluating premium changes utilizing 2 measures. For the main analysis, we used the *uninsured rate for the year 2017* since it was exogenous to states' policy choices available during the Trump administration. Finally, to account for unobserved time-invariant state characteristics and year specific differences, we included state and year fixed effects.

To perform data triangulation, we examined publicly available actuarial memoranda retrieved from ratereview.healthcare.gov. Under the ACA, insurance companies are required to submit actuarial memoranda documenting reasons for changes in premiums. We identified ACA-exempt plans in the actuarial memoranda to identify whether insurers consider them as a factor leading to changes in premiums in ACA-compliant plans. We also examined these memoranda in states that banned the ACA-exempt plans.

Analytic Strategy

We utilized difference-in-differences (DD) modeling, a quasi-experimental method, particularly suited to study the association between the different health insurance policies across states and our study outcomes, namely, average premium levels and uninsured rate.[32] We estimated 2 main models with accompanying falsification tests and additionally 8 models conducting sensitivity analysis (See Supplemental Appendix). We estimated robust standard errors clustered at the state-level. First, we estimated a baseline model to estimate if the Trump administration's easing of rules governing ACA-exempt policies is associated with statistically significant increase in premiums in ACA compliant plans. Second, we conducted a sensitivity test assuming an earlier implementation of Trump policies in 2016 and examined any policy effect subsequent to this earlier period. If such an effect was evident, we would conclude that results may be driven by unobserved factors rather than being a true policy impact. Third, we estimated a model where the outcome is the uninsured rate in the state to test whether increased duration of lower cost ACA-exempt plans decreased uninsured rates. Fourth, as in the second model, we examined the sensitivity of the uninsured model to assuming a change in the timing of the federal policy.

For the premium outcome analysis, a baseline DD model compared change in premiums in ACA compliant plans in states that implemented various STLDI policies (and also the states that banned such policy) to a reference (comparison) group of states that allowed STLDI for 36 months. The "pre" period was 2014 to 2017, and the "post" period was 2018 to 2021. We tested the hypothesis that states with less permissive STLDI regulations (eg, STLDI for 3 months) have lower premiums in the ACA compliant plans compared to states with less restrictive STLDI regulations (eg, our reference category of STLDI with 36 months). We estimate the following DD regression:

$$Y_{ij} = \alpha + \beta_1 POST + \beta_2 STLDI_i + \beta_3 POST * STLDI_i + \beta_4 X_{ij} + \Omega + \Theta + \varepsilon_{ij}$$

where Y_{ij} is the premium for state i at year j, POST is an indicator variable for year 2018 or later, when federal policy allowed more permissive STLDI plans, STLDI is a vector of indicators for the different categories of states based on the adopted regulation, $STLDI36_i$ $STLDI24_i$, $STLDI12_i$, $STLDI6_{i,}$ $STLDI0_i$. Ω represents year fixed effects and Θ represent the state fixed effects. X_{ij} is a vector of other covariates for state i and year j (eg, share of young adults (26-34), per capita income, share of uninsured at year 2017). In this model, β_3 represents the Diff-in-Diff estimators representing the vector of effect sizes, ε_{ij} is the random error term.

Second, we conducted a falsification test adding an indicator for the period 2016 to 2017, along with interactions between this variable and STLDI indicators. We expect that artificially changing the time when the STLDI federal

Table 1. Difference-In-Difference Estimates of STLDI Policy Impact on ACA Benchmark Plans Premiums, 2014 to 2021.

	Main model	Sensitivity model
Variables		
Trump policy 2018-2021 × Short term plans for 24 months	24.53 (24.61)	14.91 (23.64)
Trump policy 2018-2021 × Short term plans for 12 months	−76.74*** (27.44)	−106.4*** (32.72)
Trump policy 2018-2021 × Short term plans for 6 months	−62.65** (25.01)	−84.14*** (27.07)
Trump policy 2018-2021 × Short term plans for 3 months	3.729 (29.60)	−4.276 (35.04)
Trump policy 2018-2021 × Ban on short term plans	−87.60*** (32.33)	−121.6*** (40.76)
Policy change in 2016 × Short term plans for 24 months		−21.60 (25.62)
Policy change in 2016 × Short term plans for 12 months		−61.01** (25.68)
Policy change in 2016 × Short term plans for 6 months		−40.36 (25.66)
Policy change in 2016 × Short term plans for 3 months		−16.22 (27.37)
Policy change in 2016 × Ban on short term plans		−63.85**
Observations	408	408
R^2	.734	.740
Number of states	51	51

Note. Robust standard errors clustered at the state-level are in parentheses. Only interaction terms are presented, for full results see Supplemental Appendix A.
***$P < .01$. **$P < .05$.

permissive policies took effect in our model should result in not seeing the effects that we discerned in the main model.

Third, as primary analysis, we estimated the DD estimation to model the state uninsured rate as the outcome. We hypothesized that availability of cheap ACA-exempt plans in certain states might decrease the share of uninsured. Otherwise, the methods and variable interpretation were similar to the model estimating policy impact on premium rates.

Fourth, identical to the previous sensitivity analysis, conducted a falsification test by including an indicator for the period 2016 to 2017.

We also conducted the following additional analysis for each of the 2 outcomes that are reported in the Supplemental Appendix. First, we estimated the main model without the control variables such as state average income, and share of young adults, to see how sensitive the results are to inclusion/exclusion of particular covariates. Second, we estimated the main model excluding data for 2018 since it is the year of policy change. Third, we estimated an event study model by interacting the dummy variables for each year with short term plans variables. This is the flexible or generalized approach adopted by researchers for testing the assumption of parallel pre-trends.[33] We tested for this by examining the statistical significance of the interactions of the pre-policy years with the short term plans variables. For parallel pre-trend assumption to be satisfied, these interactions should not be statistically significant. Fourth, we created a graph plotting change in premiums over time for each category of states to see how the rate of change differs among states based on the specific STLDI policy that they adopted. Fifth, we estimated our main models after dropping the post-Medicaid expansion years for states that expanded Medicaid after Trump's STLDI policies took effect.

Analysis of Actuarial Memoranda

We reviewed actuarial memoranda for ACA-compliant plans that reported premium increases in 2020 or 2021 (the most current years available) submitted by insurers that sold plans in the 23 states which allow STLDI coverage for 36 months—the most leniently regulated states, and also, in states with most restrictive regulations which banned these short term plans. Where multiple filings were available for a given insurer in a state, we reviewed the memorandum for the plan with highest rate increase. To look for mentions of ACA-exempt plans in memoranda, we applied 2 search words "short," which identified mentions of STLDI, and "association," which gave us mentions of AHP. Application of the above-mentioned criteria resulted in review of 103 actuarial memoranda.

Results

Modeling Premium as the Outcome

Table 1, column 1 presents the DD estimates of effects on the premiums (the full regression results are reported in the Supplemental Appendix A). It shows findings which are consistent with our hypothesis that states that banned STLDI had monthly premiums that were $88 lower than in states that allowed STLDI for 3 years, and this was statistically significant at 1% level. In addition, as we had expected, 2 categories of states that allowed STLDI for 6 months and for 12 months had lower premiums than states that allowed STLDI for 3 years ($63 and $77 respectively). Overall 3 out of the 5 states with more restrictive STLDI policies had statistically significant lower premiums than the state with the

most permissive policy. These estimates were adjusted for population characteristics described above and state and year fixed effects.

Sensitivity/Robustness Analysis

Table 1, column 2 presents the sensitivity/falsification analysis on the premium model. Under the hypothetical assumption that permissive STLDI federal policy was implemented in 2016 (shown in coefficient estimates relating to the indicator variable "*Policy change in 2016*"), we see a statistically significant effect for states that banned STLDI and those that limited their duration to 12 months—premiums were lower by $64 and $61 than states that allowed STLDI for 3 years. While this indicates some differences prior to the policy, it is important to note that the effects are much smaller in magnitude than those in the true post-policy period.

We conducted 5 additional analyses. First, we estimated an unadjusted model without the control variables (eg, share of young adults and state income) to examine how sensitive our results were to these covariates (See Supplemental Appendix B). Our findings are qualitatively similar and in fact the policy effect becomes stronger. For instance, ban on short term plans is associated with premiums being lower by $111 instead of $87 in the main model.

Second, we estimated the impact on premiums model without using the 2018 data (See Supplemental Appendix C). Our findings are again qualitatively similar. For example, ban on short term plans is association with premiums being lower by $71 instead of $87 in the mail model.

Third, we estimated an event study model (See Supplemental Appendix D) interacting each of the study years with each state policy variable. As expected, coefficients for interactions between state policy variables and some of the 2018 to 2021 years are negative and statistically significant. For instance, in 2021 states that limited short term plans for 3 months had premiums that were $79 lower, than states that allowed them for 3 years. Importantly, the event study model allows us to test for parallel pre-trends a critical assumption for the DD estimation, and for this, we examine the coefficients of the interactions of the pre-trend years (2014-2017) with state policy variables. Out of the 15 interactions, only 3 were statistically significant implying that our parallel trends assumption was largely fulfilled. Additionally, the significant coefficients did not indicate any systematic pattern in terms of years or the type of legislation.

Fourth, we estimated premiums model after dropping the expansion years for states that expanded Medicaid after Trump's STLDI policies took effect (Virginia [STLDI 12], Maine [STLDI 6] in 2019; Utah [STLDI 36], Idaho [STLDI 36], and Nebraska [STLDIO 36] in 2020; Oklahoma [STLDI 36] and Missouri [STLDI 36] in 2021).The results are very similar to the main premiums model, for instance, ban on short term plans is associated with premiums being lower by $84 instead of $88 in the main model (See Supplemental Appendix E).

Fifth, we analyzed and plotted how premiums change over time among states that implement restrictive and permissive STLDI policies. We can see that in 2014 to 2017 premiums exhibited similar trends in most states, while in 2018 to 2021 they exhibited higher levels in states with more permissive policies than in states with more restrictive policies (See Supplemental Appendix F).

Modeling Uninsured Rate as the Outcome

The results of the main uninsured model are reported in Table 2, column 1, which shows no policy impact at our threshold level of significance ($P < .05$). The only state that comes close to significance is Kansas that allows STLDI for 24 months and where uninsured rates are higher by 0.5% compared to states that allow STLDI for 3 years.

Sensitivity/Robustness Analysis

Table 2, column 2 presents results of the uninsured model under the hypothetical assumption that permissive STLDI federal policy was implemented in 2016. There was a statistically significant effect for Kansas that allowed STLDI for 24 months relative to those that allowed STLDI for 3 years (0.6%; $P < .01$) but no effects for the transition period thus demonstrating that the falsification test results are consistent with our hypothesis.

Similar to the premium analysis, here too we conducted 4 additional analyses. First, we estimated an unadjusted model without the control variables (eg, share of young adults and uninsured in 2017, state income) to examine how sensitive our results were to these covariates. The results are almost identical to the main uninsured model. In Kansas uninsured rates are higher by 0.4% ($P < .05$) compared to states that allow STLDI for 3 years (see Supplemental Appendix H).

Second, we estimated the main uninsured model without 2018 data. The results are identical to the main uninsured model. In Kansas uninsured rates are higher by 0.5% ($P < .05$) compared to states that allow STLDI for 3 years (See Supplemental Appendix I).

Third, we estimated an event study model (See Supplemental Appendix J) interacting each of the study years with each state policy variable. Several coefficients for interaction terms between state policy variables and 2018 to 2021 year indicators are positive and statistically significant. This is consistent with our hypothesis although, the size of coefficients is small which signals no meaningful impact. For instance, in Kansas, in 2018 uninsured rate increased by 0.9% ($P < .01$), in 2019 to 2021 by 1% each year ($P < .01$). As before, the event study model allows us to test for parallel pre-trends, and for this, we examine the coefficients of the interactions of the pre-trend years (2014-2017) with state policy variables. Out of the 15 interactions, 2 were significant at 1% level, and 3 were significant at 5% level. However, the size of the coefficients are small—out of 15 coefficients for the interaction terms, only one indicated

Table 2. Difference-In-Difference Estimates of STLDI Policy Impact on Uninsured Rate.

	Uninsured model	Sensitivity model
Variables		
Trump policy 2018-2021 × Short term plans for 24 months	0.00482* (0.00242)	0.00663** (0.00287)
Trump policy 2018-2021 × Short term plans for 12 months	−0.00337 (0.00584)	−0.00496 (0.00908)
Trump policy 2018-2021 × Short term plans for 6 months	0.000591 (0.00222)	0.000732 (0.00329)
Trump policy 2018-2021 × Short term plans for 3 months	0.00273 (0.00260)	0.00528 (0.00363)
Trump policy 2018-2021 × Ban on short term plans	−0.000705 (0.00340)	0.00172 (0.00514)
Policy change in 2016 × Short term plans for 24 months		0.00382* (0.00204)
Policy change in 2016 × Short term plans for 12 months		−0.00286 (0.00662)
Policy change in 2016 × Short term plans for 6 months		−0.000228 (0.00289)
Policy change in 2016 × Short term plans for 3 months		0.00504 (0.00319)
Policy change in 2016 × Ban on short term plans		0.00398 (0.00383)
Observations	408	408
R^2	.693	.701
Number of states	51	51

Note. Robust standard errors clustered at the state-level are in parentheses. Only interaction terms are presented, for full results see Supplemental Appendix G.
**$P < .05$. *$P < .1$.

a 1% or higher increase in uninsured rate. Overall, the small magnitude of these coefficients and common lack of significance suggests that the parallel trend assumptions were for the most part fulfilled.

Fourth, we estimated the uninsured model without post-Medicaid expansion data for states that expanded after Trump's STLDI policies took effect. The results are almost identical to the main uninsured model, there is very small increase in uninsured rate in Kansas in comparison to states that allowed STLDI for 3 years (See Supplemental Appendix K).

Analysis of Actuarial Memoranda

Out of 103 memoranda in 2020 and 2021 in 23 states that allowed STLDI for 36 months, 18 mentioned ACA-exempt plans (STLDI, AHP, HRAs) as a justification for premium increases. In 2020, 12 memoranda in 8 states mentioned such effects, although the trend decreased in 2021 and 6 memoranda in 5 states mentioned these effects. In states (CA, CO, HI, ME, MA, NJ, NY, RI) that banned STLDI, and states (DE, DC, MD, NM, OR, VT, WA) that limit STLDI to 3 months, ACA-exempt plans are not mentioned as a reason for premiums increase.

Discussion

To increase access to health insurance, the Trump administration made ACA-exempt plans (Short Term, Limited Duration Insurance [STLDI], Association Health Plans [AHPs], Health Reimbursement Arrangements [HRA] etc.) widely available. Such plans are less costly for consumers than ACA-compliant plans because they may exclude pre-existing conditions, underwrite premiums, cap benefit payments, and cover fewer benefits than ACA-compliant plans. In July 2017, President Trump and the Republican Congress failed in their effort to repeal and replace the Patient Protection and Affordable Care Act of 2010. As a result, the Trump administration was left with the only choice: sabotaging implementation of the ACA.[34] For example, in February 2019, the administration proposed a rule to change the way premium tax credits are calculated for those who buy insurance on the exchanges, likely resulting in decreased enrollment.[35] In October 2017, President Trump issued Executive Order 13813, which directed relevant departments to increase the choice of plans available to Americans. The order was intended to address the affordability of ACA-compliant insurance to people who are above or close to 400% of the federal poverty level and, as a result, eligible for only limited subsidies or no subsidy at all. Additionally, in December 2017, the Tax Cut and Jobs Act (Public Law 115-97) reduced to 0 the individual penalty for not having health insurance, effectively repealing the enrollment mandate. On August 20, 2018, a final rule (83 FR 28912) by Employee Benefits Security Administration took effect and changed the definition of "employer" under The Employee Retirement Income Security Act of 1974 (ERISA) enabling more small firms to purchase health insurance as part of association plans. Shortly thereafter, on October 2, 2018, a final rule (83 FR 38212) by the Internal Revenue Service, Employee Benefits Security Administration, and Department of Health and Human Services took effect and changed the permissible duration of STLDI. These policies collectively can be expected to make lower-cost, but lower quality insurance available for individuals and small groups while also undermining the stability of risk pools for more comprehensive ACA-compliant plans.

The Trump administration's ACA-exempt policies remain relevant. On January 28, 2021, President Biden issued Executive Order revoking former President Trump's order 13813 which advanced ACA-exempt plans,[36] but as of December 2021, the Biden administration had not yet issued proposed rules reversing Trump administration's regulations on STLDI, AHPs, HRAs. Overall, regulatory changes aimed at strengthening the ACA are easier to implement than statutory ones,[37,38] thus the Biden administration will probably follow a regulatory path. Although permissive rules governing ACA-exempt plans are likely to be fully reversed, it is important to learn from the natural policy experiment provided by the Trump ACA policy changes.

After the passage of the ACA in 2010, the Obama administration viewed STLDI as auxiliary instrument to give consumers the opportunity to fill short-term gaps in health insurance coverage. STLDI plans do not have to be ACA compliant, disregarding pre-existing condition protections, allowing medical underwriting, and coverage of fewer benefits than compliant plans.[39]

While the Obama administration's final rule (81 FR 75316) governing STLDI shortened permissible duration from 12 to 3 months, the Trump Administration took the opposite tack. Effective October 2, 2018, a new final rule (83 FR 38212) was issued, extending STLDI from 3 to 36 months (including renewals, since the initial contract is limited to 12 months), making it possible for consumers to use such insurance as primary coverage, which is contrary to the very essence of a short-term plan. This more permissive federal framework shifted decisions to states; giving rise to a political divide STLDI regulations and putting with "red" states allowing longer duration STLDI and "blue" states restrict them. More permissive regulations put consumers at risk of higher premiums for compliant plans as risk pools fragment and of under-insurance in the STLDI market. Whether these effects manifest depends not just on state regulatory actions, but on their capacity to effectively enforce their regulations, which has often been lacking.[40,41]

Changes in the regulation of small group health insurance plans during the Trump administration also have the potential affect premiums and coverage rates in much the same way as STLDI. ERISA gives states the authority to regulate multi-employer welfare agreements (MEWAs) (29 U.S.C. § 1144(b)(6)(A)), including Association Health Plans (AHPs). Traditionally, the Labor Department defined the "employer" narrowly, thereby limiting AHPs because they were comprised of groups of small employers providing collective plan to their employees. The Trump administration rule (83 FR 28912) issued in June 2018, in contrast, redefined "employer" extremely broadly and thus allowed groups of employers who establish an AHPs as a form of MEWA.

The regulatory treatment of small groups can have significant impacts on individual insurance markets. For instance, an individual business owner is considered an "employer" under the Trump rule, which prompted several Democrat-controlled states to require "sole proprietors" to buy insurance on individual insurance markets. In essence, under the new rule, GOP-controlled states to promoted AHPs and Democrat-controlled states to limited them. ACA-exempt plans are relatively popular: in 2019, nearly 1 in 10 people under 400% of federal poverty level who were potentially eligible for subsidies in ACA exchanges but did not purchase an ACA compliant plan had some form ACA-exempt plan, while the remainder were uninsured.[42]

Our results generally confirm the hypothesis that the more permissive regulation of STLDI is associated with higher premiums in ACA-compliant plans. Specifically, results of both the premium DD models and analysis of actuarial memoranda are consistent with prior evidence that greater fragmentation of risk pools can increase premiums for older and sicker people who remain in plans offering most comprehensive coverage.[43] Overall, our study confirms earlier predictions about the negative effect of Trump's ACA-exempt policies on benchmark premiums in ACA exchanges.[16,44]

Results of the sensitivity check on our baseline premium model temper this conclusion to a degree. Falsely modeling policy change in 2016 showed that the 2 groups of states that banned STLDI or restricted them to 12 months had statistically significantly but modestly lower benchmark premiums than states with the most permissive policy even during 2016 to 17. One possible explanation for this finding is that the actuaries setting ACA compliant premiums may have anticipated the policymakers in states that would come to adopt the least restrictive STLDI regulations would pursue other policy avenues that would degrade risk pools for ACA compliant plans (eg, more permissive MEWA rules). Further, GOP-controlled states allowed sales of many types of ACA-exempt plans besides STLDI, including AHPs, HRAs, farm bureau plans, religious plans, etc. The latter were not subject to federal regulations under Obama or Trump, possibly affecting results of the falsification test assuming introduction of the STLDI reforms in 2016. Further, states that ultimately adopted the most permissive STLDI policies may have had other policies in place in the transition period that influenced premiums in ACA exchanges. For instance, some states implemented regulations permitting or promoting online sales of such plans while others did not. It is important to note here that financial penalty from the individual mandate was removed in 2019 and we did not explicitly model for this. Evidence to date suggests that repeal of the individual mandate tax penalty had minimum effects.[45] With only a few jurisdictions implementing state-level penalties, adding analysis of the penalty question would likely add complexity to the analysis without generating insights about our study questions. As more experience is gained about the impact of the tax penalty repeal, future research should consider the potentially complex interactions of the tax penalty and market regulatory changes.

The results of the uninsured model did not show statistically significant effects: namely, states with more permissive STLDI policies did not have lower uninsured rate.

Our results may also have been driven by other policy actions taken by states with the most lenient STLDI regulations to weaken take-up in their marketplaces, such as less public outreach/education and not expanding Medicaid. The state fixed effects, however, should largely account for such differences. We note several caveats and limitations of our analysis. Data were available only to examine impacts on ACA benchmark silver-plan premiums, not the full range of options available on marketplaces. Of note here, states with looser regulation on STLDI actually see more of those plans purchased. Up-take STLDI plans is an important consideration but one that is tangential to our study questions: spillovers to ACA compliant premiums and the overall uninsured rate in the states. Accordingly, we do not analyze uptake. Further, STLDI enrollment data are not consistently available. Only one state, Kansas, adopted the 24 month duration of legislation but we did not group it with other states to avoid heterogeneity in our policy characterization. Finally, we did not explicitly model for the impact of COVID-19 in the last 2 years of our study period. In addition, several states expanded Medicaid eligibility over this period. We believe that our difference-in-difference analysis utilizing comparison states and fixed effects estimates exploiting within state variation in outcomes over time would largely account for these events.

Conclusion

The main goal of the ACA was to provide Americans with access to high quality and affordable healthcare services, by expanding access to health insurance. The Obama administration made major progress in increasing access to both health insurance and health services, although it struggled to fully address the issue of affordability. The Trump administration did try to address affordability of insurance by implementing federal regulations aimed at increasing access to lower cost ACA-exempt plans. The problem, however, was that such plans do not provide high quality comprehensive insurance. Early on, multiple critics had warned that promotion of ACA-exempt plans would deteriorate risk pools in ACA-exchanges and cause higher premiums. This article provides evidence supporting that concern. At the same time, our analysis did not find an offsetting benefit of permissive insurance regulation, namely we did not observe lower uninsured rates in states with the broadest STLDI policies.

Results of our main premium model indicate that states that banned STLDI have ACA benchmark premiums that were $88 lower than states that allowed STLDI for 36 months. Subsequently, the Biden administration has announced plans to reverse Trump's federal regulations, but as of March 2023, federal agencies have not yet issued Notices of Proposed Rulemaking regarding STLDI, AHPs, and HRAs. Whether such rules will prove durable, once enacted, remains to be seen. Given that the Trump administration has appointed many conservative judges, Biden's new rules could be blocked in courts and ACA-exempt policy could be here to stay. Such an outcome would mean that many Americans could see rising premiums, remain underinsured, or be at high risk of financial loss due to inadequate coverage provided by ACA-exempt plans.

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