

The Impact of a Connecticut Public Option on Health Insurance Coverage and State Spending

Final Report

Prepared For:
Partnership for America's Health Care Future

Prepared By:
Lane Koenig, PhD
Marie Steele-Adjognon, PhD
Aishwarya Agarwal, MA

KNG Health Consulting, LLC

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About KNG Health Consulting, LLC

KNG Health Consulting, LLC, is a health economics and policy consulting company assisting clients across all sectors of the healthcare industry. The company's work focuses on two main practice areas: Healthcare Reform and Payment Innovation (HRPI); and Evaluation and Health Economics (EHE). In the HRPI practice, KNG Health's experts work with our clients to estimate the effects of a wide range of healthcare reform and payment innovation policies, ranging from modeling innovative state and federal proposals to reduce health insurance premiums to facilitating learning systems for providers on alternative payment models. In the EHE practice, KNG Health's experts conduct studies on the efficiency, effectiveness, and value of medical interventions using big and small data, applying careful research designs, and translating findings into actionable results.

KNG Health is a small, woman- and minority-owned business located in the Washington, DC metropolitan area.

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Executive Summary

For the last few legislative sessions, the Connecticut legislature has considered state healthcare reform proposals whose common element is the implementation of a state administered health plan (or public option). Connecticut Senate Bill No. 842 (SB 842), introduced during the January 2021 legislative session, would expand access to a state-administered insurance plan to small businesses, non-profit organizations of any size, and multiemployer groups (i.e., unions). Critics of the proposal have raised concerns regarding the impact of an expanded public option in Connecticut on state tax revenue as well as whether premiums would be sufficient to cover expenses.

The Partnership for America's Healthcare Future (PAHCF) engaged KNG Health Consulting, LLC (KNG Health) to assess the effects of a public option in Connecticut, similar to that proposed in SB 842, on coverage, state spending, and state tax revenue. Consistent with the legislation, we model a state-administered plan that would be similar to the state employees plan in terms of deductibles, copayments for services, and out-of-pocket maximums. To complete the study, we used the KNG Health Reform Model (KNG-HRM), a microsimulation model used to estimate national and state-level impacts of healthcare reform proposals. We model a state public option that is accessible to eligible employers and their employees and examine several scenarios under different assumptions of employer "take up" of a public option (ranging from 25% to 75% among eligible employers and unions) and employer eligibility (i.e., < 50 employees or < 100 employees).

We find that existing state revenue from premium taxes and health insurance assessments would fall significantly under a public option, requiring the state to increase taxes on businesses and individuals. With respect to premium tax revenue, we found that the direct reduction in premium tax revenue for the state would be between \$26 million (with 25% take up and small firms defined as those with fewer than 50 employees) and \$45 million (with 75% take up and small firms defined as those with fewer than 100 employees) in 2023. After accounting for all private health insurance taxes and assessments, we project taxes and assessments to fall by between \$71 and \$122 million in 2023. In addition, we estimate that provider reimbursement rates would need to fall by roughly 15 percent to ensure the public option was on secure financial footing, or potential underfunding would need to be covered by other state dollars. A reduction of this amount in provider rates in the public option translates to a reduction of 5.6 percent in total spending for the population of interest if take up of the public option was 75 percent among small firms defined as those having 100 or fewer employees, and a reduction of 4.5 percent if the take up of public option was 25 percent among small firms defined as those having 50 or fewer employees.

We also estimated the additional state revenue that may be required under the Partnership Plan 3.0 to replace lost tax revenue and ensure financial sustainability of the plan if provider reimbursement rates were not reduced. For the scenario with 75 percent take up and small firms defined as those with fewer than 100 employees, we estimate that the state may need to collect an extra \$1.152 billion in 2023. For the scenario with 25 percent take up and small firms defined as those with fewer than 50 employees, we estimate that the state may need to collect an extra \$816 million.

As Connecticut debates introducing a public option for small employers and, potentially, others in the state, the tax implications of both lost premium related tax revenue and financial requirements to ensure stability of the plan should be considered.

I. Introduction

For the last few legislative sessions, the Connecticut legislature has considered state healthcare reform proposals whose common element is the implementation of a state administered health plan (or public option). Currently, the state of Connecticut offers Connecticut Partnership Plan 2.0 (Partnership Plan) to non-state public employees, which includes employees of a municipality or other subdivision of the state. Connecticut Senate Bill No. 842 (SB 842)¹, introduced during the January 2021 legislative session, would expand access to a state-administered insurance plan, similar to the Partnership Plan, to small businesses, non-profit organizations of any size, and multiemployer groups (i.e., unions). Supporters of the legislation argue that a Partnership Plan 3.0 would inject added competition into the employer insurance market and, as a result, reduce insurance costs. (For ease of presentation, we refer to the expanded public option plan as Partnership Plan 3.0.)

Critics of the proposal have raised concerns regarding an expansion of a public option in Connecticut on a number of dimensions. First, private insurers in the state pay a premium tax, as well as other taxes, that presumably would not be required of the Partnership Plan 3.0. As a result, state tax revenue would fall as employers moved their coverage from private insurance to the public option. The state would have to replace this lost revenue through additional taxes on business and individuals in the state.² Second, the Partnership Plan 2.0 appears to have been underfunded between July 2017 through June 2019, with spending by the plan on clinical services and quality improvement exceeding premiums (i.e., medical loss ratio greater than 100%).³ Although Partnership Plan 2.0 medical loss ratios fell below 100 percent between July 2019 and December 2020, this period includes the COVID-19 public health emergency (PHE), during which overall healthcare utilization was down significantly from prior years. Such underfunding of the insurance product is not sustainable and would require the state to either raise premiums, reduce spending, or use other state funds to offset losses.

The Partnership for America's Healthcare Future (PAHCF) engaged KNG Health Consulting, LLC (KNG Health) to assess the effects of a public option in Connecticut, similar to that proposed in SB 842, on coverage, state spending, and state tax revenue. Consistent with the legislation, we model a state-administered plan that would be similar to the state employees plan in terms of deductibles, copayments for services, and out-of-pocket maximums. To complete the study, we used the KNG Health Reform Model (KNG-HRM), a microsimulation model used to estimate national and state-level impacts of healthcare reform proposals. We model several scenarios under different assumptions of employer "take up" of a public option and employer eligibility, under the assumption that the medical loss ratio (MLR) would match the Partnership Plan 2.0 (in the period prior to the COVID-19 PHE).

¹ <https://www.cga.ct.gov/2021/TOB/S/PDF/2021SB-00842-R00-SB.PDF>

² Relatedly, insurers in the state have argued that the potential loss of business in the state may result in loss employment and insurers choosing to move their offices out of the state. These potential responses to a public option in Connecticut are beyond the scope of this study.

³ Connecticut Partnership Plan Status Update 2021. Available at https://carecompass.ct.gov/partnershipupdate_2021_web/

II. Study Approach

To complete the study, we built on the KNG-HRM version recently used to assess the effects of enhancement to the Affordable Care Act (ACA) on coverage and spending.⁴ In this study, we use the baseline estimates from our prior analysis and limit the sample to households in Connecticut. A detailed appendix on the KNG-HRM is available online (<https://www.knghealth.com/kng-health-develops-health-reform-model/>). We briefly describe methods specifically to adopting the KNG-HRM to assess the impact of a public option in Connecticut.

a. Overall Approach: Scenarios, Population, and Decision Model

We estimated coverage for 2023 using policies in place prior to the passage of the American Rescue Plan Act (ARPA) as our baseline. Throughout the analysis we limit the Connecticut population to those under the age of 65 who are not enrolled in government assistance programs (Medicare, Medicaid, Tricare, VA, or Indian Health Services). We also removed all employees and dependents of Federal, state, and local government workers from our sample since they are not the population of interest for the Partnership Plan 3.0.

We model take up of the Partnership Plan 3.0 by employers and the impact on coverage, healthcare spending, and state tax revenue. We model a total of six scenarios that vary in terms of eligibility for the public option and take-up rates (Figure 1). In all scenarios, unions and non-profits of any size are eligible to enroll in the public option. In Scenarios 1 through 3, employers with fewer than 50 workers are also eligible to join. In scenarios 4 through 6, employers with fewer than 100 workers are eligible to join. We note that SB 842 defines a small employer as fewer than 50 employees. Nevertheless, we examined an alternative definition for small employer.

Figure 1: Firm Eligibility to Enroll in Partnership Plan 3.0 and Take Up Rates Assumed under each Scenario

Scenario	Eligibility				Take Up Rates		
	< 50 Employees at For-Profit Firm	< 100 Employees at For-Profit Firm	Unions	Non-Profits	25%	50%	75%
Baseline	-	-	-	-	-	-	-
1	✓	-	✓	✓	✓	-	-
2	✓	-	✓	✓	-	✓	-
3	✓	-	✓	✓	-	-	✓
4	✓	✓	✓	✓	✓	-	-
5	✓	✓	✓	✓	-	✓	-
6	✓	✓	✓	✓	-	-	✓

⁴ Koenig, L, Steele-Adjogon, M, Agarawal, A. Building on the Affordable Care Act: The Effects on Coverage and Healthcare Spending of an Enhancements to the ACA. Accessed at <https://americashealthcarefuture.org/wp-content/uploads/2021/05/KNG-Health-The-Impact-of-ACA-Enhancements.pdf>

Modeling Employer Take Up. We model 3 take up rates for employers to opt for coverage under the public option: 25 percent, 50 percent, and 75 percent. The employers that enroll in the public option were selected based on the savings to the employer and its employees from enrolling in the public option as compared to its current offer (which includes those employers not offering employer-sponsored insurance). Specifically, we ranked employers based on the relative savings from enrolling in the public option and then assumed employers that would benefit the most from the public option would be first to enroll. We selected the employers, working our way from those with highest savings as a share of total firm payroll to lowest savings from adopting the Partnership Plan 3.0, until we met the assumed take up rates. We grouped union members in the same industry into a single “union firm” and treated these firms as any other individual employer with respect to choosing the public option.

To assess savings from enrolling in the public option, we evaluated premiums and out-of-pocket costs if the employer maintains its current coverage and if it enrolls in the public option (see Figure 2). We split the firms eligible to enroll in Partnership Plan 3.0 into those that offer traditional ESI and those that do not. We then calculated the savings to a firm and its employees from enrolling in the Partnership Plan 3.0 as the difference in costs between a scenario where the firm maintains its current coverage offer and a scenario where the firm enrolls in the Partnership Plan 3.0. So, for eligible firms that do not offer ESI, their choice set is to maintain not offering ESI (and employees are forced to rely on NOG market for coverage) or to switch to offering the Partnership Plan 3.0. The firm decision for eligible firms that were offering traditional ESI is to keep offering their current ESI plan or to switch to offering the Partnership Plan 3.0. Next, we divided the calculated savings by the employer’s annual payroll to get the relative savings to payroll; this ratio of savings to payroll was used as our measure when selecting which employers would take up the Partnership Plan 3.0.

Figure 2. Description of Cost Components in Firm Partnership Plan 3.0 Choice Model

Cost Component	If the employer maintains current coverage status...	If the employer enrolls in the Connecticut public option ...
Premiums for workers and dependents, net of subsidy	<p>For employers offering coverage, the sum of:</p> <ul style="list-style-type: none"> • The employee’s and employer’s share of ESI premiums for those taking up ESI coverage, reduced by the enrolling family’s marginal tax rate; and • Net non-group premiums for those opting out of ESI coverage. <p>For employers not offering coverage, the sum of:</p> <ul style="list-style-type: none"> • Net non-group premiums for workers. 	Partnership Plan 3.0 net premiums for all workers and dependents.
Out-of-Pocket Costs	Out-of-pocket health costs for workers and dependents either participating in the ESI plan, receiving coverage through non-group coverage, or who are uninsured.	Partnership Plan 3.0 out-of-pocket health costs for workers and dependents.

Cost Component	If the employer maintains current coverage status...	If the employer enrolls in the Connecticut public option ...
Financial Penalties	No penalty if employer is offering coverage. Penalty if employer does not offer coverage and is subject to the ACA employer mandate.	No penalty.
Other Costs	For employers offering coverage, the internal HR administrative burden of offering coverage. For employers not offering coverage, no HR administrative costs.	The internal HR administrative burden of offering coverage.

Individual and Household Coverage Choice. Although our primary focus is on employer decisions to enroll in the Connecticut public option, our model also considers individual and household choices and impact. When an employer chooses to enroll in the public option and drop their current coverage, worker premiums, benefits, and out-of-pocket spending can change. As a result, these workers and their families may decide to take up ESI coverage (i.e., choose to enroll in the public option offered by its employer and move from non-group coverage or from being uninsured) or may decide to drop their ESI coverage. We modeled individual and household coverage choice using our KNG-HRM, which models coverage choice in a utility framework. Details on the KNG-HRM are available in the technical appendix at www.knghealth.com.

b. Development of Connecticut Baseline

To develop the Connecticut baseline for coverage and healthcare spending, we used the KNG-HRM baseline, with some modifications. The KNG-HRM baseline is based on data from the U.S. Census Bureau’s American Community Survey (ACS), with significant inputs from the U.S. Agency for Healthcare Research and Quality’s Medical Expenditure Panel Survey (MEPS), the U.S. Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), and other sources.^{5,6,7} The primary data source for the model is the 2018 ACS. We project our baseline to 2023, under assumption that this would be the first full year of a Partnership Plan 3.0.

Projecting Demographic Changes. We used information on demographic trends from the U.S. Census Bureau, which reports population projections by combinations of single year of age, sex, race, Hispanic status, and native status, to project the demographic changes in state populations between 2018 (the year for the ACS data) and 2023 (modeled year).⁸ We also adjusted spending and income in future years,

⁵ American Community Survey. US Census Bureau. Accessed at <https://www.census.gov/programs-surveys/acs/>
⁶ Medical Expenditure Panel Survey. Agency for Healthcare Research and Quality. Accessed at <https://meps.ahrq.gov/mepsweb>.
⁷ Behavioral Risk Factor Surveillance System. US Center for Disease Control and Prevention. Accessed at <https://www.cdc.gov/brfss/index.html>.
⁸ 2017 National Population Projections Datasets. U.S. Census Bureau. Accessed at <https://www.census.gov/data/datasets/2017/demo/popproj/2017-popproj.html>.

relying on National Health Expenditure Account projections to inflate healthcare spending and CBO's projections of CPI-U to project income.⁹

Grouping Workers into Firms. To develop the analytic file for this analysis, we subset the KNG-HRM baseline data to select individuals and households located in Connecticut. In our KNG-HRM, we group workers into synthetic firms. However, a Partnership Plan 3.0 would be available to unions as well. Therefore, we modified the Connecticut baseline dataset to include information on union membership status for each employee. Since the ACS does not report any information on union membership, we used union status information from the Current Population Survey (CPS) to impute whether a worker is part of a union or not in the ACS. This imputation is heavily dependent on the industry category where the worker is employed. Once each worker has an imputed membership status, we group workers who are members of a union within each industry. For our analyses, we use this grouping of workers as a multi-employer group (i.e., union) firm which is eligible to opt-in for the state-sponsored public option.

Estimating Healthcare Utilization and Spending. We estimated healthcare utilization and spending for everyone in the ACS, based on an individual's demographics and imputed health status, including general health, presence of select chronic conditions, and disabilities. We converted healthcare utilization into spending by multiplying utilization rates by prices in Connecticut. Commercial insurer prices were obtained from publicly available data from the Health Care Cost Institute (HCCI). We developed comparable Medicare prices using studies from the Congressional Budget Office (CBO) and other sources that compare commercial provider payment rates to Medicare. In addition, we allowed both commercial and Medicare prices to vary geographically. For commercial prices, we used the HCCI Healthy Marketplace Index (HMI) to develop a commercial price index by geographic area and imputed an index value for geographic areas not included in the HMI. To account for geographic and provider variation in Medicare prices, we used the input price and policy adjustments under the Medicare fee schedules (e.g., wage index, indirect medical education, and geographic practice cost index).

We recognize that our price and utilization estimates are approximations that may differ from those experienced by consumers on either ESI or insured through the non-group market. Therefore, we scaled spending to match external benchmarks for ESI and Marketplace premiums (see calculation of premiums discussed below). Specifically, we calculated a scaling factor for ESI prices and utilization such that our ESI premiums match the average Connecticut premiums as reported in the MEPS.¹⁰ There are limited data available on prices paid by uninsured populations. People without health insurance coverage are often billed charges, but then receive discounts through charity care programs. Following analyses of the AHA Annual Survey data for hospital services and estimates in the literature, we assumed that the uninsured

⁹ www.cbo.gov/publication/56020

¹⁰ https://meps.ahrq.gov/data_stats/summ_tables/insr/state/series_2/2019/tiic1.htm

pay rates comparable to Medicare for hospital services and rates comparable to commercial payers for other services.^{11,12}

c. Modeling Premiums and Spending under Partnership Plan 3.0

Premiums. To calculate what enrollee premiums would be we have to make several assumptions regarding the Partnership Plan 3.0. We assume that the Partnership Plan 3.0 is paying provider rates comparable to commercial provider rates, but (as discussed below) would need to be reduced (or tax revenue on business and individuals increased) to put the plan on a more secure financial basis. Based on the current medical loss ratio faced by the Partnership Plan 2.0, reported in the [Brown & Brown Insurance report](#), we initially assume that the Partnership Plan 3.0 would also face a medical loss ratio of 108 percent. Since the Partnership Plan 2.0 does not pay premium or other taxes and assessment, we also assume the Partnership Plan 3.0 will not either.

The premiums for the Partnership Plan 3.0 are established in one large rating area, which includes only all newly eligible firm employee enrollment (i.e., separate risk pool from the Partnership Plan 2.0 covering the municipality enrollees). Further, we assume that when an employer switches onto the Partnership Plan 3.0, they will maintain the individual and family employer subsidy share under the Partnership Plan 3.0 as they had under the plan they were offering in the baseline. Lastly, we assume that the Partnership Plan 3.0 has an actuarial value of 99 percent, \$0 Deductible, \$2,000 individual out-of-pocket (OOP) max and \$4,000 family OOP max.

Tax Revenue Implications.

- *Insurance Premium Tax.* Connecticut imposes a tax rate of 1.50 percent on net direct premiums collected by admitted insurers (i.e., those authorized to operate in Connecticut), known as the insurance premium tax. The tax only applies to fully insured plans (both NOG plans and employers who do not self-insure). We assume that the Partnership Plan 3.0 will not be charged insurance premium tax. For the baseline and each scenario in our model, we add up the estimated premiums charged by fully insured health plans and multiply the resulting number by the tax rate. We calculate the Insurance Premium Tax deficit under the public option by subtracting the tax revenue in each scenario from the revenue in baseline.
- *Exchange Fund Assessment.* To fund the Connecticut Exchange, the state charges an assessment on earned premiums reported by qualified health carriers on the individual and small group markets. The assessments are calculated at a rate of 1.65 percent on premiums collected during the previous calendar year. We assume that the Partnership Plan 3.0 will not be charged exchange assessments.

¹¹ Melnick and Fonkych. Hospital Pricing and the Uninsured: Do the Uninsured Pay Higher Prices? Health Affairs. 2008. Accessed at <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.27.2.w116>.

¹² Gruber and Rodriguez, How Much Uncompensated Care Do Doctors Provide? Journal of Health Economics. 2007. Accessed at <https://economics.mit.edu/files/6423>.

For the baseline and each scenario in our model, we add up the estimated premiums charged by small group and individual insurers and multiply the resulting number by the exchange fund assessment rate. We calculate the Exchange Fund Assessment deficit under the public option by subtracting the tax revenue in each scenario from the revenue in baseline.

- *Connecticut Department of Insurance Assessment.* The Connecticut Department of Insurance (DOI) is funded through an assessment on all insurance (health, life, etc.). We estimated the share of Department of Insurance (DOI) fund from health insurance policies at \$19 million in 2020. The DOI assessment is paid by fully insured health plans, which are assessed based on premiums and amount to meet the target funds established by the state. To calculate a DOI assessment rate, we estimate total premiums collected by fully insured plans in the baseline and divided these premiums into the projected DOI fund amount (inflation adjusted to 2023). This tax rate is then applied to premiums earned by fully insured plans in each scenario to calculate DOI assessment revenues. Each scenario's tax deficit is the difference in DOI revenues between baseline and the respective scenario.
- *Health and Welfare Assessment.* The Health and Welfare Assessment (also known as the Immunization Fund) is assessed against all lives covered by both fully insured and self-insured businesses. We estimated the Health and Welfare Assessment Fund at \$62 million in 2020. To estimate the per-covered life assessment rate, we divide the total fund amount by the number of covered lives by fully and self-insured entities in the baseline. We assume the per capita rate to remain constant across the scenarios and multiply the rate by the earned premiums to estimate tax revenue in each scenario. The tax deficit is calculated by subtracting the scenario-specific revenue from the total projected fund amount in 2023 (adjusted for inflation).
- *Health and Well-being Assessment.* The Health and Well-being Assessment applies to fully insured and self-insured health care premiums. We estimated the fund at \$11.8 million in 2020. In order to estimate tax revenue, we divide the total fund amount by the number of covered lives, from fully and self-insured plans, to calculate a per capita rate in the baseline. We assume the per capita rate to remain constant across the scenarios and multiply the rate by the earned premiums to estimate tax revenue in each scenario. The tax deficit is calculated by subtracting the scenario-specific revenue from the total projected fund amount in 2023 (adjusted for inflation).

Provider Spending Offsets. We assume that the MLR for Partnership Plan 3.0 will remain comparable to the MLR for Partnership Plan 2.0 (in the period prior to COVID-19 PHE) at 108 percent. This implies that the amount spent on clinical services and quality improvement would be 8 percent higher in Partnership Plan 3.0 than the premiums collected, thereby creating an insurance product which is underpriced. Under SB 346 introduced in February 2020 legislative session, the state-sponsored plan would be required to have a medical loss ratio of not less than 90 percent. Empirical evidence from a study on administrative load conducted by RAND suggests administrative load at 8 percent for large employer self-insured plans,

with medical loss ratio at 92 percent.¹³ Therefore, for the purpose of our analysis, we assume MLR of 92 percent as the target value required to eliminate underfunding of the plan.

We assume that premiums charged by the plan will remain unaffected over the short-term. Instead, the channel the public option plan will use to offset the losses incurred from underpricing is through reduced provider rates. We estimate the cut in healthcare spending by multiplying spending under the Partnership Plan 3.0 with the ratio of target value of MLR to assumed initial value of MLR. In this case, the ratio is 0.852 (0.92/1.08).

III. Findings

a. Coverage

In 2023, we project the Connecticut population under the age of 65, not employed or dependents of those employed by the government (Federal, state, or local) and not enrolled in a government assistance program, such as Medicare and Medicaid) to be 1.9 million (Figure 3). In 2023, we estimated that slightly more than 82 percent of this population will receive coverage through an employer, with the remaining 18 percent roughly split between non-group coverage and being uninsured.

Across the six scenarios modeled, private ESI remains the leading source of coverage, but total enrollment declines as more firms become eligible to enroll in the public option and as the take up rate increases. For the least extreme scenario, i.e., when eligibility is limited to for-profit firms with fewer than 50 employees, non-profits, and unions and firm take up rate is assumed to be 25 percent, we see private ESI drop from 1.6 million to 1.0 million. Under this scenario, we also estimate that 29.3 thousand more people would be uninsured. For the most extreme scenario, i.e., when eligibility is limited to for-profit firms with fewer than 100 employees, non-profits, and unions and firm take up rate is assumed to be 75 percent we estimate that the Partnership Plan 3.0 enrollment (829 thousand) is almost as high as private ESI enrollment (867 thousand). Under this scenario we estimate a decrease of 9.4 thousand in the uninsured population compared to the baseline. Across scenarios, private ESI would fall from 82 percent in baseline to as low as 45 percent in the most extreme scenario (Figure 4).

There is a large drop off in private ESI enrollment from Baseline to the scenario with eligibility limited to for-profit firms with fewer than 50 employees, non-profits, and unions and firm take up rate of 25 percent (reduction of 553 thousand individuals or 35%); however, as take up increases the decline in private ESI coverage is noticeably smaller. This large initial ESI drop off is because larger organizations eligible for the Partnership Plan 3.0 were more likely to enroll with assumed take-up at the initial 25 percent rate than at other take-up rate assumptions. The remaining eligible firms tend to be smaller, and these firms are more likely to take up the Partnership Plan 3.0 in later scenarios (i.e., in the scenarios with

¹³ Eibner, C., Girosi, F., Miller, A., Cordova, A., McGlynn, E. A., Pace, N. M., ... & Gresenz, C. R. (2011). Employer self-insurance decisions and the implications of the Patient Protection and Affordable Care Act as modified by the health care and education reconciliation Act of 2010 (ACA). *Rand health quarterly*, 1(2). Available at: https://www.rand.org/pubs/technical_reports/TR971.html.

50% and 75% take up). Since smaller firms take up in the later take-up scenarios, the drop off from private ESI coverage is smaller in magnitude across the later corresponding scenarios.

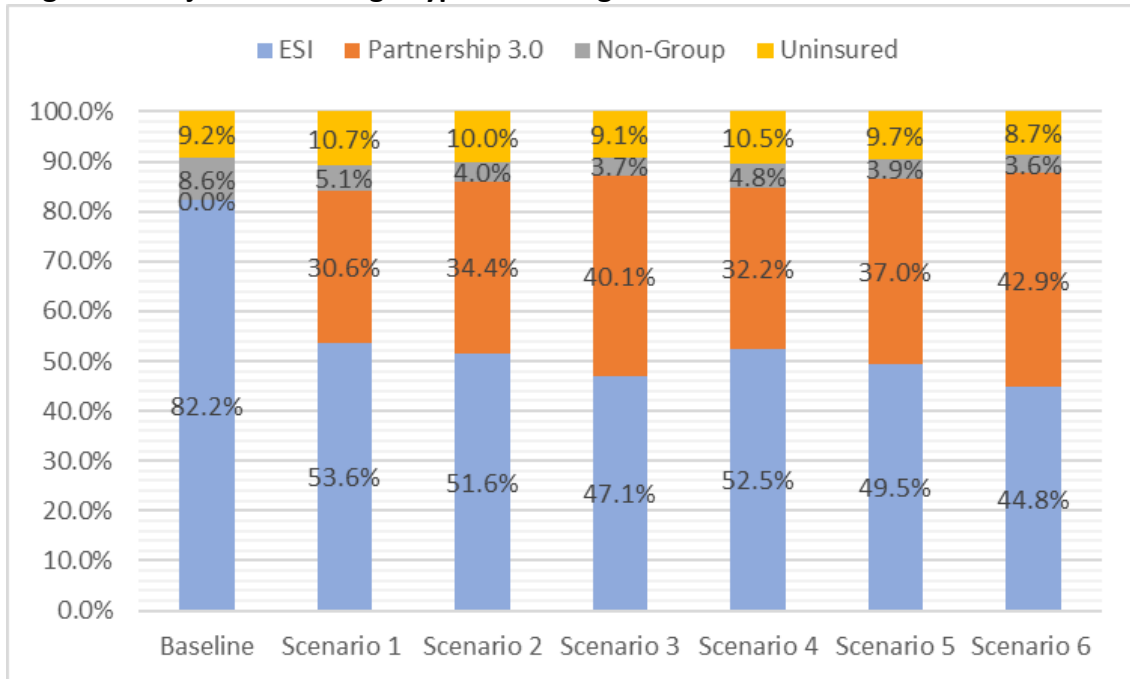
Figure 3: Projected Number (Thousands) of People by Coverage Category in 2023

Coverage	Baseline	For-profit Firms with Fewer than 50 Employees, Non-profits, and Unions			For-profit Firms with Fewer than 100 Employees, Non-profits, and Unions		
		25% Take Up	50% Take Up	75% Take Up	25% Take Up	50% Take Up	75% Take Up
ESI	1,590.6	1,038.0	998.2	911.6	1,015.4	957.2	867.3
Partnership Plan 3.0	-	591.2	665.7	776.0	623.6	715.3	829.3
Non-group	166.5	98.6	76.8	71.0	92.1	75.6	69.8
Uninsured	178.0	207.3	194.4	176.6	203.9	186.9	168.6
Total	1,935.1	1,935.1	1,935.1	1,935.1	1,935.1	1,935.1	1,935.1

Source: KNG Health analysis using the KNG Health Reform Model

Note: The population reported here excludes Connecticut residents who are enrolled in government assistance programs (Medicare, Medicaid, Tricare, VA or IHS) as well as all employees and dependents of Federal, state, and local government workers.

Figure 4: Projected Coverage Type Percentage in each Scenario in 2023



Source: KNG Health analysis using the KNG Health Reform Model

Note: The population reported here excludes Connecticut residents who are enrolled in government assistance programs (Medicare, Medicaid, Tricare, VA or IHS) as well as all employees and dependents of Federal, state, and local government workers.

When a firm chooses to offer employer sponsored insurance, whether it be through the commercial private market or through the Partnership Plan 3.0, its employees can choose to enroll in the offered ESI plan or not (and instead enroll in non-group coverage or be uninsured). We find that the employee level take-up rates of ESI coverage is consistently higher when an eligible firm chooses to offer the Partnership Plan 3.0 as compared to when they are offering ESI coverage through the private commercial market. Figure 5 shows the employee level ESI take up rate when the firm has chosen to offer the Partnership Plan 3.0 as the ESI ranges from 95.7 to 96.2 percent, whereas the employee take-up rate among those same firms in baseline ranges from 83.2 to 87.1 percent under the 6 different modeled scenarios.

Figure 5: ESI Enrollment Rates in Firms that Chose to Enroll in Partnership Plan 3.0 in 2023

Scenario	Description	In Baseline	Partnership Plan 3.0
1	25% Take Up; < 50 employees; all non-profits; Unions	87.1%	96.2%
2	50% Take Up; < 50 employees; all non-profits; Unions	84.3%	95.7%
3	75% Take Up; < 50 employees; all non-profits; Unions	83.2%	95.9%
4	25% Take Up; < 100 employees; all non-profits; Unions	87.0%	96.2%
5	50% Take Up; < 100 employees; all non-profits; Unions	84.2%	95.7%
6	75% Take Up; < 100 employees; all non-profits; Unions	83.2%	95.9%

Source: KNG Health analysis using the KNG Health Reform Model

Note: The population reported here is employees and dependents offered Partnership Plan 3.0.

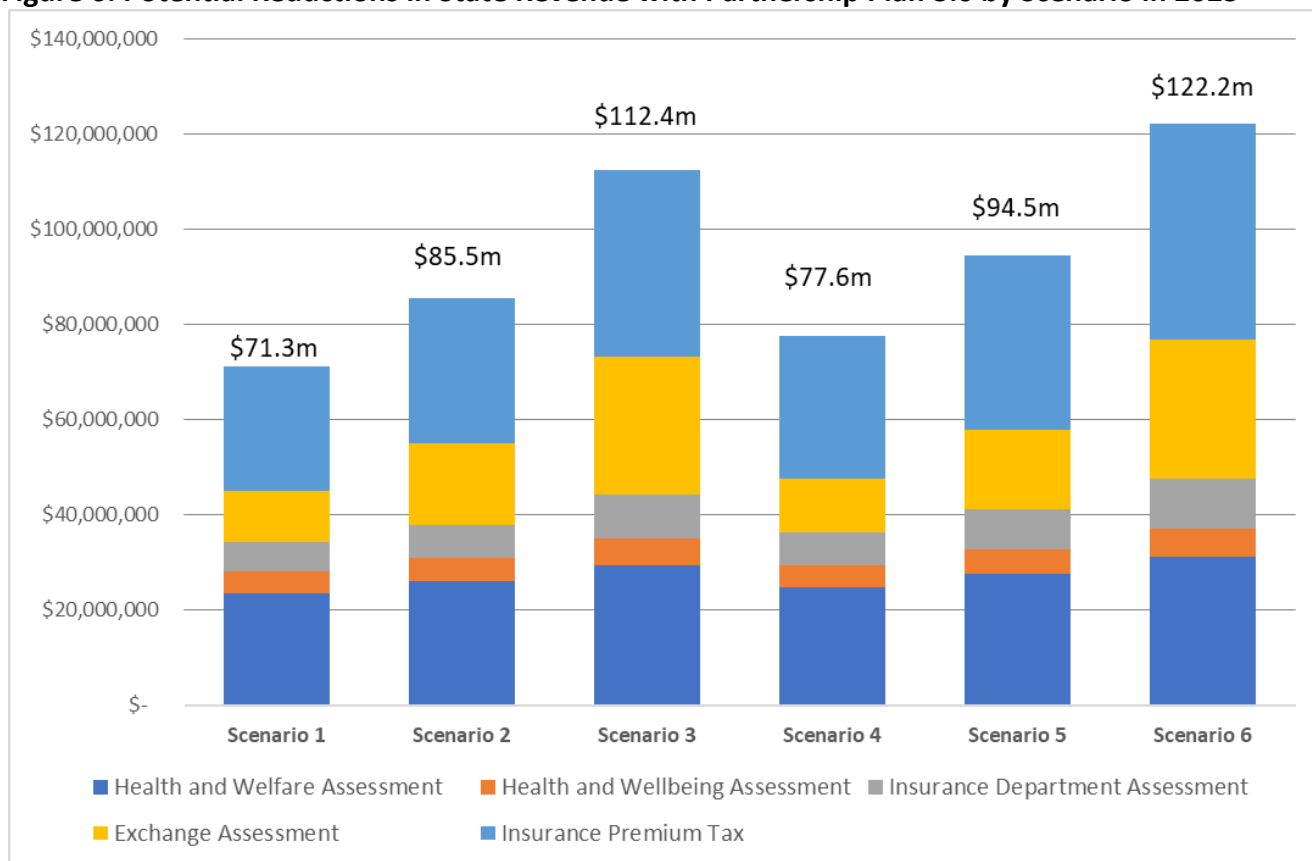
b. Tax Revenue

Private insurers in Connecticut pay taxes and assessments on healthcare premiums that presumably would not be required of the Partnership Plan 3.0. As more eligible firms participate in the state-sponsored plan, the pool of firms purchasing health insurance through a private insurer would fall. This leads to a decline in the tax collection by the state. We characterize the loss in state’s tax revenue as the difference between taxes collected by the state in the baseline and taxes collected after the public option becomes available.

We calculate the aggregate health insurance related taxes and assessments in the baseline by adding externally reported tax funds estimates for: (1) Health and Wellness Assessment; (2) Health and Wellbeing Assessment; (3) Department of Insurance Assessment; (4) Exchange Fund Assessment; and (5) Insurance Premium Tax (~\$244 million in total). After implementation of the Partnership Plan 3.0, the aggregate revenue from these sources varies across different scenarios and ranges from \$173 million in the scenario with 25 percent take up and small firms defined as those with fewer than 50 employees (Scenario 1) to \$122 million in the scenario with 75 percent take up and small firms defined as those with fewer than 100 employees (Scenario 6). The revenue across all scenarios is noticeably less than the baseline tax collection. The revenue reductions range from \$71 million (Scenario 1) to \$122 million

(Scenario 6) (Figure 6). To offset these revenue reductions, the state will need to either increase taxes and assessment on the remaining insurers or raise revenue through other mechanisms.

Figure 6: Potential Reductions in State Revenue with Partnership Plan 3.0 by Scenario in 2023



Source: KNG Health analysis using the KNG Health Reform Model

Note: The population reported here excludes Connecticut residents who are enrolled in government assistance programs (Medicare, Medicaid, Tricare, VA or IHS) as well as all employees and dependents of Federal, state, and local government workers.

c. Provider Spending

Our model initially assumes that the Partnership Plan 3.0 will pay commercial provider rates (like private ESI insurers). We then calculate impact on provider reimbursement if the Partnership Plan 3.0 reduces provider reimbursement rates to maintain a sustainable medical loss ratio. We calculate the total spending impact of the reduction in provider rates as well as the hospital-specific spending impact (for inpatient, outpatient, and emergency room services only).

For the scenario with 25 percent take up and small firms defined as those with fewer than 50 employees (Scenario 1), we estimate a decrease of \$694 million in total spending in provider reimbursement under the assumption that the Partnership Plan 3.0 will reduce provider reimbursement to achieve a target

Medical Loss Ratio of 92 percent in 2023. If the Partnership Plan 3.0 remains underfunded and does not reduce provider reimbursement below the private insurer rates, we estimate the total provider spending to increase by \$51 million (Figure 7a). Limiting to hospital spending, we estimate a decrease of \$242 million with reduced provider rates and an increase of \$24 million under commercial provider rates (Figure 8a).

For the scenario with 75% take up and small firms defined as those with fewer than 100 employees (Scenario 6), we estimate a decrease of \$876 million in total spending in 2023, approximately 5.6 percent of total baseline spending, if the Partnership Plan 3.0 were to adjust its Medical Loss Ratio as we assume. However, if we were to assume that the Partnership Plan 3.0 would continue to pay commercial rates then total spending would increase by \$154 million (Figure 7b). If we limit the spending impact to only the hospital services, we project an increase in \$73 million under commercial rates and a decrease of \$293 million if Partnership Plan 3.0 provider rates were adjusted such that the plan would not be underfunded (Figure 8b).

Figure 7a: Projected 2023 Total Spending Impacts (in millions of dollars) – Scenario 1

Coverage	Baseline	Partnership Plan 3.0 Provider Reimbursement Rates			
		Commercial Rates		Non-Commercial Rates	
		Partnership Plan 3.0	Impact	Partnership Plan 3.0	Impact
ESI	\$13,468	\$8,843	-\$4,624	\$8,843	-\$4,624
Partnership Plan 3.0	\$0	\$5,034	\$5,034	\$4,289	\$4,289
Non-group	\$1,335	\$982	-\$353	\$982	-\$353
Uninsured	\$772	\$767	-\$5	\$767	-\$5
Total	\$15,575	\$15,627	\$51	\$14,882	-\$694

Source: KNG Health analysis using the KNG Health Reform Model

Note: The population reported here excludes Connecticut residents who are enrolled in government assistance programs (Medicare, Medicaid, Tricare, VA or IHS) as well as all employees and dependents of Federal, state, and local government workers. This table reports results for Scenario 1 (for-profit firms with fewer than 50 firms are eligible for the Partnership Plan 3.0 with take-up rates of 25%).

Figure 7b: Projected 2023 Total Spending Impacts (in millions of dollars) – Scenario 6

		Partnership Plan 3.0 Provider Reimbursement Rates			
		Commercial Rates		Non-Commercial Rates	
Coverage	Baseline	Partnership Plan 3.0	Impact	Partnership Plan 3.0	Impact
ESI	\$13,468	\$7,346	-\$6,122	\$7,346	-\$6,122
Partnership Plan 3.0	\$0	\$6,957	\$6,957	\$5,927	\$5,927
Non-group	\$1,335	\$750	-\$585	\$750	-\$585
Uninsured	\$772	\$676	-\$97	\$676	-\$97
Total	\$15,575	\$15,729	\$154	\$14,699	-\$876

Source: KNG Health analysis using the KNG Health Reform Model

Note: The population reported here excludes Connecticut residents who are enrolled in government assistance programs (Medicare, Medicaid, Tricare, VA or IHS) as well as all employees and dependents of Federal, state, and local government workers. This table reports results in Scenario 6 (for-profit firms with fewer than 100 firms are eligible for the Partnership Plan 3.0 with take-up rates of 75%).

Figure 8a: Projected 2023 Hospital Spending Impacts (in millions of dollars) – Scenario 1

		Partnership Plan 3.0 Provider Reimbursement Rates			
		Commercial Rates		Non-Commercial Rates	
Coverage	Baseline	Partnership Plan 3.0	Impact	Partnership Plan 3.0	Impact
ESI	\$4,729	\$3,072	-\$1,656	\$3,072	-\$1,656
Partnership Plan 3.0	\$0	\$1,801	\$1,801	\$1,534	\$1,534
Non-group	\$494	\$379	-\$114	\$379	-\$114
Uninsured	\$212	\$207	-\$6	\$207	-\$6
Total	\$5,435	\$5,459	\$24	\$5,192	-\$242

Source: KNG Health analysis using the KNG Health Reform Model

Note: The population reported here excludes Connecticut residents who are enrolled in government assistance programs (Medicare, Medicaid, Tricare, VA or IHS) as well as all employees and dependents of Federal, state, and local government workers. This table reports results for Scenario 1 (for-profit firms with fewer than 50 firms are eligible for the Partnership Plan 3.0 with take-up rates of 25%).

Figure 8b: Projected 2023 Hospital Spending Impacts (in millions of dollars) – Scenario 6

		Partnership Plan 3.0 Provider Reimbursement Rates			
		Commercial Rates		Non-Commercial Rates	
Coverage	Baseline	Partnership Plan 3.0	Impact	Partnership Plan 3.0	Impact
ESI	\$4,729	\$2,548	-\$2,180	\$2,548	-\$2,180
Partnership Plan 3.0	\$0	\$2,476	\$2,476	\$2,109	\$2,109
Non-group	\$494	\$299	-\$194	\$299	-\$194
Uninsured	\$212	\$185	-\$28	\$185	-\$28
Total	\$5,435	\$5,508	\$73	\$5,141	-\$293

Source: KNG Health analysis using the KNG Health Reform Model

Note: The population reported here excludes Connecticut residents who are enrolled in government assistance programs (Medicare, Medicaid, Tricare, VA or IHS) as well as all employees and dependents of Federal, state, and local government workers. This table reports results in Scenario 6 (for-profit firms with fewer than 100 firms are eligible for the Partnership Plan 3.0 with take-up rates of 75%).

Figure 9 provides the estimated additional state revenue required under the Partnership Plan 3.0 to replace lost tax revenue and ensure financial sustainability of the plan without reducing provider reimbursement rates. The state would need to compensate for both the lost tax revenue as well as the healthcare expenditures that exceed what is collected through premiums. For the scenario with 75% take up and small firms defined as those with fewer than 100 employees (Scenario 6), we estimate that the state would need to collect an extra \$1,152 million in 2023. For the scenario with 25% take up and small firms defined as those with fewer than 50 employees (Scenario 1), we estimate that the state would need to collect an extra \$816 million to the Partnership Plan 3.0 for it to be sustainable.

Figure 9: Additional Funding Needed to Replace Lost Tax Revenue and Sustain Partnership Plan 3.0 without Reducing Provider Reimbursement Rates in 2023 (in Millions)

	For-profit Firms with Fewer than 50 Employees, Non-profits, and Unions			For-profit Firms with Fewer than 100 Employees, Non-profits, and Unions		
	25% Take Up	50% Take Up	75% Take Up	25% Take Up	50% Take Up	75% Take Up
Tax Revenue Lost	\$71.3	\$85.5	\$112.4	\$77.6	\$94.5	\$122.2
Unaccounted for Health Expenditures	\$745.1	\$830.5	\$959.4	\$787.2	\$896.9	\$1,029.6
Total	\$816.4	\$916.0	\$1,071.8	\$864.8	\$991.4	\$1,151.8

Source: KNG Health analysis using the KNG Health Reform Model

IV. Discussion

Several states legislatures have introduced or are considering establishing a public option.¹⁴ The proposals differ in important ways, such as the level of the state control and the approach to provider reimbursement. In this study, we examined the potential effects of one such plan in Connecticut, whose legislature has debated a public option over the last few legislative sessions. The Connecticut public option, as specified in SB 842, would expand access to a state-administered insurance plan to small businesses, non-profit organizations of any size, and unions. The plan would be tied to the insurance plan offered to state employees, which is a generous health insurance plan with low co-payments and out-of-pocket spending caps. The bill, however, does not specify provider reimbursement rates.

The impact of a public option on insurance coverage, health care spending, providers, and state budgets, depends on several factors. An eligible entity's decision to enroll in the public option will depend on plan premiums, benefits, deductibles, and copayments. The impact on healthcare spending will depend on, among other factors, provider reimbursement rates, while the impact on state budgets will depend on medical spending, premiums collected, and tax revenue. Critics of the Connecticut public option proposal have raised a few concerns, including its effects on tax revenue, if ESI moves from private insurance to a state plan. In addition, the existing public option in the state, for which eligibility is limited to municipalities and other non-state government entities (i.e., Partnership Plan 2.0), appears to be underfunded. If the new public option is also underfunded, the state would need to raise premiums or use other tax revenue and/or cut provider reimbursement rates to maintain the financial health of the plan.

We examine the potential impact of expanding a public option in Connecticut to small employers, non-profit organizations, and unions. We model several scenarios that vary in terms of definition of a small

¹⁴ California Health Care Foundation. State Public Options: Comparing Models from Across the Country. CHCF Issue Brief. March 2021. Accessed at <https://www.chcf.org/wp-content/uploads/2021/03/StatePublicOptionsComparingModelsAcrossCountry.pdf>

employer and employer take up rates. With respect to coverage, we project that the number of uninsured individuals among the population eligible for the new public option would increase in 4 of the 6 scenarios modeled, ranging from an increase in uninsured from 9 thousand (5%; eligibility: < 100 employees; take up: 50%) to 29 thousand (16%; eligibility: < 50 employees; take up: 25%). While an increase in uninsured may seem counter intuitive, it is the result of changes in ESI premiums and other costs because of changes in the risk pools. For example, premiums could increase for workers and their families either under the public option or, more likely, for those whose employers that do not take up the public option. We find that the higher the take up of the public option the smaller the effect on the uninsured. In fact, in the scenario where firms with fewer than 100 employees are eligible for the public option and where take up is 75 percent, we found that the number uninsured would fall by about 5 percent.

With respect to tax revenue, we found that the direct reduction in revenue for the state would be between \$71 million (with 25% take up and small firms defined as those with fewer than 50 employees) and \$122 million (with 75% take up and small firms defined as those with fewer than 100 employees) in 2023. We estimate that provider reimbursement rates would need to fall by roughly 15 percent to ensure the public option was on secure financial footing, or potential underfunding would need to be covered by other state dollars. A reduction of this amount in provider rates in the public option translates to a reduction of 5.6 percent in total spending for the population of interest if take up of the public option was 75 percent among small firms defined as those having 100 or fewer employees, and a reduction of 4.5 percent if the take up of public option was 25% among small firms defined as those having 50 or fewer employees.

The additional state revenue required under the Partnership Plan 3.0 to replace lost tax revenue and ensure financial sustainability of the plan without reducing provider reimbursement rates was also estimated. For the scenario with 75 percent take up and small firms defined as those with fewer than 100 employees, we estimate that the state may need to collect an extra \$1,152 million in 2023. For the scenario with 25% take up and small firms defined as those with fewer than 50 employees, we estimate that the state may need to collect an extra \$816 million.

As Connecticut debates introducing a public option for small employers and, potentially, others in the state, the tax implications of both lost premium related tax revenue and financial requirements to ensure stability of the plan should be considered.