Can Active Purchasing Control Costs?
The Massachusetts Health Insurance Exchange Experience*

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Abstract

As the ACA Marketplaces face rising prices and political uncertainty, there is significant interest in how state policymakers can stabilize markets and control costs. We describe a unique set of active purchasing policies used by Massachusetts’ pioneer insurance exchange to shape the rules of competition and reward lower-price insurers with additional customers. In contrast to the typical focus on recruiting new insurers to an exchange, Massachusetts’ policies focused on steering consumers to low-cost plans. We provide evidence that the state’s active purchasing policies significantly influenced insurer pricing. Between 2010 and 2013, 80% of insurer prices were set exactly at or within 1% of pricing thresholds created by active purchasing policies. One key “limited choice” policy—which restricted the choice of fully-subsidized consumers to the cheapest plans—was associated with a 16-20% reduction in average insurance prices relative to comparative insurance markets in 2012-2014. Under the ACA, Massachusetts’ active purchasing policies contributed to sustained slower price growth as the state fell from the twenty-fifth to the second-lowest benchmark silver premiums in the nation.

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Introduction

After several years of enrollment growth and cost stability, the ACA’s Marketplaces are now in a tumultuous period. Starting in 2017, the Marketplaces have seen sharply higher premiums, exits by several prominent insurers, and substantially reduced competition. By 2018, half of the country lives in Marketplace areas with just one or two competing insurers.

In this strained environment, it is increasingly important to identify models for policies that control costs and maintain coverage. In this paper, we describe and present evidence on the effects of a unique set of policies used in Massachusetts’ pioneer exchange, the Connector. Operating since 2006, the Connector is the country’s oldest health insurance exchange and was the model for the ACA. Prior work has studied the impact of the Connector (and the state’s “Romneycare” reform more broadly) on coverage, costs, and quality of care.

But a key part of the Connector’s story remains untold. There has been little attention to its use of creative regulatory policies that shape the rules of competition to encourage insurers to compete more aggressively to lower prices and costs. These policies were used in the Connector’s subsidized segment, a program that was called Commonwealth Care (CommCare) prior to 2014 and ConnectorCare under the ACA.

The Connector’s policy approach contrast with the standard focus on simply boosting the number of competing insurers in a market. Instead, its approach fits into the broader paradigm of “active purchasing” – in which a market regulator actively uses its power to shape competitive rules towards desired ends. In contrast, most state ACA Marketplaces have taken a more passive “clearinghouse” approach. Although there has been some research comparing average outcomes in active purchasing vs. clearinghouse states, there has been little work describing specific policies or testing their impact.

Our objective was to study the relationship between several of the Connector’s active purchasing policies and insurer prices and state costs. We first describe the active purchasing policies used by the Connector, both prior to and after the ACA. We then present evidence on how these policies impacted insurer prices and state costs, drawing on policy variation over time and comparing outcomes in the Connector to other health insurance markets. Finally, we discuss implications for regulators of ACA Marketplaces.

Active Purchasing in the Massachusetts Exchange

Background and Policy Overview

Like the ACA for which it was a model, Massachusetts’ 2006 health reform law (“Romneycare”) sought to expand coverage through an individual mandate and subsidies for private health insurance. Subsidies were available for individuals up to 300% of poverty to purchase insurance in the CommCare exchange. A separate market (called CommChoice) covered individuals above 300% of poverty without subsidies.

We focus here on the policies the Connector used in regulating CommCare as a market-based insurance program. These differed from the way most ACA Marketplaces work today. Most ACA Marketplaces operate as a clearinghouse, with the regulator working as a passive market facilitator. Although there is
benefit regulation and subsidies, regulators in this model seek to minimize policies that intervene in the market. The guiding principle of the clearinghouse model is to “let the market work.”

In contrast, the Connector operated CommCare as an active purchaser. Active purchasing draws on ideas of competitive procurement used by employers and state Medicaid programs to contract with private health insurers.12 The guiding principle is to use the government’s regulatory and purchasing power to shape the competitive incentives and encourage desired outcomes like cost control or quality improvement.

Previous authors have defined specific tools used in active purchasing.13,14 They have also observed how these tools have been employed in marketplaces such as California and in the early years of the Connector.13,15 To date, these descriptions have focused on “standardization of benefits” and “selective contracting”. In the case of CommCare, for example, the Connector required that subsidized plans cover a standard set of benefits with an actuarial value of approximately 95-99% (depending on enrollee income). It also reserved the right to have final say over which plans were eligible for subsidies, and actively recruited insurers to join the market.

The Connector differed in important ways, however, from other active purchasers. While active purchasing often involves selective contracting in which a small subset of winning bidders get the contract, the Connector allowed all willing insurers to participate in the market but shaped the rules of competition in ways that encouraged insurers to lower their prices. To do so, the Connector significantly broadened its active purchasing toolkit. The additional active purchasing strategies used in CommCare included:

1) **Steering to low-price plans through default choices**: Many subsidized insurance enrollees are passive and fail to make active plan choices. The Connector leveraged this reality to reward low-price insurers in two ways. First, it used preferential auto-assignment of passive new enrollees into low-premium plans. Second, it threatened to invoke “active open enrollment” for plans failing to price below a target. This policy would eliminate auto-renewal during open enrollment and require enrollees to actively choose or else be defaulted into a low-price plan.16

2) **Limiting choice to low-price plans**: An even stronger way of rewarding low-price plans involves requiring enrollees to choose them. In an extreme version, this could mean that only low-price plans (e.g., pricing below a threshold) can operate in the market. However, as we describe below, the Connector applied limited choice only for new enrollees and only for the lowest-income segment of the market (below 100% of poverty) who were fully subsidized so could choose any plan for free. This setup lessened disruption by allowing higher-price plans to continue operating in the market, giving them the opportunity to bid low in future years.

3) **Pricing range**: The simplest way to lower prices is to directly impose price caps on participating insurers. The Connector started using price caps in 2010, and these were binding on at least one plan in every year from 2010-2014. Interestingly, the Connector also imposed price floors (which were binding in several years) to satisfy federal rules requiring that prices fall within an actuarially sound rate range.

**Timeline of Active Purchasing in CommCare**

Exhibit 1 summarizes the timeline of active purchasing policies used in CommCare. In the exchange’s early years (fiscal 2007-2009),17 it took a relatively passive approach: the Connector required standardized
benefits and reserved the right to selectively contract with plans, but the main competitive policy was auto-assignment of passive new enrollees into low-price plans.

Two main shifts in active purchasing policy occurred in 2010 and 2012. In 2010, the exchange instituted an aggressive premium ceiling—below what was required by the actuarially sound range and below several insurers’ 2009 premiums. In addition, the Connector set several target thresholds below which insurers had to price or else risk losing enrollees through active open enrollment and auto-assignment. Insurers had to set prices at least 1% below a target capitation rate or enrollees would be actively enrolled in other plans; insurers also had to price at a discount of at least 2% or they would lose auto-assignment of passive enrollees.

This active approach to premium regulation continued in 2011, though a relatively high actuarially sound range set by a consultant prevented the exchange from using some of the policies from 2010.18

In 2012, in response to state budget pressures, the Connector again boosted its active purchasing role. It implemented a new policy, called limited choice, whereby new enrollees in the lowest-income, fully-subsidized group (below 100% of poverty) were restricted to choosing the cheapest plan based on pre-subsidy price.19 The limited choice policy effectively took a large group (about half of all enrollees) that was previously insensitive to prices (since all plans were free) and steered them to the lowest-price plans. This policy strengthened insurer incentives to lower prices and appears to have had a major impact on competitive behavior. In a fight for access to this newly stratified population, two insurers tied in bidding at the bottom of the actuarially-sound range, meaning enrollees were able to choose between two options. Following dramatic premium reductions in 2012, CommCare continued the limited choice policy into 2013 and the shortened fiscal 2014 (July-December 2013 up to the start of the ACA).

**Policies after the Start of the ACA**

With the implementation of the ACA Marketplaces in 2014, a number of CommCare’s active purchasing policies were continued through a successor program called ConnectorCare. ConnectorCare used state dollars to supplement federal ACA subsidies in order to maintain CommCare’s generous subsidies and actuarial values for enrollees below 300% of poverty. The state reserved these extra state subsidies, however, for only the five lowest-cost silver plans in each region. This form of linking subsidies to low premiums gave the state continued leverage in the marketplace and gave plans a continued incentive to keep premiums low.

**Study Data and Methods**

**Conceptual Approach and Statistical Analyses**

To test the role of the Connector’s active purchasing policies in affecting market prices, we take several approaches. First, we examine the distribution of insurer prices relative to price thresholds set by active purchasing policies. We report the share of prices in each year that are exactly at, or within 1% below, these thresholds. Intuitively, when insurers price just at or below a threshold, it suggests that the incentive involved with the policy influenced their pricing decision.
Second, we use the policy timeline described above to study the association of policy shifts with insurer prices. We focused our analysis on the most aggressive policy, the 2012 limited choice policy requiring many lower-income enrollees to choose one of the cheapest two plans.

We do two analyses of this 2012 change. First, we study the path of average prices in the CommCare market relative to average prices in three comparison markets: commercial insurance in Massachusetts, Massachusetts Medicaid managed care organization prices, and national employer-sponsored insurance. We plot the path of prices in these market from 2007-2014 to examine trends visually. We also implement a difference-in-differences model, regressing prices on market fixed effects, year fixed effects, and an interaction of CommCare with a dummy for post-2012. All statistical analysis was implemented using Stata version 14.2.

In addition, we examine the distribution of prices within CommCare around the 2012 change. Conceptually, we expect this policy to lower prices and particularly to strengthen price competition at the “low end” – i.e., among insurers competing win access to the “limited choice” group by being one of the cheapest plans.

Finally, we study trends in premiums in Massachusetts’ post-ACA Marketplace relative to other states. As described above, the Connector has taken a more active approach through its ConnectorCare program than most Marketplaces, which act as clearinghouses. If this active purchasing has been successful, one would expect this to translate into lower premiums and/or lower growth over time. To analyze this statistically, we draw on data on benchmark (second-cheapest) silver premiums in each state for 2014-2018. We plot premiums in Massachusetts relative to the median state and to 10th-lowest and 10th-highest price states in nation.

Data Sources

We use historical information on premiums and policies in the Massachusetts exchange (both CommCare and the post-ACA state Marketplace) and other comparison settings. Information on policies was gleaned from public documents published by the Connector (including its annual report and board meeting materials) and from conversations with Connector staff.20

Data on CommCare insurer premiums was gathered from publicly available reports and state contracts with insurers. To calculate enrollment-weighted average premiums (across plans, regions, and income groups), we use de-identified administrative enrollment data made available via a data use agreement with the Connector. Our research protocol was approved by the IRBs of Harvard University and the National Bureau of Economic Research.

To measure premiums in comparison settings, we draw on publicly available data sources. Specifically, the Kaiser-HRET Survey for national employer-sponsored insurance premiums,21 Massachusetts’ Center for Health Information and Analysis (CHIA) for state-specific commercial insurance premiums,22 and public capitation reports for Massachusetts Medicaid managed care organizations.23 For benchmark silver premiums in the ACA Marketplaces, we use data compiled by the Kaiser Family Foundation.24

Limitations
Our study is subject to several limitations. Most fundamentally, our analysis involves studying the association of policies and pricing outcomes enacted in a single state exchange. Absent an experiment that randomizes policies across markets, it is challenging to infer the exact counterfactual path that insurer prices would have followed absent the policies we study. Our analysis of prices in comparison settings provides a natural benchmark, but these settings should not be viewed as ideal control groups.

We view our results as providing suggestive evidence of the effects of active purchasing policies, rather than giving precise causal estimates. Similarly, the analysis of bunching of insurer prices just below policy targets provides evidence that these targets affected insurer pricing, but we cannot infer the magnitude of the effect.

Our results suggest an effect of the suite of active purchasing policies enacted by the Connector. The analysis of any one policy may not generalize to insurance markets that take a more limited approach or where the market structure is different.

Finally, our results are focused on insurance prices. But prices are just one outcome in an insurance market, and plan quality also matters. Our results, therefore, not sufficient to make strong statements about enrollee or social welfare. There is likely to be a tradeoff between price and quality, and states will need to assess this tradeoff based on their individual needs and circumstances.

Results

Prices and Competitive Policy Thresholds

Exhibit 2 shows the influence of active purchasing policies with target thresholds on insurer premiums. Three policies involved setting thresholds: min and max allowed premiums, active open enrollment, and auto-assignment. The table shows the number of premium bids that were exactly at or within 1% below these thresholds.

Active purchasing thresholds appear to have influenced a large share of bids. In 2010 when insurers priced at a regional level (resulting in 23 total bids among the five insurers), 20 of these were at a policy threshold. From 2011 on, when each insurer set a single state-wide price (or 5 total bids), 3-4 of these were at a threshold. In total across all four years, 82% of all premium bids were within 1% of a policy threshold. In every year that a threshold existed, at least one plan bid within 1% of that threshold.

Most of these binding thresholds were premium ceilings and floors. But active open enrollment and auto-assignment thresholds were also binding in every year they were used. A good example is the active purchasing policy in 2012. In this year, CommCare threatened to impose active open enrollment on all insurers if three of the five insurers did not price below $414.98 (or $55 above the min allowed bid). While CeltiCare and Network Health cut prices aggressively to compete for the limited choice enrollees, it was unclear whether a third insurer would meet this target. In the end, Neighborhood Health Plan (NHP) set a premium of $414.95, preventing active open enrollment from being invoked.

CommCare Prices after 2012 Introduction of Limited Choice Policy

Exhibit 3 plots average insurer prices in CommCare (black lines) versus comparison markets from 2007 to 2014. The trends in CommCare divide into two periods: before and after 2012, when the limited choice policy was instituted.
From 2007 to 2011, prices were growing steadily in both CommCare and other markets. On an annualized basis, nominal premium growth over 2007-2011 was 5.2% per year in CommCare versus 4.3-5.5% in the three comparison settings. These growth rates were high but typical for health insurance. There was a slight dip in CommCare’s prices in 2010—possibly related to the introduction of new active purchasing policies—but prices rebounded in 2011.

Starting in 2012, CommCare prices experienced a major trend break. Average prices fell 6.6% in 2012 and another 7.7% in 2013, or almost 14% over two years. This represented a clear divergence from the other markets where prices continued to rise, albeit at a slower rate (1.1% to 3.5% growth per year).

Appendix Exhibit A1 shows the results from the difference-in-differences (DD) regression that corresponds to Figure 1. Consistent with the visual evidence, the key coefficients on the interaction between CommCare and post-2012 indicator(s) are negative and statistically significant. The pooled DD estimate in column (1) indicates that CommCare prices were $68.49 per month lower in the post-2012 period than comparison markets (statistically significant at the 1% level). This is a 16% reduction relative to CommCare’s premium in 2011. Column (2) shows results from a richer model that interacts CommCare with individual year dummies for 2012-2014. These estimates suggest reductions that rise from $37.52 per month (or 9%) in 2012 to $82-86 (or 20%) in 2013-14.

This sharp decline is remarkable for health insurance markets in which premiums nearly always rise. The 20% premium reduction in 2013 translates to major savings for the state of Massachusetts—about $1,000 per member-year or about $200 million in total.

CommCare Prices by Insurer

Appendix Exhibit A2 shows the premiums for each of the five insurers underlying the overall trends. In the years up to 2010 when insurers set multiple premiums (by region and demographics), the graph shows enrollment-weighted averages; for 2011 and following, the single premium set by each insurer is shown. The graph also shows maximum and minimum allowed premiums in applicable years.

From 2007-2009, premiums varied substantially across insurers and rose across the board. With the start of more aggressive active purchasing in 2010, this variation narrowed, and several insurers cut premiums from 2009. In addition, a new insurer (CeltiCare, owned by the national company Centene) entered the market with a low-price strategy. These forces led to an overall average premium decline of 2%. The graph suggests that the new premium ceiling likely played a role, though we show below that other thresholds were also important.

After premium increases in 2011, there were major shifts in 2012 and 2013. In 2012, Network Health and CeltiCare competed aggressively to be the lowest price and “win” access to the population facing limited choice. Both cut premiums by more than 10% and priced at the minimum allowed level. Meanwhile, the other insurers maintained relatively high premiums, particularly BMC HealthNet which priced at the maximum.

Because of their much lower prices and access to limited choice enrollees, Network Health and CeltiCare grew sharply, with their combined market share rising from 38% at the end of 2011 to 62% at the end of 2012. Other insurers lost market share, particularly BMC whose share fell by almost half (from 34% to 18%). Thus, the market-level premium decline of 6.6% was driven by both the large premium cuts by Network Health and CeltiCare and the shift in market share towards these low-price plans. A simple
decomposition suggests that about 60% of the overall premium decrease came from plan-level changes (holding fixed 2011 shares), while the remaining 40% came from the shift in market shares.

Facing such a large loss of membership, BMC in 2013 reversed course and cut its monthly premium by over $100 (or 22%) down to the lowest level among all plans. As a result, its market share rebounded back to 42% at the end of 2013, restoring its status as the largest plan. Appendix Exhibit A2 shows that this premium cut by BMC (and the resulting shift in market shares) was the main driver of the overall average premium decrease in 2013.26

Analysis of ACA Marketplace Premiums

Exhibit 4 shows the path of benchmark silver premiums from 2014-2018 for Massachusetts and for the national average (with bars shown for the range from the 10th highest and to 10th lowest state in each year).27 The graph shows the divergence path of premiums in Massachusetts versus the rest of the nation. Benchmark premiums in Massachusetts declined slightly (by 1-3% per year) from 2014-2017, with the growth rate in each year statistically different from the average other state.

Although premiums spiked in 2018 (largely due to the termination of cost-sharing reduction subsidies and silver-loading adopted by the Massachusetts exchange28), Massachusetts’ 26% growth was less than the 34% growth in the national average. As of 2017 and 2018, Massachusetts has the second lowest benchmark silver premiums of any state in the country (just above Washington in 2017 and Rhode Island in 2018).

Furthermore, unlike many ACA Marketplaces, the Connector, on net, has not lost insurers. The ConnectorCare program currently has five participating insurers, the same number that participated in CommCare.

Discussion

Today’s ACA Marketplaces face continued premium increases and new political instability that forces states to confront tradeoffs in price and quality. In this paper, we identify policies that use the state’s regulatory and purchasing power to shape the competitive incentives—expanding the toolkit in a strategy known as “active purchasing.” Furthermore, we describe active purchasing policies employed by Massachusetts both before and after the ACA and show evidence that these policies contributed to remarkable and durable premium reductions over time.

Observational evidence suggests that Massachusetts’ 2012 limited choice policy played a large role in stoking competition and lowering prices. The other active purchasing policies likely exerted an additional effect, as evidenced by plans’ affinity for bidding at policy thresholds. By sustaining its own competitive subsidies, Massachusetts was able to preserve the gains made in 2010-2014 through the early years of the ACA. The Connector’s premium growth since 2015 has been much slower than for the typical state exchange, and it now has the second lowest benchmark premiums in the nation.

Active purchasing policies may affect premiums through multiple channels. Consider, for instance, the add-on state subsidies for lower-income enrollees used since 2015 via the state’s ConnectorCare program. These may lead to lower market average premiums in several ways. First, they encourage insurers to set lower premiums, since the add-on subsidies are targeted to the cheapest plans in each market. Second,
they encourage consumers to select these lower-premium plans, which are differentially subsidized. Finally, by making insurance cheaper, they encourage more low-income enrollees to participate in the market. Past evidence from Massachusetts suggests that the additional enrollees are likely to be younger, healthier, and lower-cost, resulting in a healthier risk pool and lower average costs.\textsuperscript{29}

Together, our results suggest the potential value of active purchasing policies for ACA exchanges to boost competition and lower premiums. Underlying active purchasing is the idea that “letting the market work” may not always be the best policy for health insurance. Health insurance is subject to market failures. The best known market failure is adverse selection, which motivates policies used even in clearinghouse ACA exchanges (e.g., benefit regulation, subsidies, and risk adjustment). But another market failure is lack of competition, an issue that has become increasingly relevant for the ACA. Active purchasing can use the state’s power as market regulator to strengthen competitive incentives, even without a large number of insurance competitors.

Policy-makers should be aware that stoking such competition may have tradeoffs. By standardizing many dimensions of the insurance product, such as its benefits and cost sharing, the Connector and other ACA marketplaces encouraged firms to compete on price. Another dimension firms can compete on, however, is their provider network. As Massachusetts introduced new active purchasing policies, increased competition may have increased the incentive for plans to narrow and differentiate their hospital networks. Previous research indicates expensive “star” hospitals, such as Massachusetts General Hospital and Brigham & Women’s Hospital, were especially likely to be excluded.\textsuperscript{30} Today, only one ConnectorCare plan covers these hospitals, and that plan is owned by the hospitals’ parent company. Ultimately, excluding expensive providers played a key role in cutting costs.

The Massachusetts’ Connector demonstrates the potential of active purchasing to spur competition in subsidized insurance markets. As exchanges around the country confront the same budgetary pressures that the Connector has faced, states could employ similar policies to create competition, control costs, and maintain coverage. Moreover, the lessons from the Connector apply similarly to state Medicaid programs, which essentially subsidize insurance coverage through Managed Care Organizations. Additional research is needed to delineate the effects of individual active purchasing policies. Further research should also investigate what market characteristics might be unique to Massachusetts, and how policies might be adapted to other states.
Exhibit 1. CommCare Active Purchasing Timeline.

**Auto-Assignment**
New members in the fully subsidized group (below 100% of poverty) who did not actively select a plan were auto-assigned, with larger shares going to the lowest-price plans.

**Threat of Active Enrollment**
If invoked, current members who failed to make an active plan selection during open enrollment would be auto-assigned to the cheapest plan. Plans could prevent this from taking effect by setting prices below target levels.

**Pricing Range**
From FY2010 to FY2014, the Connector implemented fixed maximum and minimum bounds on the bidding range.

**Limited Choice**
New members in the fully subsidized group (below 100% of poverty) could only choose the cheapest two plans in their region.
## Exhibit 2. Conformity of Prices and Active Purchasing Policy Thresholds

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<thead>
<tr>
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<th>Fiscal Year</th>
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<td></td>
<td>2010</td>
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<tr>
<td>Total number of prices set</td>
<td>23</td>
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<tr>
<td>Number of prices at a policy threshold (share)</td>
<td>20 (87%)</td>
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*Breakdown, by policy:*

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<th>Fiscal Year</th>
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<tr>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Price ceiling</td>
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<tr>
<td>Price floor</td>
<td>8</td>
</tr>
<tr>
<td>Active open enroll. threshold</td>
<td>4</td>
</tr>
<tr>
<td>Auto-assignment threshold</td>
<td>7</td>
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</table>

**Source.** Connector procurement reports, fiscal years 2010-2013. **Notes.** Share of total number of bids in parentheses. The Connector required that bids be within predefined thresholds in order for plans to qualify for various policies. We determined bids to be at the threshold if it was exactly at the threshold or within 1% below it. In 2010, insurers set one price per region, resulting in 23 total prices (five insurers x five regions, with one insurer not participating in two regions). In 2011, the Connector simplified its bidding structure so that each insurer submitted one price for the entire state. Across 2010-2013, 82% of bids were within 1% of an active purchasing policy threshold. N/A (not applicable) signifies years when a policy was not in effect.
Exhibit 3. Average Monthly Prices of Insurance.

Source. Connector Board Meeting reports, Kaiser-HRET Survey for national employer-sponsored insurance premiums, Massachusetts’ Center for Health Information and Analysis (CHIA) for state-specific commercial insurance premiums, and public capitation reports from Massachusetts Medicaid managed care organizations

Notes. CommCare prices are for the state fiscal year (July-June). The vertical gray bar represents the implementation of the “Limited Choice” policy, which was introduced before insurers set prices in fiscal year 2012.


Notes. National median premium is displayed with dashed lines representing the 10th highest and 10th lowest state in order to illustrate Massachusetts' position relative to its peers. Massachusetts’ rank among the other 51 states (including the District of Columbia) is written beneath Massachusetts’ data point in every year. Average benchmark premiums were produced by Kaiser Family Foundation and are calculated based on the price of the second-lowest cost silver premium for a 40-year-old non-smoker in each county of the state. Benchmark premiums are then averaged across counties, weighting for the number of consumers in each county.

TABLE 3

<table>
<thead>
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<th>Variables</th>
<th>Coeff. (std. error)</th>
<th>Coeff. (std. error)</th>
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<tr>
<td>CommCare x Post_2012</td>
<td>-68.49 (14.11) **</td>
<td></td>
</tr>
<tr>
<td>CommCare x 2012</td>
<td></td>
<td>-37.52 (6.580) **</td>
</tr>
<tr>
<td>CommCare x 2013</td>
<td></td>
<td>-82.00 (10.04) **</td>
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<tr>
<td>CommCare x 2014</td>
<td></td>
<td>-85.96 (11.98) **</td>
</tr>
<tr>
<td>Year Dummies</td>
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<td>X</td>
</tr>
<tr>
<td>Market Dummies</td>
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<td>X</td>
</tr>
<tr>
<td>Constant</td>
<td>350.1 (5.335) **</td>
<td>350.1 (5.641) **</td>
</tr>
<tr>
<td>Observations</td>
<td>31</td>
<td>31</td>
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<tr>
<td>R-squared</td>
<td>0.934</td>
<td>0.958</td>
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Source. Same as Exhibit 3. Notes. This figure shows regression analysis of the data presented in Exhibit 3. CommCare premiums are for the relevant state fiscal year (July-June). Robust standard errors in parentheses. ** p<0.01, * p<0.05. Prices in dollars per month.
Appendix Exhibit A2. CommCare Insurer Premiums, Fiscal Years 2007 - 2014.

**Source.** Connector procurement reports, fiscal years 2007 – 2014. **Notes.** Black bars represent price ceilings and floors during years when price regulations were in effect.
References


12. This strategy grew out of CommCare’s genesis as a hybrid between a traditional individual insurance market and a Medicaid program. Consistent with this viewpoint, the Connector called the annual process of soliciting insurer price bids as a “procurement” process.


16. Auto-assignment continued through 2010, after which it was ended for budgetary reasons. (After this, passive new enrollees did not receive coverage.) The Connector used a threat of active open enrollment in 2010 and 2012, but the threat proved effective enough that all plans complied by pricing below the target.

17. References to years in this discussion are to Massachusetts fiscal years, which run from July-June. For instance, state fiscal year 2009 ran from July 2008 to June 2009.

18. Because of the relatively high ASRR, the Connector set insurer premiums for medical care (the “medical bid”) equal to the bottom of the ASRR for all plans. Insurers could not reduce this medical bid but could offer discounts on an administrative fee (set by default at $32 per member-month) intended to cover non-medical costs.

19. The policy exempted new enrollees with recent enrollment experience in another plan that was not low-price. The policy did not apply to enrollees above 100% of poverty, who were not fully subsidized so could choose to pay more for a higher-price plan.

20. We particularly thank Michael Norton, the Connector’s Senior Advisor on Market Reforms, for his assistance in answering questions and clarifying ambiguities about CommCare’s policies.


23. Authors calculations using the MassHealth 4B Reports (“MCO Experience Review – Revenue/Expense
Reports”) for 2007-2014, obtained via a public records request.

24. Kaiser Family Foundation. Marketplace Average Benchmark Premiums [Internet]. Kaiser Family
indicator/marketplace-average-benchmark-premiums/

25. These premium reductions occurred without significant changes in plan benefits or actuarial value.

26. To access the Appendix, click on the Appendix link in the box to the right of the article online.

27. Post-ACA premiums are not directly comparable to pre-ACA CommCare premiums because the
actuarial values are different. ACA premiums are for a 70% AV plan, while we estimate that
CommCare plans had an average AV of 97%.

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Health Insurance Exchange [Internet]. National Bureau of Economic Research; 2016 Sep [cited 2018