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Health Care Spending Slowed Following State Regulation of Commercial Insurers through Rhode Island’s Affordability Standards

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Abstract

States are introducing regulations to slow health care spending growth, but which of these successfully reduce spending growth remains unclear. We studied Rhode Island’s 2010 “Affordability Standards”, which imposed price controls on commercial contracts, particularly inflation caps and diagnosis-based payments, and required commercial insurers to increase funding for primary care coordination services. Using a difference-in-differences design, we compared spending among 38,001 commercially-insured adults in Rhode Island to matched adults in other U.S. states between 2007–2016. Relative to the control group, quarterly fee-for-service spending decreased by \$76/enrollee among Rhode Island enrollees after the policy (95% CI: -\$128 to -\$24; P=0.004), reflecting 8.1% of 2009 spending. Quarterly primary care coordination spending increased by \$21/enrollee. Total spending growth decreased, driven by lower prices concordant with the adoption of price controls. Quality measures were unaffected or improved. The Rhode Island experience indicates that states can slow total commercial health care spending growth through price controls while maintaining quality.

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Introduction

Efforts to slow health care spending currently garner widespread interest.¹⁻³ With bipartisan support, states are experimenting with regulatory approaches to reduce spending growth, particularly in the commercial insurance sector. Regulatory approaches include price controls, such as inflation caps on annual contract renewals between commercial insurers and private hospitals and clinics, and investments in primary care including hiring care managers and using electronic registries to proactively manage chronic diseases.⁴⁻⁶ Whether these measures reduce spending growth remains unclear.

In 2010, Rhode Island's Office of the Health Insurance Commissioner implemented a set of "Affordability Standards" for all commercial insurers in the state.^{7,8} The Standards provide an important policy test of a bold, large-scale, multi-payer reform coordinated by a state government to reduce the growth in commercial-sector health care spending. The Standards introduced the following requirements for all commercial insurers in the state (detailed in Exhibit A1)⁹: (i) price controls, including annual price inflation caps equal to the Medicare price index plus one percentage point for both inpatient and outpatient services, and transition of hospital payments from per diem to value-based payments and diagnosis-related group (DRG) based payments (which pay a fixed fee for a given type of diagnosis and inpatient stay); and (ii) increase the share of spending on primary care services by one percentage point per year from 2010 to 2014, without raising consumer premiums, by supporting the patient-centered medical home model, paying for care managers to conduct proactive care management, and implementing electronic health records and a state-wide health information exchange for care coordination and quality tracking.⁸ The latter forms of spending were in the form of direct payments to practices (not fee-for-service payments).

Surveys suggest that the Affordability Standards were implemented as intended. Annual price inflation caps and a shift in hospital reimbursement from per-diem to DRG-based payments occurred between late 2011 and early 2013.⁸ A survey of three of the state's largest insurers suggested that required primary care coordination spending targets were met during the period 2010 to 2012.¹⁰

We tested the hypothesis that the Affordability Standards were associated with lower fee-for-service (FFS) spending growth when comparing commercially-insured adults in Rhode Island to similar adults in other states. We further evaluated changes in total spending growth by accounting for the increases in non-FFS primary care spending. Finally, we investigated whether reductions in spending growth were more related to changes in prices or changes in utilization, to disentangle whether the policy's effects were primarily attributable to the Standards' price control measures or its primary care spending mandates.

Methods

We performed difference-in-differences analyses to compare quarterly fee-for-service (FFS) medical spending before and after the 2010 Affordability Standards among a cohort of commercially-insured adults in Rhode Island, as compared to a matched cohort in other U.S.

states over the period 2007–2016. We additionally tracked direct (non-FFS) spending in Rhode Island to capture the increased spending on primary care coordination services.

Data sources

We obtained data on both FFS and non-FFS spending. Data on FFS spending were obtained from de-identified, enrollee-level administrative claims from 2007–2016 in the Truven Health MarketScan® Commercial Database (Truven Health Analytics Inc., Ann Arbor, Michigan). Inclusion criteria were: enrollment in a commercial health insurance plan during the full pre-policy period (pre-2010); age 27 to 64 years old during the period of enrollment; and not enrolled in Medicaid or Medicare. Inclusion criteria started with age 27 to minimize any effect of state variations in implementation of the dependent coverage provision of the Affordable Care Act, which enabled adults 19 through 26 years old to enroll in their parents' health plans starting in 2010. The intervention group included $N=38,001$ adults in Rhode Island, while the control group included $N=38,001$ matched adults sampled from a pool of 14,210,436 adults in other U.S. states. We constructed the matched control group by sampling from the claims data from all other 49 states with 1:1 coarsened exact matching¹¹ by age, sex, pre-policy Hierarchical Condition Categories (HCC) risk score,¹² pre-policy insurance plan type (Exhibit 1), and enrolled months. Multiple other specifications with alternative control sampling methods, including methods to account for differential implementation of the Affordable Care Act between states (detailed below), were also conducted to ensure robustness of our results.

Data on non-FFS spending were obtained from Rhode Island's Office of the Health Insurance Commissioner from 2007–2016. The non-FFS spending was organized into categories of: patient-centered medical home spending on care managers and their technical support at primary care practices, spending on incentive payments to meet value-based performance goals specified in performance-based contracts, spending on the state health information exchange, spending on electronic health record implementation, and primary care provider loan forgiveness.

Outcome measures

The primary dependent outcome was quarterly FFS spending per enrollee as measured by claims payments, including both negotiated payments from insurers and enrollee cost sharing. Spending was inflation-adjusted to year 2015 prices and standardized to a 90-day quarter.

Secondary outcomes included (i) quarterly FFS spending per enrollee by site of care (inpatient or outpatient), provider and claim type (primary care or specialty; facility or professional), and service type (categories such as radiology, laboratory, etc.); (ii) quarterly utilization per enrollee, and FFS cost per encounter, each measured using a previously-established claims-based estimation approach¹³ and similarly disaggregated by site, provider, claim, and service type; and (iii) claims-based quality measures, to identify whether quality was adversely affected by the Standards.

The quality measures included: 30-day readmission rate; any admission for a chronic ambulatory care-sensitive condition as defined by the Agency for Healthcare Research and

Quality Prevention Quality Indicators;¹⁴ and hemoglobin A1c testing, low-density lipoprotein cholesterol testing, and retinal examination for enrollees with a history of diabetes mellitus in a prior calendar year.^{15,16} Measures of low-value care were also assessed, including: low-value imaging (carotid ultrasound, magnetic resonance imaging, or computed tomography for patients outside of inpatient or emergency department visit, without stroke, transient ischemic attack, or focal neurological deficit; and head imaging for uncomplicated headache, without diagnosis of giant cell arteritis, cancer, head injury, or thunderclap headache); low-value cardiovascular procedures (percutaneous coronary intervention with angioplasty or stent for stable coronary disease); and other low-value procedures (spinal injection for lower-back pain including epidural, paravertebral facet, or trigger point injection, without radiculopathy).¹⁶

Statistical Analysis

Difference-in-differences regressions were performed to estimate the change in FFS spending, utilization, and quality outcomes among members of the Rhode Island cohort versus members of the matched control group cohort over the period 2010 through 2016, versus 2007 through 2009. To test a critical difference-in-differences assumption that the intervention and control group cohorts had parallel pre-policy trends in medical spending, utilization, prices, and quality, each dependent variable was regressed against year in both Rhode Island and in the control group, to assess whether the slopes of spending, utilization, prices, and quality were similar between the cohorts during the pre-policy period (see Results). Regressions were adjusted for age, sex, HCC score (calculated using the Centers for Medicare and Medicaid Services-HCC Risk Adjustment Model),¹² insurance plan type (categorized into nine standardized plan types; Exhibit 1), indicators for Rhode Island residence, year, interaction terms between Rhode Island residence and year, and fixed effects for state and quarter. Huber-White robust standard errors were clustered at the Metropolitan Statistical Area (MSA) level, chosen as the smallest level available in the dataset that would account for area hospital and practice patterns to provide the most conservative confidence intervals. Linear regressions were used for spending, and logistic or negative binomial models were used for utilization and quality outcomes.

To determine whether observed changes in FFS and total spending were more attributable to price controls or to primary care coordination spending, we analyzed whether prices per visit/hospitalization changed (consistent with price controls), or whether utilization changed (as primary care coordination spending is intended to lower emergency room visits and hospitalizations).

Robustness and sensitivity analyses

First, we tested whether attrition from the two cohorts produced differential changes in enrollee number or composition between the groups over time. We assessed whether the Rhode Island group experienced differential changes in demographic characteristics, risk, or insurance characteristics with the policy change, as compared to the control group.

Second, we introduced enrollee-level fixed effects into the regression model to absorb sources of omitted variable bias correlated with each individual's time-invariant unmeasured

characteristics. Differential implementation of the Affordable Care Act across states may have introduced different types of people into commercial health insurance across cohorts.

Third, we repeated the analysis in the subset of enrollees who were continuously enrolled over the period 2007–2016 (total N=25,905) and again among serial cross-sections of enrollees with at least 11 continuous months of enrollment during any year during the period 2007 through 2016 (mean total N=175,889 per year). These analyses helped ensure consistent results under highly inclusive and exclusive study entry criteria, given that changes in medical spending may relate to periods of stable versus unstable commercial insurance enrollment.

Fourth, we repeated the analysis after including pharmaceutical claims spending, which was omitted from the main specification as not all enrollees had drug coverage through their primary insurer (11.3% of enrollees had no pharmacy claims during the study period).

Fifth, we repeated the analysis restricting the control group to enrollees from other New England states, to investigate whether regional factors could produce different results from the main specification.

Analyses were performed in StataMP version 14 (StataCorp, College Station, Texas).

Limitations

There are important limitations to our analysis. First, because multiple Affordability Standards were implemented during the same time period, we cannot attribute changes to any single policy measure. However, we analyzed price versus utilization changes as a means to potentially distinguish effects of price controls versus primary care coordination spending.

Second, the difference-in-differences analysis cannot account for time-varying unmeasured confounders. Given this concern, a meeting was held among the authors, representatives of the Rhode Island Office of the Health Insurance Commissioner, and representatives of all state commercial insurers, during which we learned that no market mergers or other major regulatory changes occurred during the study period that may confound the analysis of the Standards in a substantial way.¹⁷

Third, the difference-in-differences analysis relies on the assumption that in the absence of the Affordability Standards, spending differences between Rhode Island and control would have been the same. We note that trends in spending were very similar during the pre-policy period (Exhibit 2), and checked whether changes in FFS growth in Rhode Island could be attributed to differential changes in the demographics, risk, or insurance profiles among the Rhode Island cohort as compared to the control group. Reassuringly, the lower FFS spending growth in Rhode Island was observed in several statistical specifications, including when alternative inclusion criteria were tested, when only Northeast states were used as the control group, when adjusting for time-invariant unobserved enrollee features, and when including pharmaceutical claims.

Fourth, non-FFS primary care spending data were not available for the control group. Thus, we conservatively assumed no change in non-FFS primary care spending among the control group over the study period; because non-FFS primary care spend is believed to have increased in other states during the study period, our estimated reduction in total spending in Rhode Island would be biased toward zero.

Finally, Rhode Island is a single state dominated by three large insurers, hence lessons from the state may not generalize to other states.

Results

Population

The characteristics of the intervention and control groups were similar, both before and after the Affordability Standards went into effect in 2010 (Exhibit 1, Exhibit A2⁹). The overall study population had a median age of 34 years old, was 50.1% female, and had an average HCC risk score of 0.23 in 2007.

FFS medical spending

Before the 2010 policy, FFS spending trends were similar between the Rhode Island and control group cohorts, with a mean annual spending increase of \$22/quarter for Rhode Island enrollees versus \$20/quarter for control group enrollees ($P = 0.506$; Exhibit 2, Exhibit A3⁹).

After the 2010 policy, adjusted quarterly FFS spending among Rhode Island enrollees declined by an average of \$76 per enrollee (95% CI: -\$128 to -\$24; $P=0.004$) over the period 2010–2016 compared to the control group (Exhibit 3). For reference, the 2009 mean quarterly spending in Rhode Island was \$944 per enrollee, such that the \$76 reduction reflected 8.1% of average quarterly 2009 FFS spending per enrollee.

Quarterly FFS spending in Rhode Island was similar to control group spending in the first three years after policy adoption, but lower in subsequent years, with a decline of \$128 per enrollee over the period 2013–2016 (95% CI: -\$199 to -\$58; $P<0.001$; Exhibit 3). Of note, quarterly costs borne by patients (patient cost share) also decreased relative to controls (-\$37, 95% CI: -\$72 to -\$2; $P=0.037$; Exhibit A4⁹). The change in FFS spending was similar across inpatient hospitalizations (-\$39 per enrollee from 2010–2016, 95% CI: -\$71 to -\$6; $P=0.021$; Exhibit 3) and outpatient services overall (-\$36, 95% CI: -\$66 to -\$5; $P=0.022$), with the latter driven by professional services (-\$16, 95% CI: -\$26 to -\$7; $P=0.001$) and primary care (-\$4, 95% CI: -\$6 to -\$2; $P=0.001$; Exhibit A4⁹). Consistent with the state mandate, however, non-FFS payments increased for primary care, as detailed in the ‘Non-FFS spending’ results section. Outpatient spending was not significantly changed for specialist services (Exhibit A4 and A5⁹). The spending change was greater among enrollees with HCC scores in the top quartile (highest risk) at baseline (a reduction of 12.2% from 2009; Exhibit A6⁹). Results were consistent in robustness and sensitivity analyses incorporating enrollee fixed effects, continuously-enrolled persons, pharmaceutical claims, Northeastern state populations as controls, or when performing the statistical analysis using a serial cross-sectional rather than cohort design (Exhibit A7⁹).

Health care utilization versus FFS spending per encounter

Outpatient utilization was not significantly affected overall (incidence rate ratio for encounters=0.99, 95% CI: 0.98 to 1.01; P=0.243), but FFS costs per outpatient encounter did decrease relative to controls (-\$10, 95% CI: -\$19 to -\$2; P=0.021; Exhibit 4), including reductions in FFS costs per professional encounter (-\$19, 95% CI: -\$27 to -\$10; P< 0.001; Exhibit A8⁹).

Similarly, inpatient utilization did not decrease (odds ratio of admission=0.98, 95% CI: 0.92 to 1.04; P=0.525), but FFS spending per inpatient admission decreased relative to controls (-\$2,513, 95% CI: -\$4,342 to -\$684; P=0.007; Exhibit 4). The change was driven by lower growth in spending per inpatient admission within Rhode Island after the policy (Exhibit A9⁹) and was distributed across inpatient service categories (Exhibit A10⁹).

Non-FFS spending

Quarterly non-FFS primary care spending increased by \$21 per enrollee in Rhode Island after versus before the policy, with a more than 5-fold increase from 2009 to 2016 (Exhibit A11⁹). The bulk of non-FFS spending was on medical home expenditures (\$3.4 million/year since 2010), followed by value-based payments such as incentive payments for performance-based contracts (another \$2.2 million/year since 2010).

The net reduction in quarterly health care spending per enrollee was therefore \$55 (the \$76/enrollee reduction in FFS spending was offset by the \$21/enrollee increase in non-FFS spending), reflecting 5.8% of average quarterly healthcare (FFS + non-FFS) spending per enrollee in 2009.

Health care quality

Quality metrics were unchanged, except for improvement in a low-value care metric: decreased use of head imaging for uncomplicated headache (odds ratio=0.88, 95% CI: 0.84 to 0.93; P<0.001; Exhibit A12⁹).

Discussion

State regulation of commercial health care markets has the potential advantages of coordinating changes among multiple insurers, tailoring reforms to state needs and context, and circumventing federal policy grid-lock. The 2010 Affordability Standards set by the Office of the Health Insurance Commissioner of Rhode Island provided an important policy test of a large-scale reform coordinated by a state to reduce the growth in commercial-sector health care spending.

Our analysis of commercial claims data suggests that the Affordability Standards were associated with a reduction in FFS spending growth. Total spending (FFS plus non-FFS spending) growth also declined, as non-FFS spending, primarily directed to primary care coordination services, increased to a lesser extent than FFS spending decreased. FFS spending was lower across both outpatient and inpatient services relative to controls, and slowed disproportionately among more medically-complex enrollees. Overall patient cost sharing also declined. The Standards' effect on spending was comparable to spending

growth changes achieved by some Accountable Care Organizations,^{15,18} but larger than the spending reductions from previously-studied medical home or electronic record initiatives.^{19,20} Across all sensitivity analyses, our most conservative estimate suggested a 4.8% reduction in FFS spending growth and 2.7% reduction in total (FFS and non-FFS) spending growth.

The decline in spending growth was driven by lower prices, rather than reduced utilization. There were no differential reductions in outpatient or inpatient utilization, nor in specialty visits or ambulatory care-sensitive hospitalizations, suggesting that increased non-FFS primary care coordination spending did not drive the reduction in spending growth. Rather, the timing of the decline and reduction in prices rather than utilization was concordant with the adoption of the price inflation caps and DRG-based payments in 2012 and 2013.⁸ Thus, while a redistribution of funding towards primary care was achieved without net losses to payers, the reduction in FFS spending growth appears to be mostly attributable to the price controls in the Affordability Standards, rather than to the increased spending on non-FFS primary care.

In instituting price inflation caps and mandating adoption of DRG-based payments, the state-mandated Affordability Standards appear to have shifted commercial insurer-provider negotiation dynamics in favor of insurers.⁷ Rhode Island's experience thus suggests that mandated price control measures may effectively leverage state regulatory power to reduce healthcare costs, particularly in areas where the market power of providers is greater than insurers. Furthermore, to the extent that per diem contracts continue to be used, our results suggest that adoption of DRG-based payments in the commercial insurance market may lower spending growth.

That the increase in non-FFS primary care spending by itself may have been insufficient to induce practice or cost changes is consistent with prior literature on medical home initiatives and non-FFS chronic care management programs.^{21–23} However, there are several reasons to be cautious when interpreting these primary care findings. First, commercial insurers in Rhode Island made substantial investments in Patient-Centered Medical Homes before the Standards' implementation in 2010,²⁴ which might have dampened the impact of further investments in primary care, particularly as quality on many of the measures was high in Rhode Island prior to the study period.²⁵ Second, the Affordability Standards did not involve capitated, risk-based payments to primary care practices, which have been associated with reductions in utilization and spending growth.¹⁸ Third, there was a national slowdown in utilization growth during the study period, likely related to the Great Recession and with potentially some contribution from the Affordable Care Act, which makes it more difficult to observe the marginal effect of Rhode Island's policy. Fourth, commercially-insured populations may not be the primary beneficiaries of strengthened primary care; rather, the benefits may accrue to lower-income individuals or those with poor health or multiple comorbidities who are covered by Medicaid or Medicare. Fifth, changes in quality of care related to enhanced primary care are likely not fully captured by claims data. Finally, we cannot rule out the extent to which the interaction between primary care investment and the price control measures contributed to the observed cost savings.

The results of our evaluation of Rhode Island's Affordability Standards have important implications for policy makers seeking to slow healthcare spending. State regulators in Rhode Island achieved among the largest total health care spending changes observed from payment reforms to date. Our analysis suggests that price inflation caps and diagnosis-based payments, which led to lower prices, drove a broad and sustained reduction in commercially insured health care spending growth. Further, by combining price control measures with a requirement to markedly increase funding to primary care practices, a redistribution of spending toward primary care was observed without net losses to payers.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Exhibit 2.

(Figure) Quarterly Fee-for-Service Spending in the Rhode Island Cohort and the Control Group Cohort

Source [Authors' analysis of study data]

Notes [All values are quarterly per enrollee after adjustment to a standardized 90-day quarter. Dollars were inflation-adjusted to 2015 dollars. The vertical dashed line in 2009 indicates the last pre-policy year before the 2010 Affordability Standards implementation.]

Exhibit 1

(Table) Demographic and Insurance Characteristics of Rhode Island Cohort and Control Group Cohort, 2007–2009.*

Characteristic	Rhode Island Cohort (N=38,001)	Std Dev or %	Control Group Cohort (N=38,001)	Std Dev or %
Age – yr	33.5	17.9	33.6	17.9
Female – no. (%)	19,030	50.1%	19,030 (50.1)	50.1%
Hierarchical Condition Categories (HCC) risk score ^a	0.23	0.23	0.24	0.24
Plan type – no. (%)				
Preferred Provider Organization	25,753	67.8%	26,368	69.4%
Health Maintenance Organization	7,321	19.3%	6,543	17.3%
Non-Capitated Point-of-Service	4,167	11.0%	3,638	9.6%
Comprehensive	391	1.0%	897	2.4%
Consumer-Driven Health Plan	225	0.6%	283	0.7%
Exclusive Provider Organization	129	0.3%	186	0.5%
Capitated or Partially-Capitated Point-of-Service	15	<0.1%	86	0.2%
High Deductible Health Plan	0	0.0%	0	0.0%
Basic/Major Medical	0	0.0%	0	0.0%

Source [Authors' analysis of study data]

* **Notes** [Values reflect characteristics of the Rhode Island cohort and control group cohort over the period 2007–2009, before the Affordability Standards in 2010. Plus–minus values are means $\pm$ SD. There were no significant differences between the two groups as calculated by Wilcoxon and chi-square tests. Percentages may not total 100 because of rounding.

^a The Hierarchical Conditions Categories risk score is a modeled estimate of the risk of healthcare expenditures based on demographics and diagnostic codes.]

Exhibit 3**(Table)** Changes in Fee-for-service Medical Spending Associated with the Policy, by Year^{*}

Outcome Measure	Change in Outcome By Post-Policy Year, Versus Control Group							
	2010	2011	2012	2013	2014	2015	2016	2010–2016
<i>Change in Quarterly Fee-for-service Spending per Enrollee (\$)</i>								
Total	–15	23	–24	–113 ^{****}	–92 [*]	–121 [*]	–188 ^{****}	–76 ^{***}
Outpatient	–7	10	–12	–43 ^{**}	–4	–71 ^{**}	–125 ^{****}	–36 ^{**}
Inpatient	–7	13	–11	–69 ^{***}	–87 ^{**}	–49	–60 ^{**}	–39 ^{**}

^{*}
p < 0.10^{**}
p < 0.05^{***}
p < 0.01^{****}
p < 0.001**Source** [Authors' analysis of study data]

^{*}
Notes [All \$ values are quarterly per enrollee, after adjustment to a standardized 90-day quarter. Changes in spending on medical spending are from the main difference-in-differences regression analysis with adjustment for age, sex, HCC score, plan type, and fixed effects for state and quarter. 95% confidence intervals reflect Huber-White robust standard errors clustered at the MSA level. Negative values represent reductions in spending relative to the control group. Dollars were inflation-adjusted to 2015 dollars. A version of this table with confidence intervals and specific p values can be found in Appendix Exhibit A13. See Note 9 in the text.]

Exhibit 4

(Table) Changes in Utilization and Fee-for-service Spending per Encounter Associated with the Policy, by Year*

Outcome Measure	Change in Outcome By Post-Policy Year, Versus Control Group							2010–2016	2013–2016
	2010	2011	2012	2013	2014	2015	2016		
<i>Change in Quarterly Utilization per Enrollee</i>									
Inpatient Admission (Odds Ratio)	1.00	1.05	0.98	0.98	0.92 [*]	0.94	1.01	0.98	0.96
Outpatient Episode (Incidence Rate Ratio)	1.00	1.01	1.01	0.99	0.97 ^{**}	0.98	0.98	0.99	0.98 [*]
<i>Change in Fee-for-service spending per Enrollee per Encounter (quarterly fee-for-service \$/enrollee/encounter)</i>									
\$ Per Inpatient Admission	−1250	10	−417	−4058 ^{****}	−5319 [*]	−1975	−4584 ^{**}	−2513 ^{***}	−3984 ^{***}
\$ Per Outpatient Episode	−2	−3	−11	−19 ^{**}	9	−16 [*]	−30 ^{****}	−10 ^{**}	−14 ^{**}

* p < 0.10

** p < 0.05

*** p < 0.01

**** p < 0.001

Source [Authors' analysis of study data]

* **Notes** [To examine quarterly outpatient visits, we allowed a maximum of one outpatient visit per patient-day and used a negative binomial difference-in-differences regression analysis with adjustment for age, sex, hierarchical conditions category (HCC) score, plan type, and fixed effects for state and quarter. 95% confidence intervals reflect Huber-White robust standard errors clustered at the MSA level. To examine quarterly inpatient admissions, we used a dummy variable equal to 1 if an enrollee had at least one admission in the quarter and zero otherwise, and a logistic difference-in-differences regression analysis with adjustment for age, sex, HCC score, plan type, and fixed effects for state and quarter-year. To calculate spending per encounter, quarterly spend per enrollee in each category was divided by the enrollee's utilization of that category of care during the quarter. Dollars were inflation-adjusted to 2015 dollars. A version of this table with confidence intervals and specific p values can be found in Appendix Exhibit A14. See Note 9 in the text.]