

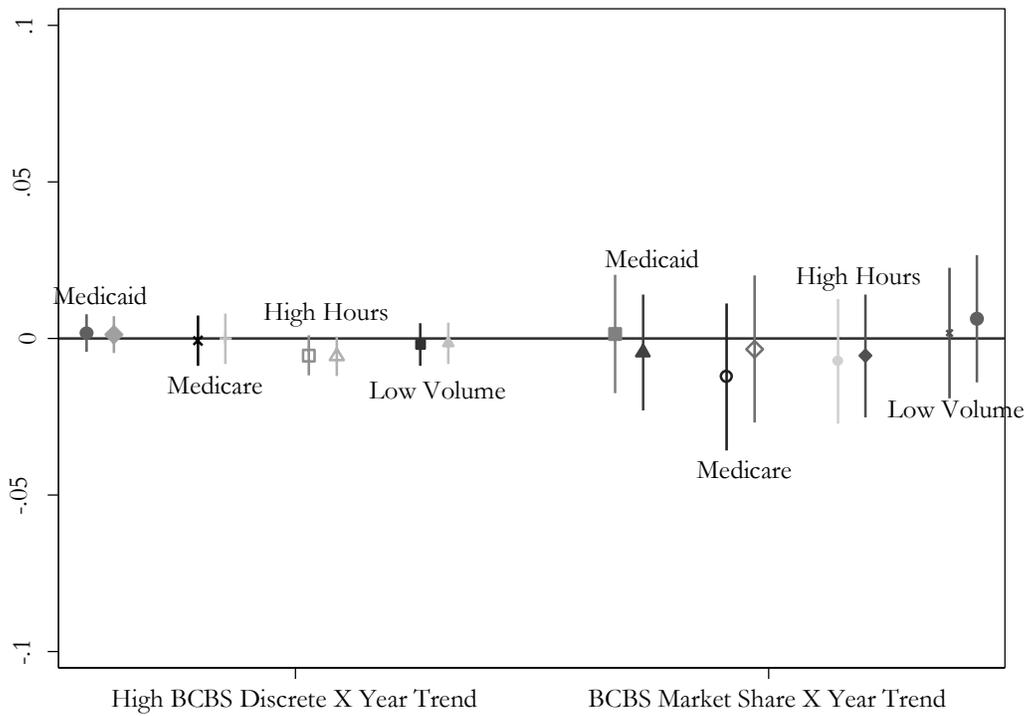
**Public Spillovers from Private Insurance Contracting:
Physician Responses to Managed Care**

By Michael R. Richards and D. Sebastian Tello-Trillo

Online Appendix

APPENDIX A: Workforce Survey

Appendix Figure A1—Testing for Pre-Carve-Out Differential Trends Across High and Low BCBS Counties in Florida



Notes: These are the coefficients from interacting the BCBSFL market share variable (discrete and continuous, respectively) with a linear time trend during the 2009-2012 period.

APPENDIX TABLE A1—EFFECTS OF BCBSFL NETWORK AND PRICING SHOCK ON EXTENSIVE MARGIN MEDICAID PARTICIPATION (*Alternative Specifications*)

	(1)	(2)
	Are you currently accepting new patients covered by Medicaid?	Are you currently accepting new Medicare patients in your practice?
<i>DDD Discrete</i>		
Baseline	0.068* (0.033)	0.078* (0.035)
Baseline + Controls	0.055+ (0.033)	0.081* (0.035)
Baseline + Location	0.057+ (0.034)	0.076* (0.035)
Baseline + County FE	0.068* (0.033)	0.078* (0.034)
Baseline + County*Year	0.069* (0.033)	0.078* (0.034)
<i>DDD Continuous</i>		
Baseline	0.226* (0.096)	0.342*** (0.099)
Baseline + Controls	0.190* (0.095)	0.355*** (0.099)
Baseline + Location	0.198* (0.098)	0.330** (0.101)
Baseline + County FE	0.252** (0.096)	0.341*** (0.098)
Baseline + County*Year	0.248** (0.095)	0.338*** (0.098)

Notes: Standard errors clustered at the physician level

Post includes all survey years between 2012 and 2015

Treated group is composed of general psychiatry physicians. Comparison (control) group is composed of all non-psychiatry specialists

“Controls” include physician age and sex, and “Location” includes practice setting information (e.g., hospital-based, group office practice, solo office practice, etc.)

Only key coefficients reported from Triple Differences (DDD) specifications

The number of observations is 138,786. + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

APPENDIX TABLE A2: Effects of Pricing Shock on “Accepting New **Medicaid** Patients” by different control groups

	(1) Baseline	(2) Excluding All Primary Care and Pediatricians	(3) Only Primary/Pediatricians	(4) Obgyn	(5) Medical Sub- specialties	(6) Surgeon
Psych x Post x (High) BCBS Mrkt Share	0.068* (0.033)	0.065+ (0.033)	0.074* (0.035)	0.024 (0.046)	0.070+ (0.037)	0.052 (0.043)
N x T Observations (N)	138,786 52,465	95,611 36,878	49,101 20,368	12,859 4,877	21,655 8,538	13,642 5,339

Notes: Standard errors clustered at the physician level

Post includes all survey years between 2012 and 2015

Treated group is composed of general psychiatry physicians. Comparison (control) group is composed of all non-psychiatry specialists

High BCBS Mrkt Share in column (2, 5) is defined as primarily practicing in a county with above the median BCBS market share among all FL counties. In column (3, 6) the BCBS market share is a continuous variable.

Only key coefficients reported from Triple Differences (DDD) specifications

The pre-reform mean for the high BCBSFL market group for psych is 0.34 for the New Medicaid Variable and 0.51 for New Medicare.

APPENDIX TABLE A2: Effects of Pricing Shock on “Accepting New **Medicare** Patients” by different control groups

	(1) Baseline	(2) Excluding All Primary Care and Pediatricians	(3) Only Primary/Pediatricians	(4) Obgyn	(5) Medical Sub- specialties	(6) Surgeon
Psych x Post x (High) BCBS Mrkt Share	0.078* (0.035)	0.070* (0.035)	0.095** (0.036)	0.093* (0.045)	0.075* (0.035)	0.059 (0.039)
N x T Observations (N)	139,270 52,562	96,095 36,954	49,123 20,396	12,921 4,885	21,806 8,557	13,703 5,343

Notes: Standard errors clustered at the physician level

Post includes all survey years between 2012 and 2015

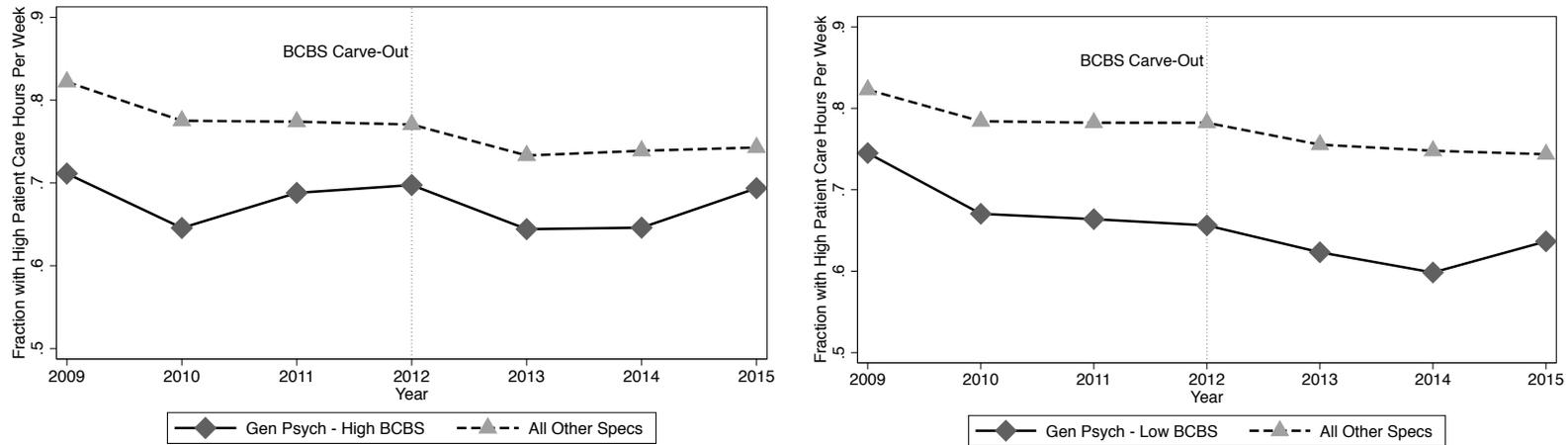
Treated group is composed of general psychiatry physicians. Comparison (control) group is composed of all non-psychiatry specialists

High BCBS Mrkt Share in column (2, 5) is defined as primarily practicing in a county with above the median BCBS market share among all FL counties. In column (3, 6) the BCBS market share is a continuous variable.

Only key coefficients reported from Triple Differences (DDD) specifications

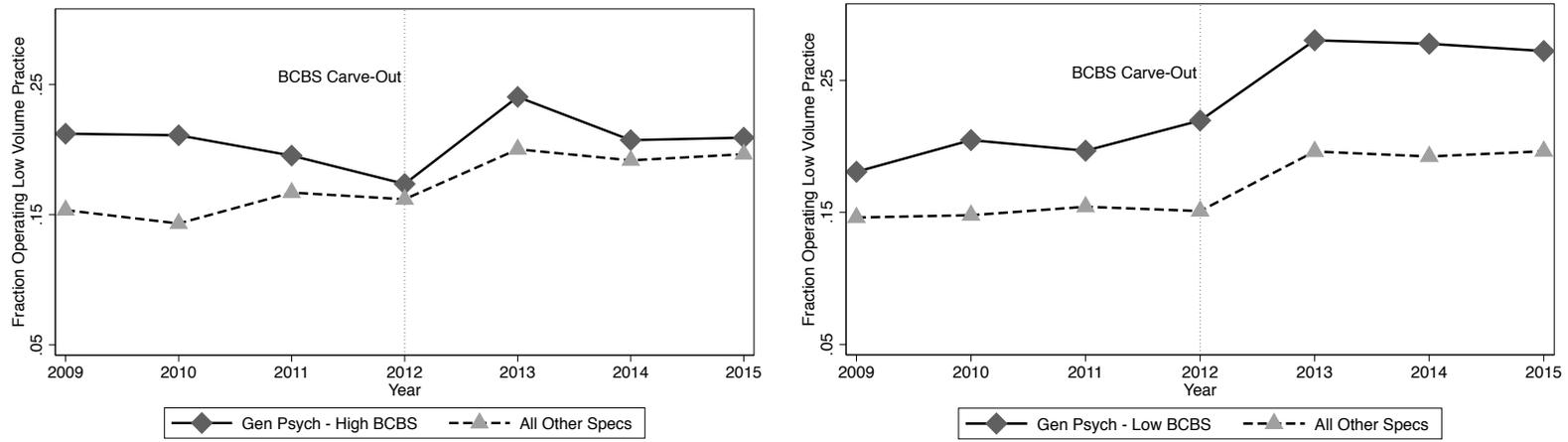
The pre-reform mean for the high BCBSFL market group for psych is 0.34 for the New Medicaid Variable and 0.51 for New Medicare.

Appendix Figure A2: Fraction Devoting More Than 30 Hours to Patient Care Per Week 2009-2015 in High (Panel A) and Low (Panel B) BCBSFL Areas



Source: Florida physician workforce survey. “High” and “Low” BCBS counties reflect counties above and below the median BCBS market share as of January 2012, respectively.

Appendix Figure A3: Fraction Seeing 25 Patients or Less Per Week 2009-2015 in High (Panel A) and Low (Panel B) BCBSFL Areas



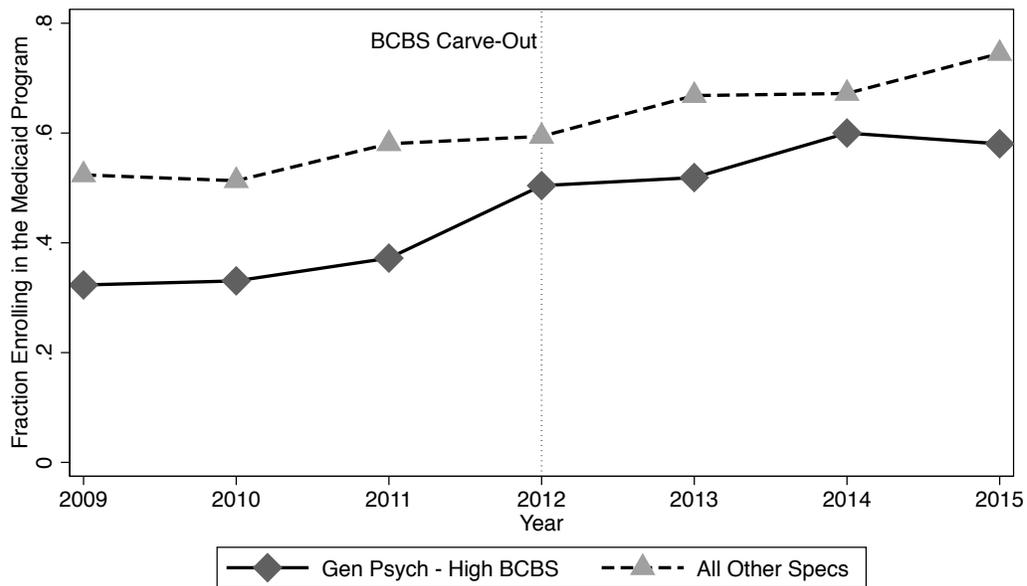
Source: Florida physician workforce survey. “High” and “Low” BCBS counties reflect counties above and below the median BCBS market share as of January 2012, respectively.

APPENDIX TABLE A3—EFFECTS OF BCBSFL NETWORK AND PRICING SHOCK ON EXTENSIVE MARGIN MEDICAID PARTICIPATION

<i>DDD Estimate</i>	(1)	(2)	(3)	(4)
Psych x Post x (High) BCBS Mrkt Share	0.085 (0.030)	0.213 (0.086)	--	0.034 (0.022)
Psych x High BCBS Mrkt Share x 2011	--	--	-0.036 (0.044)	--
Psych x High BCBS Mrkt Share x 2012	--	--	0.096 (0.046)	--
Psych x High BCBS Mrkt Share x 2013	--	--	0.036 (0.053)	--
Psych x High BCBS Mrkt Share x 2014	--	--	0.122 (0.049)	--
Psych x High BCBS Mrkt Share x 2015	--	--	0.029 (0.053)	--
BCBS Mrkt Share	Discrete	Continuous	Discrete	Discrete
Physician (FE)	No	No	No	Yes
Observations (N)	146,174	146,174	146,174	146,174
Unique Physicians				53,583

Notes: Standard errors clustered at the physician level. Post includes all survey years between 2012 and 2015. Treated group is composed of general psychiatry physicians. Comparison (control) group is composed of all non-psychiatry specialists. High BCBS Mrkt Share in all columns except column 2 is defined as primarily practicing in a county with above the median BCBS market share among all FL counties. In column 2 the BCBS market share is a continuous variable. Only key coefficients reported from Triple Differences (DDD) specifications as well as the model with individual year interactions (column 3). Column 4 also includes individual physician fixed effects

Appendix Figure A4: Fraction of Providers Enrolled in the State Medicaid Program (Extensive Margin Participation) 2009-2015



Source: Florida physician workforce survey combined with the Provider Master List of Florida Medicaid. “High” and “Low” BCBS counties reflect counties above and below the median BCBS market share as of January 2012, respectively.

APPENDIX TABLE A4
Effects of BCBSFL Network and Pricing Shock on Additional Labor Supply Measures

	Plan to Retire within 5 Years		Plan to Leave FL within 5 Years		Work in a Hospital Setting		Number of Counties Where Practice	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Psych x Post	0.003 (0.009)	0.009 (0.015)	-0.008 (0.009)	-0.008 (0.009)	-0.001 (0.011)	-0.014 (0.017)	-0.0293 (0.0230)	-0.029 (0.023)
Psych x Post x (High) BCBS Mrkt Share	0.028 (0.027)	-0.017 (0.079)	0.010 (0.054)	0.010 (0.054)	0.050 (0.031)	0.119 (0.092)	-0.125 (0.133)	-0.125 (0.133)
Effect Size at BCBS Mrkt Share Median (27%)		-0.005		0.003		0.032		-0.034
BCBS Market Share Observations	Discrete 140,385	Continuous 140,385	Discrete 140,195	Continuous 140,195	Discrete 143,817	Continuous 143,817	Discrete 146,252	Continuous 146,252

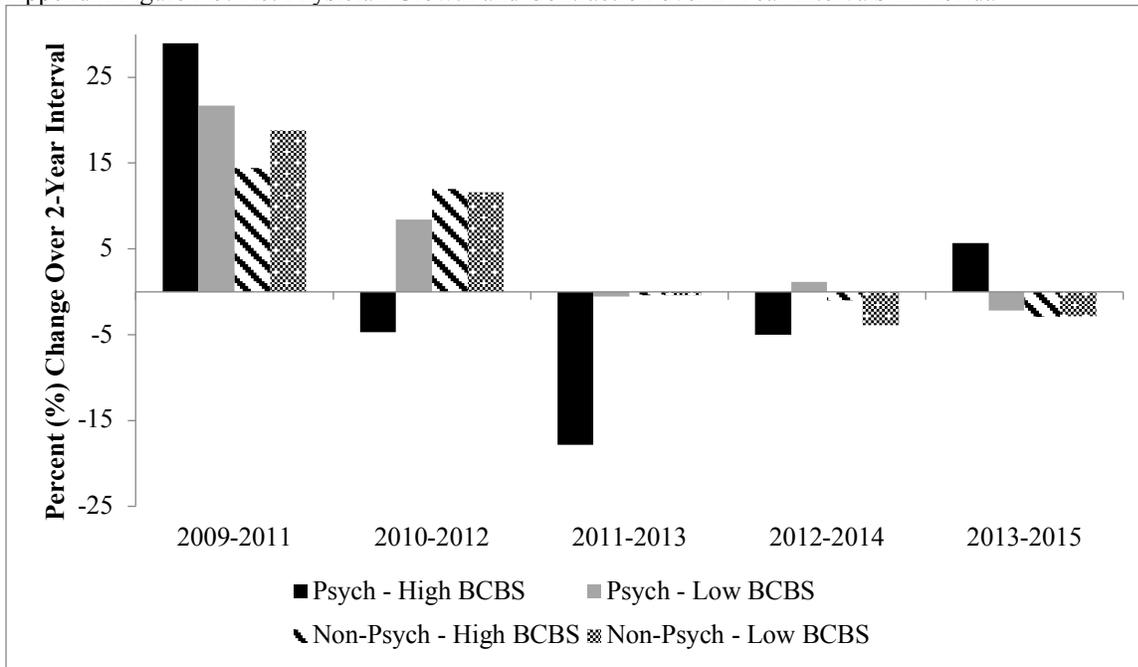
Notes: Standard errors clustered at the physician level

Post includes all survey years between 2012 and 2015

Treated group is composed of general psychiatry physicians. Comparison (control) group is composed of all non-psychiatry specialists

Only key coefficients reported from all Triple Differences (DDD) specifications (i.e., discrete and continuous BCBS market share versions)

Appendix Figure A5. Net Physician Growth and Contraction over 2-Year Intervals in Florida



Source: Florida physician workforce survey. “High” and “Low” BCBS counties reflect counties above and below the median BCBS market share as of January 2012, respectively. Note, the typical survey respondent is re-surveyed every two years during his/her license renewal process.

To better understand these changes to the stock of psychiatrists in affected areas, we examine the flows of new providers into specific markets within the state. We use licensing information prior to 2009 in order to identify new market entrants (i.e., those receiving their first Florida license) for each survey wave (2009-2015). After restricting to this subset of physicians, we estimate a simple difference-in-differences (DD) model to assess if the flow of psychiatrists is altered by the BCBSFL decision. The estimation strategy is straightforward since we have clearly demarcated treatment (psychiatrists) and control (all non-mental health physicians) groups. The corresponding specification is:

$$Y_{it} = \alpha + \beta(\text{Psych})_i + \gamma(\text{Post})_t + \delta(\text{Psych} \times \text{Post})_{it} + \varepsilon_{it} \quad (\text{A1})$$

Y is a binary variable for entering a high BCBSFL market for new market entrant i in year t . Psych is a binary indicator equal to one for those in the treatment group, and Post is equal to one for all survey years 2012-2015. The delta parameter recovers our DD estimate of interest. We also estimate an event study style model, which takes the form:

$$Y_{it} = \alpha + \phi \text{Psych}_i + \gamma_t \sum_{t=2011}^{2015} \text{Year}_t + \lambda_j \sum_{j=2011}^{2015} (\text{Psych}_i \times \text{Year}_t)_j + \varepsilon_{it} \quad (\text{A2})$$

This allows for a separate interaction term between each year from 2011 through 2015 and our treated physician group. The Year variable reflects the particular survey wave that a given respondent became a newly licensed physician in Florida. The standard errors for Equations A1 and A2 (as well as throughout our empirics) are clustered at the physician level to allow for any auto-correlation over time.

APPENDIX TABLE A5—EFFECT OF BCBSFL NETWORK AND PRICING SHOCK ON THE FLOW OF NEW PSYCHIATRISTS

	Enter a High BCBS Market	
	(1)	(2)
<i>DD Estimate</i>		
Psych x Post	0.025 (0.032)	--
<i>Year Interactions</i>		
Psych x 2011	--	0.040 (0.052)
Psych x 2012	--	0.127 (0.058)
Psych x 2013	--	0.073 (0.059)
Psych x 2014	--	-0.011 (0.043)
Psych x 2015	--	-0.031 (0.045)
Observations (N)	12,925	12,925

Notes: Huber-White robust standard errors

Post includes all survey years between 2012 and 2015. Treated group is composed of general psychiatry physicians. Comparison (control) group is composed of all non-psychiatry specialists. Analytic sample restricts to those entering the Florida physician market for the first time in a given year. Only key coefficients reported from the difference-in-differences (DD) and event study style models.

Coupled with the findings from Figure 6 and Appendix Figure A4 , the smaller stock of psychiatrists in high BCBSFL penetration areas appears to be driven by an outflow of these providers (i.e., market exit), as opposed to deterring prospective physicians from entering. It also seems most likely that the exit behavior is operating through the retirement channel. Within Appendix Table A6 we only see weak evidence that the youngest physicians, who established their practices just prior to the BCBSFL carve-out decision, are less likely to remain there in the post-period. In other words, intra-state migration of psychiatrists due to the BCBSFL strategic move appears negligible at best.

APPENDIX TABLE A6
Effects of BCBSFL Network and Pricing Shock on Intra-State Physician Migration

<u>Diff-in-Diff</u>				
PANEL A: Practicing in a High BCBS Area				
	All	Under 40 and Entered FL after 2008	Under 40 and Entered FL after 2009	Under 40 and Entered FL after 2010
	(1)	(2)	(3)	(4)
<i>DD Estimate</i>				
Psych x Post (2012-2015)	-0.004 (0.004)	-0.012 (0.022)	-0.040 (0.029)	-0.028 (0.030)
Physician FE	Yes	Yes	Yes	Yes
Observations	146,788	16,986	12,691	9,203
Unique Physicians	53,708	8,328	7,013	5,662
PANEL B: Practicing in a High BCBS Area				
	(1)	(2)	(3)	
<i>DD Estimate</i>				
Psych x Post (2013-2015)		-0.020 (0.021)	-0.045 (0.026)	-0.029 (0.024)
Physician FE		Yes	Yes	Yes
Observations		16,986	12,691	9,203
Unique Physicians		8,328	7,013	5,662

Notes: Standard errors clustered at the physician level. Post includes all survey years between 2012 and 2015 in Panel A and survey years 2013-2015 in Panel B. Treated group is composed of general psychiatry physicians. Comparison (control) group is composed of all non-psychiatry specialists. High BCBS Mrkt Share is defined as primarily practicing in a county with above the median BCBS market share among all FL counties. Only key coefficients reported from the difference-in-differences (DD) models, and all specifications include individual physician fixed effects (FE)

APPENDIX TABLE A7—TEST OF TRENDS FOR THE SHARE OF FLORIDA PHYSICIAN WORKFORCE
IN PSYCHIATRY FROM 2009-2012

	Pr(Psych)	Pr(Psych)	Pr(Psych)	Pr(Psych)
	(1)	(2)	(3)	(4)
Year Trend x High BCBS Mrkt Share	-0.001311 (0.0015787)	-0.0000391 (0.0015399)	-0.0019136 (0.0047419)	0.0001867 (0.0046936)
BCBS Mrkt Share With Controls	Discrete	Discrete	Continuous	Continuous
Observations (N)	No 83,566	Yes 80,962	No 83,566	Yes 80,962
Unique Beneficiaries	46,911	44,994	46,911	44,994

Notes: Standard errors clustered at the physician level. High BCBS Mrkt Share is defined as primarily practicing in a county with above the median BCBS market share among all FL counties.

APPENDIX B: Emergency Department and Inpatient Discharge Data

ED Care Results

APPENDIX TABLE B1—BCBS CARVE-OUT EFFECTS ON THE Pr(PAYER TYPE) FOR MENTALLY ILL PATIENT PRESENTING TO EMERGENCY DEPARTMENT

	Privately Insured Patient Pre-Period Mean = 0.18			Medicaid Patient Pre-Period Mean = 0.20			Medicare Patient Pre-Period Mean = 0.16		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>DD Estimate</i>									
High BCBS x Post	-0.004 (0.006)	-0.005 (0.005)	-0.002 (0.005)	-0.008 (0.006)	-0.008 (0.006)	-0.010 (0.006)	-0.003 (0.006)	-0.001 (0.004)	-0.001 (0.004)
County FE	No	Yes	No	No	Yes	No	No	Yes	No
Facility FE	No	No	Yes	No	No	Yes	No	No	Yes
Observations	990,344	990,344	990,344	990,344	990,344	990,344	990,344	990,344	990,344

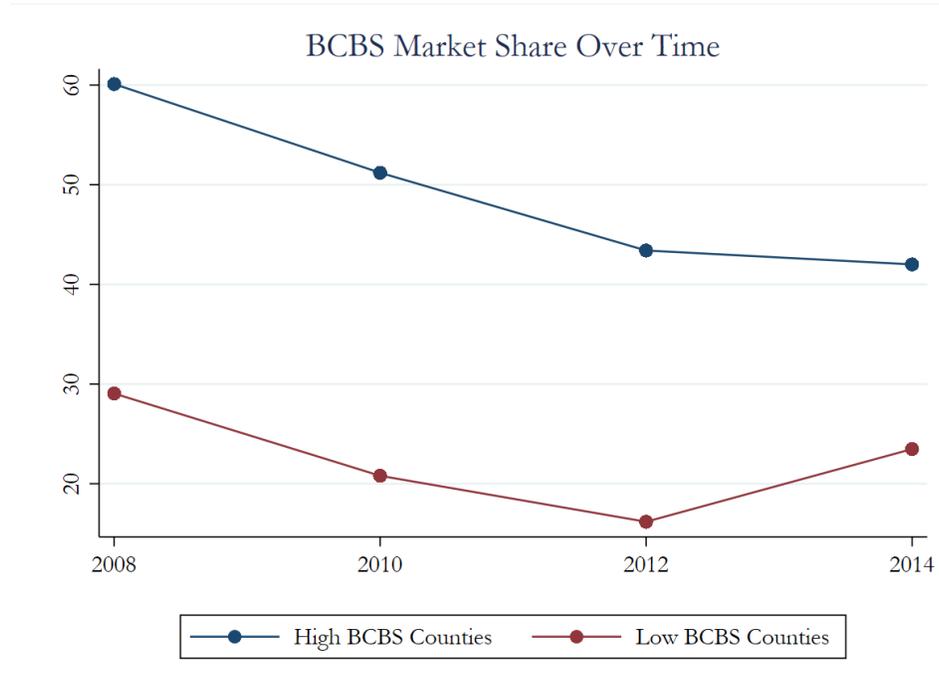
Notes: Standard errors clustered at the facility level. Analytic sample restricted to Florida residents with a mental health problem as their primary diagnosis. 'Post' is equal to one for all quarters after and including 2012 Q1. 'High BCBS' are counties with above the median BCBS market share. Only key coefficients reported, and the outcome is equal to one for patients relying on a commercial insurer carrier for coverage of ED care.

APPENDIX TABLE B2—BCBS CARVE-OUT EFFECTS ON THE LIKELIHOOD A MENTALLY ILL PATIENT PRESENTS TO THE EMERGENCY DEPARTMENT WITH SUICIDAL IDEATION

	Treated Payer is Privately Insured Pre-Period Mean = 0.086			Treated Payer is Medicaid Pre-Period Mean = 0.092			Treated Payer is Medicare Pre-Period Mean = 0.086		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>DDD Estimate</i>									
Payer x High	-0.006	-0.006	-0.006	-0.015	-0.015	-0.014	-0.019	-0.017	-0.018
BCBS x Post	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.008)
County FE	No	Yes	No	No	Yes	No	No	Yes	No
Facility FE	No	No	Yes	No	No	Yes	No	No	Yes
Observations	514,271	514,271	514,271	547,084	547,084	547,084	507,463	507,463	507,463

Notes: Standard errors clustered at the facility level. Analytic sample restricted to Florida residents with a mental health problem as their primary diagnosis. The comparison (control) payer group is composed of self-pay patients. Columns 1-3 have privately insured patients as the treated payer group, columns 4-6 use Medicaid, and columns 7-9 use Medicare as the treatment group. ‘Post’ is equal to one for all quarters after and including 2012 Q1. ‘High BCBS’ are counties with above the median BCBS market share. Only key coefficients reported, and the outcome is equal to one for patient discharges with a suicidal ideation ICD9 flag (V62.84).

Appendix Figure B1—BCBSFL Average Market Shares 2008-2014 by 2012 High versus Low Classification



Notes: County level enrollment data from DRG

APPENDIX TABLE B3—CORRESPONDING REGRESSION ESTIMATES FOR MARKET SHARE CHANGES OVER TIME BY 2012 HIGH VERSUS LOW STRATIFICATION

	DD	Linear Time Trend	Linear Time Trend*High BCBS	County-Linear Time Trend
	(1)	(2)	(3)	(4)
High BCBS*Post	-7.854** (2.869)	-7.854** (2.854)	1.480 (6.361)	1.480 (3.796)
Observations (N)	268	268	268	268

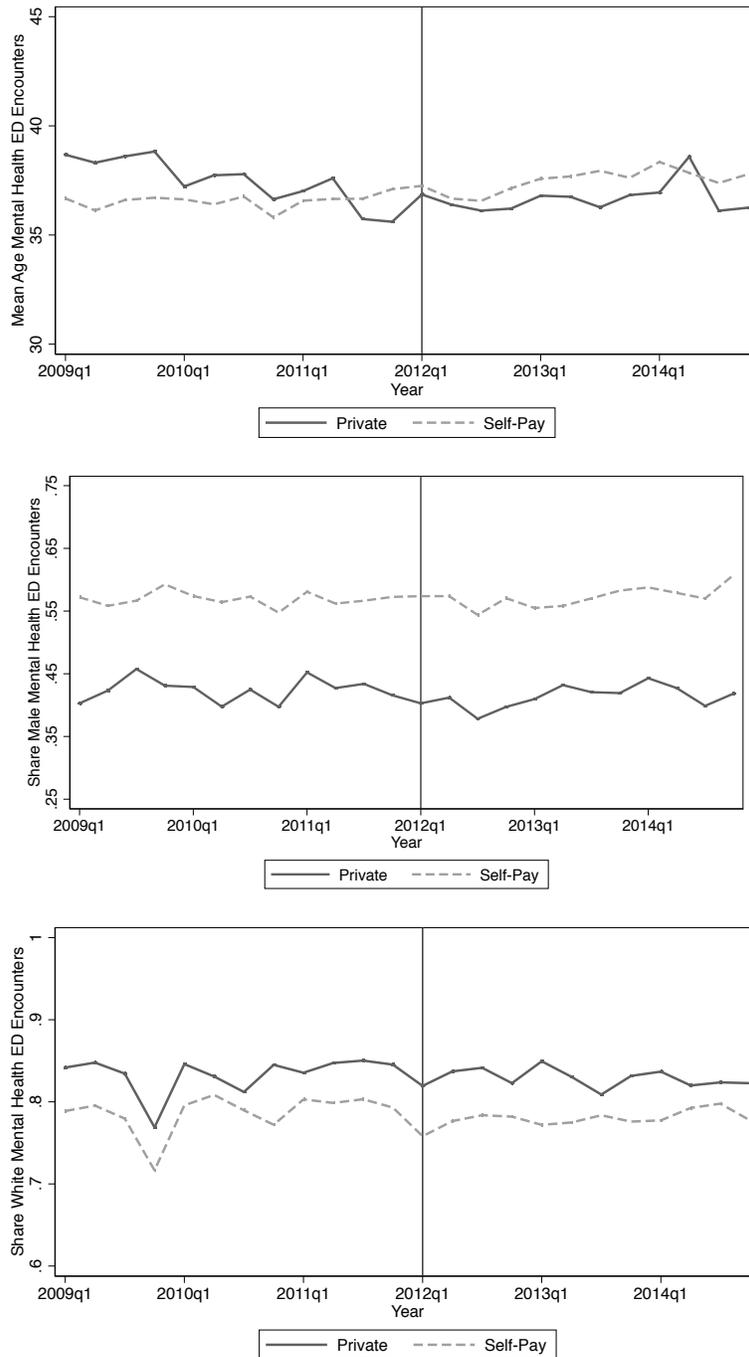
Standard errors in parentheses. + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

APPENDIX TABLE B4—TESTING FOR POST-CARVE-OUT ED ENCOUNTER DEMOGRAPHIC CHANGES BETWEEN HIGH AND LOW BCBSFL COUNTIES BY PAYER GROUP

	Private			Self-Pay		
	Age	Male	White	Age	Male	White
	(1)	(2)	(3)	(4)	(5)	(6)
High BCBS*Post	-0.069 (0.481)	-0.012 (0.011)	-0.016 (0.010)	0.306 (0.233)	-0.002 (0.010)	-0.002 (0.011)
ED Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations (N)	179,604	179,604	179,604	334,667	334,667	334,667

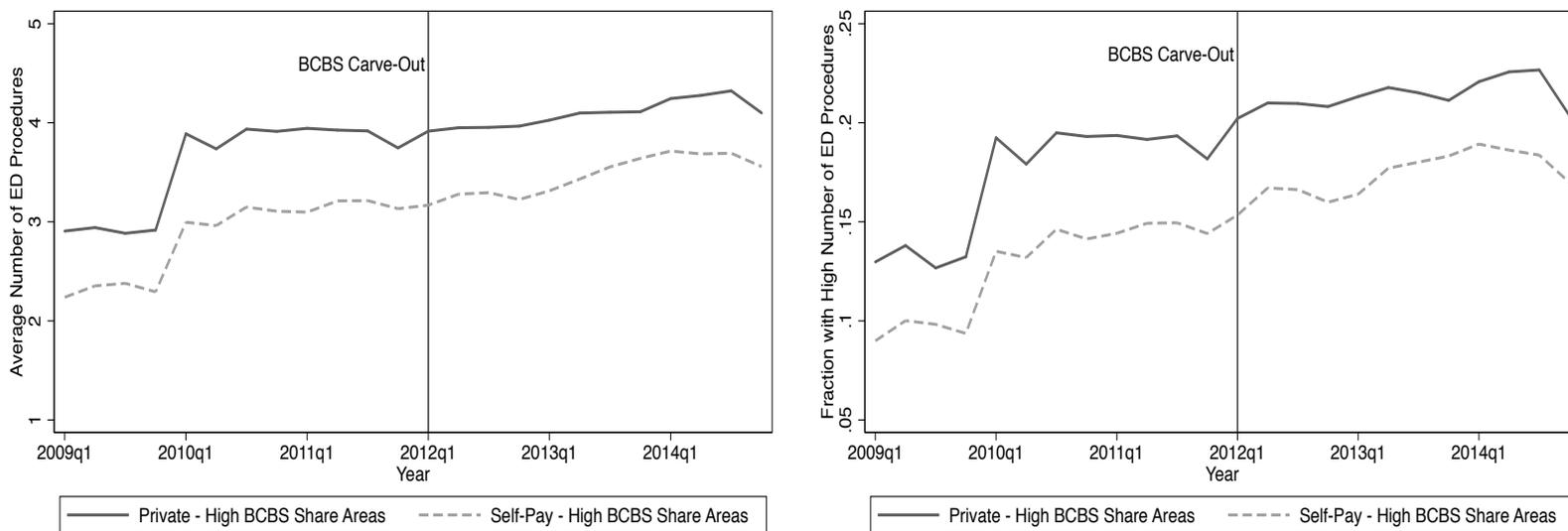
Analytic sample restricts to all ED encounters related to mental and behavioral health issues for Florida residents. “High BCBS” is equal to one for counties above the median in BCBSFL penetration in 2012 and zero for all others. Age is a continuous outcome, while Male and White are binary indicator variables.

Appendix Figure B2—Trends in Demographic Characteristics for Private and Self-Pay ED Encounters within High BCBS Areas



Notes: Restricts to ED encounters related to mental and behavioral health issues. Vertical line indicates the implementation of the BCBSFL carve-out contracting change.

Appendix Figure B3: Average Number of Ancillary Physician Services Performed in the Emergency Department for Non-Mentally Ill Patients as well as Fraction of High-Intensity Encounters



Source: Florida AHCA discharge data. Excludes all encounters with a primary diagnosis (ICD-9) of a mental health problem. Counts reflect the total number of CPT codes for a specific encounter that are listed in addition to the evaluation billing code (i.e., all additional physician services performed). The second panel outcome is equal to 1 for all ED encounters with at least 8 listed CPT codes for additional physician services beyond the initial evaluation

APPENDIX TABLE B5
 BCBS Carve-Out Effects on Mentally Ill Privately Insured Patients' Emergency
 Department Care

Use of Highest Complexity Billing Code for ED Evaluation			
Pre-Period Mean = 0.23			
	(1)	(2)	(3)
<i>DD Estimate</i>			
Private x Post	0.005 (0.008)	0.005 (0.008)	0.002 (0.007)
<i>DDD Estimate</i>			
Private x Post x High BCBS	-0.0008 (0.015)	0.003 (0.014)	0.003 (0.013)
County FE	No	Yes	No
Facility FE	No	No	Yes
Observations	436,082	436,082	436,082

Notes: Standard errors clustered at the facility level. Analytic sample restricted to privately insured and self-pay Florida residents with a mental health problem as their primary diagnosis. 'Post' is equal to one for all quarters after and including 2012 Q1. 'High BCBSFL' are counties with above the median BCBS market share. Only key coefficients reported, and the outcome is equal to one when the ED provider records a CPT/HCPCS evaluation code for the highest complexity ("level 5") for an individual ED encounter. Note, the needed variable information is only available from 2010 Q1 and onward.

Inpatient Care Results

APPENDIX TABLE B6
BCBS Carve-Out Effect on the Likelihood of a Mentally Ill Inpatient Being Privately Insured

	Inpatient Psychiatric Hospitals Pre-Period Mean = 0.28			General Acute Care Hospitals Pre-Period Mean = 0.23		
	Privately Insured Pt.	Privately Insured Pt.	Privately Insured Pt.	Privately Insured Pt.	Privately Insured Pt.	Privately Insured Pt.
	(1)	(2)	(3)	(4)	(5)	(6)
<i>DD Estimate</i>						
High BCBS x Post	-0.085 (0.035)	-0.072 (0.033)	-0.069 (0.033)	0.011 (0.014)	0.006 (0.014)	-0.00003 (0.014)
County FE	No	Yes	No	No	Yes	No
Facility FE	No	No	Yes	No	No	Yes
Observations	320,186	320,186	320,186	686,694	686,694	686,694

Notes: Standard errors clustered at the facility level. Analytic sample restricted to Florida residents with a mental health problem as their primary diagnosis for their inpatient admission. 'Post' is equal to one for all quarters after and including 2012 Q1. 'High BCBS' are counties with above the median BCBS market share. Only key coefficients reported, and the outcome is equal to one for patients relying on a commercial insurer carrier for coverage of Inpatient care.

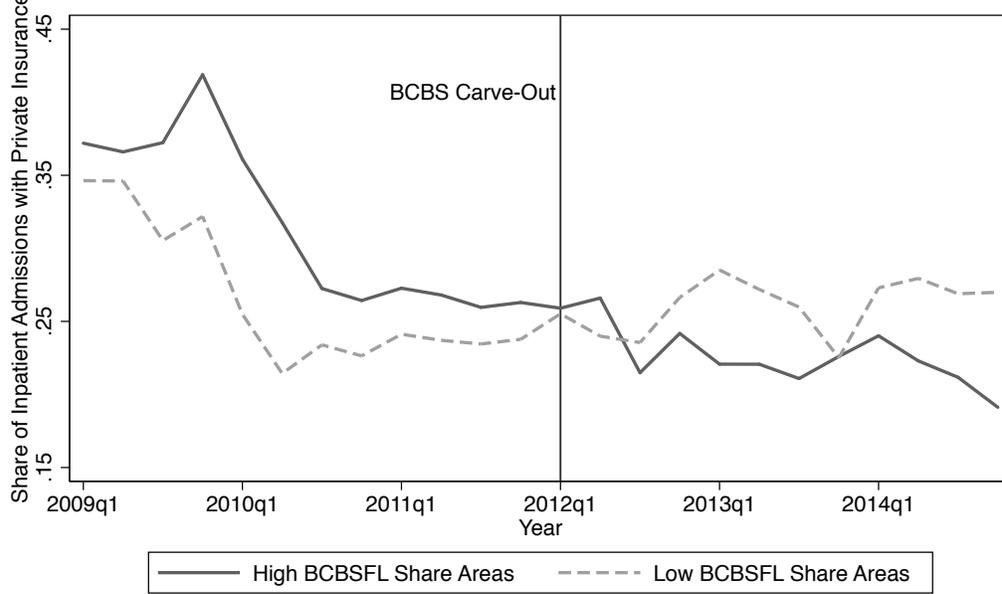
APPENDIX TABLE B7
BCBS Carve-Out Effect on Mentally Ill Inpatient Length of Stay

	Inpatient Psychiatric Hospitals Pre-Period Mean = 5.8			General Acute Care Hospitals Pre-Period Mean = 4.1		
	LOS	LOS	LOS	LOS	LOS	LOS
	(1)	(2)	(3)	(4)	(5)	(6)
<i>DD Estimate</i>						
Private x Post	-0.418 (0.398)	-0.424 (0.367)	-0.579 (0.310)	-0.158 (0.136)	-0.112 (0.116)	-0.151 (0.093)
<i>DDD Estimate</i>						
Private x Post x High BCBS	-1.373 (0.725)	-1.216 (0.605)	-1.131 (0.561)	-0.141 (0.244)	-0.069 (0.175)	0.072 (0.161)
County FE	No	Yes	No	No	Yes	No
Facility FE	No	No	Yes	No	No	Yes
Observations	127,828	127,828	127,828	237,328	237,328	237,328

Notes: Standard errors clustered at the facility level

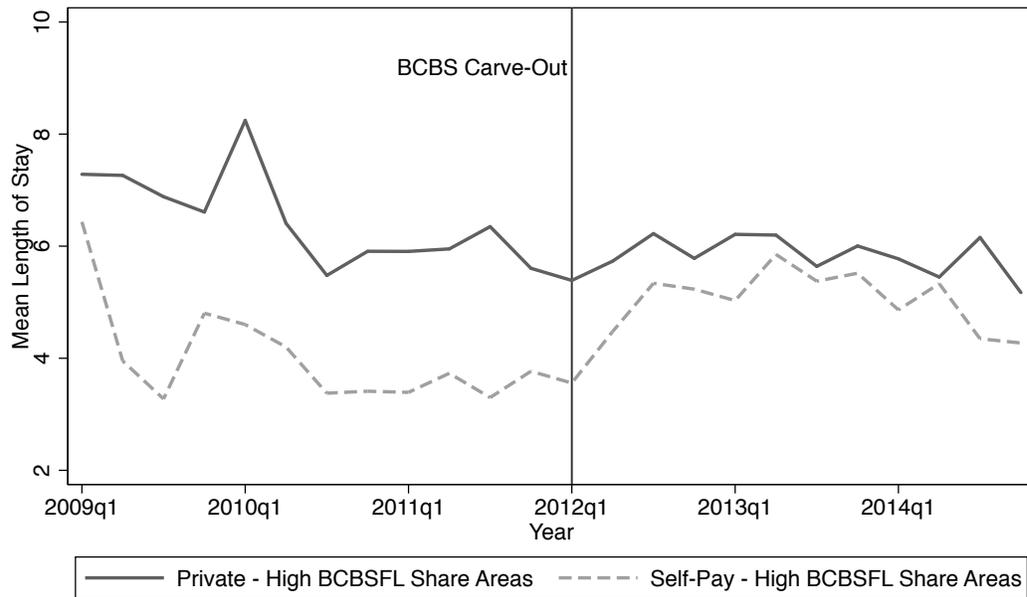
Analytic sample restricted to privately insured and self-pay Florida residents with a mental health problem as their primary diagnosis for the inpatient admission. 'Post' is equal to one for all quarters after and including 2012 Q1. 'High BCBS' are counties with above the median BCBS market share. 'LOS' stands for length of stay for a given admission. Only key coefficients reported

Appendix Figure B4: Share of Patients with Private Insurance Among Psychiatric Inpatient Hospitals



Source: Florida AHCA inpatient discharge data. Includes all encounters with a valid primary diagnosis (ICD-9) for a mental health problem within a designated psychiatric inpatient facility.

Appendix Figure B5: Average Length of Stay for Privately Insured and Self-Pay Patients Among Psychiatric Inpatient Hospitals



Source: Florida AHCA inpatient discharge data. Includes all encounters with a valid primary diagnosis (ICD-9) for a mental health problem within a designated psychiatric inpatient facility and belonging either to the private insurance or self-insurance payer group.

APPENDIX C: Supplementary Results

We augment our analyses and findings from Section 5A with Medicare fee-for-service claims data from the state of Florida. The data are drawn from a 5% national sample of beneficiaries and span 2009-2014. The data follow beneficiaries longitudinally and capture all associated claims activity. They are therefore well-suited to study flows of specific services to individual patients. We are specifically interested in the supply of outpatient psychiatric care to existing Medicare patients. Less favorable terms in the privately insured market may alter care delivery in the Medicare market beyond accepting new Medicare patients. Established patients from this payer could witness more frequent services either through relaxed capacity constraints or demand inducement. Consequently, we look for such changes by comparing beneficiaries residing in high BCBSFL market share areas against their counterparts elsewhere in Florida. The regression is a simple DD model with beneficiary fixed effects (λ).

$$Y_{it} = \alpha + \xi(HighBCBS)_i + \psi(Post)_t + \delta(HighBCBS \times Post)_{it} + \lambda_i + \varepsilon_{it} \quad (C1)$$

Y is either the number of office-based, established patient psychiatric visits for a given beneficiary (i) in a given year (t) or a binary indicator for having at least 8 visits in a given year—the top quartile of the distribution in the baseline year.¹ The analytic sample is restricted to beneficiaries with at least one visit in each year from 2009-2011 to identify those with regular and ongoing mental health care needs, who perhaps have the highest risk of having their intensity of services adjusted in response to the BCBSFL carve-out change.²

Appendix Table C1 provides the DD results. Visit intensity to these Florida patients is actually declining over time, with no clear indication that it is doing less so among patients in areas with high BCBSFL market shares. Both of the DD estimates in columns 1 and 2 are small and not statistically significant. However, we also have limited power in these analyses. The nature of these data (i.e., repeated observations of the same beneficiaries) and focusing on patients with chronic mental health care needs leaves us with only 1,719 observations across the entire state, of which only 14% fall into the BCBSFL dominant markets. Therefore, we can only cautiously say that we find no evidence of more frequent psychiatric encounters for Medicare beneficiaries with previously established care sources but cannot confidently rule out this type of provider response.

¹ Eligible visits could be to either a psychiatrist (physician) or a psychologist and are generated from the Current Procedural Terminology (CPT) codes linked to established patient evaluation and management (E&M) visits (used by all physicians) or established patient psychotherapy sessions (used by mental health providers).

² We exclude beneficiaries who die or move during the analytic period, which is a very small portion of the patient population overall.

APPENDIX TABLE C1—OFFICE-BASED PSYCH CARE
CONSUMPTION AMONG FLORIDA MEDICARE FEE-FOR-
SERVICE BENEFICIARIES

	Number of Psych Visits per Year	High Psych Visit Consumption (8 or more in a Year)
	(1)	(2)
Post	-2.104 (0.139)	-0.081 (0.008)
Post x High BCBS Mrkt Share	0.245 (0.308)	0.009 (0.022)
BCBS Mrkt Share	Discrete	Discrete
Medicare Beneficiary (FE)	Yes	Yes
Observations (N)	10,314	10,314
Unique Beneficiaries	1,719	1,719

Notes: Standard errors clustered at the individual Medicare beneficiary level. Post includes all survey years between 2012 and 2014. Data source is a 5% sample of Medicare FFS claims data from 2009-2014 Analytic sample restricted to beneficiaries living in Florida, with at least one established patient psych visit per year in 2009-2011. 14% of these beneficiaries also reside in “High BCBS Mrk Share” areas.