APPENDIX

Table A1—: Demographic Statistics for Indiana and Kentucky

	Indiana	Kentucky
Total population	6514516	4364627
DEMOGRAPHIC CHARACTERISTICS		
Male	49.2%	49.2%
Median age (years)	37.1	38.2
65 years and over	13.2%	13.6%
married (15 years and older)	50.1%	50.3%
Race/Ethnicity		
single race	97.9%	98.2%
white	86.5%	89.6%
black	9.2%	9.0%
asian	1.7%	1.2%
hispanic	6.2%	3.1%
EDUCATION (25 years and older)		
Less than High School	12.7%	17.1%
High School Degree	35.5%	34.1%
College Degree or More	23.1%	21.2%
veteran (18 years and older)	9.4%	9.5%
INCOME, POVERTY, HEALTH INSURANCE		
Per capita income (dollars)	$ 24,048	$ 22,796
Percent in Poverty		
under 18 years	22.4%	26.8%
18 to 64	14.6%	17.9%
65 and over	7.1%	11.8%
Health insurance coverage (civilian noninstitutionalized pop.)		
private health insurance	68.1%	64.3%
public coverage	28.9%	33.0%
uninsured	14.4%	14.5%
EMPLOYMENT STATUS (16 years and over)		
in labor force	64.2%	60.0%
employed	57.8%	53.4%
unemployed	6.3%	6.1%
INDUSTRY (civilian employed, 16 years and over)		
Goods producing	25.8%	22.3%
Wholesale, Retail	14.2%	14.5%
Other Services, Private	56.5%	58.5%
Public Administration	3.6%	4.6%
OCCUPATION (employed, 16 years and over)		
Management, professional	31.9%	32.5%
Service occupations	17.2%	16.9%
Sales and office occupations	24.0%	24.3%
Natural resources, construction, and maintenance	8.8%	10.0%
Production, transportation, and material moving	18.1%	16.4%

Note: Source: U.S. Census Bureau, 2010-2012 American Community Survey, accessed via American FactFinder factfinder.census.gov

Table A2—: Comparison of Baseline (Quarterly) Regressions to 2-period Regressions

VARIABLES	(1) Any Prescription	(2) Ln Patients	(3) Ln Days/Patient	(4) Ln MED/Day
		Baseline (Quarterly) Regressions in Logs		
KYpost		-0.177**	-0.0409**	-0.0343**
		(0.00913)	(0.00536)	(0.00513)
Observations		215,409	215,328	215,328
Number of providers		36,308	36,294	36,294
		2-Period Regressions in Logs		
KYPost		-0.216**	-0.0398**	-0.0398**
		(0.0119)	(0.00651)	(0.00668)
Observations		62,835	62,812	62,812
Number of Providers		35,897	35,882	35,882
		Baseline (Quarterly) Regressions in Levels		
KYPost	-0.0377**	-6.466**	-0.0334	-0.418*
	(0.00379)	(0.607)	(0.113)	(0.187)
Observations	290,464	215,409	215,328	215,328
Number of Providers	36,308	36,308	36,294	36,294
		2-Period Regressions in Levels		
KYPost	-0.0246**	-6.076**	-0.0366	-0.392
	(0.00520)	(0.593)	(0.124)	(0.244)
Observations	72,6165	62,835	62,812	62,812
Number of Providers	36,308	35,897	35,882	35,882

Note: Table reports difference-in-difference coefficients from estimation of Equation 1. Outcomes in second, third, and fourth column are conditional on the provider having any prescribing in the quarter. Baseline regressions are run on a panel of quarterly outcomes. 2-Period regressions are run on a panel of two outcomes (pre and post) for each provider. Standard errors clustered at provider level.
$**$ p<0.01, $*$ p<0.05, $+$ p<0.1

Table A3—: Coefficients from Difference in Differences Regression Including Only Pairs of Adjacent Quarters. (Implementation Period Bolded.)

Time Period	Any	Patients	Days/Patient	MEDs/Day
2012Q1-2012Q2	0.00675+	0.0503**	0.00172	-0.00326
	(1.750)	(6.543)	(0.291)	(-0.530)
2012Q2-2012Q3	**-0.0216****	**-0.130****	**-0.0274****	**-0.0336****
	(-5.279)	**(-16.28)**	**(-4.583)**	**(-5.620)**
2012Q3-2012Q4	**-0.0198****	**-0.117****	**-0.0186****	**0.00534**
	(-4.897)	**(-13.92)**	**(-3.078)**	**(0.841)**
2012Q4-2013Q1	0.00323	0.0397**	0.000220	0.0134*
	(0.815)	(5.154)	(0.0381)	(2.070)
2013Q1-2013Q2	-0.00660+	0.00170	-0.00129	-0.0100
	(-1.666)	(0.216)	(-0.221)	(-1.593)
2013Q2-2013Q3	0.00398	0.0115	-0.000757	0.00834
	(0.959)	(1.449)	(-0.133)	(1.369)
2013Q3-2013Q4	0.000927	-0.0167*	0.0236**	0.00181
	(0.230)	(-2.080)	(4.082)	(0.289)

Note: Each coefficient corresponds to one regression. T-stats in parentheses. Standard errors clustered at provider level.
** $p<0.01$, * $p<0.05$, + $p<0.1$

Table A4—: Difference in Differences Regressions by Provider Quartile Using Levels

Sample	(1) All	(2) Quartile 1	(3) Quartile 2	(4) Quartile 3	(5) Quartile 4
Total MEDs 2012 H1	0+	0-135	136-3652	3652.5-31022	31024+
			Patients, Conditional on Any		
KYPost	-6.466**	0.0169	-1.059**	-4.548**	-13.00**
	(0.607)	(0.754)	(0.355)	(0.489)	(1.587)
Observations	215,409	24,264	51,585	68,426	71,134
Number of providers	36,308	9,087	9,067	9,077	9,077
Percent Treatment Effect	-9.7	1.3	16.8	-11.3	-8.4
			Days/Patient		
KYPost	-0.0334	0.0662	-0.280	-0.157	0.274
	(0.113)	(0.613)	(0.224)	(0.180)	(0.196)
Observations	215,328	24,217	51,559	68,421	71,131
Number of providers	36,294	9,073	9,067	9,077	9,077
Percent Treatment Effect	-0.2	1.2	-2.7	-1.2	0.8
			MEDs/Day		
KYPost	-0.418*	-4.416**	-0.742+	-0.338	0.0938
	(0.187)	(1.049)	(0.422)	(0.316)	(0.270)
Observations	215,328	24,217	51,559	68,421	71,131
Number of providers	36,294	9,073	9,067	9,077	9,077
Percent Treatment Effect	-1.2	-20.9	-2.4	-1.0	0.2

Note: Table reports difference-in-difference coefficients from estimation of Equation 1, but with level outcomes instead of logged outcomes. A panel of quarterly provider-level measures 2012q1 to 2013q4 by quartile of provider MED in 2012h1 is used. Outcomes in each panel are conditional on the provider having any prescribing in the quarter.
Standard errors clustered at provider level.
** p<0.01, * p<0.05, + p<0.1

Table A5—: Percent of Providers That Don't Prescribe in 2012q4-2013q4 Among Providers who Wrote a Prescription in 2012h1

	IN Mean	KY Mean	Difference
All	0.067	0.088	0.0213**
Quartile 1	0.296	0.372	0.076**
Quartile 2	0.124	0.157	0.033**
Quartile 3	0.025	0.031	0.006+
Quartile 4	0.007	0.010	0.003

Note: This table reports the share of providers prescribing in 2012h1 who did not not prescribe at all in the post-period (2012q4-2013q4), respectively for Indiana and Kentucky. The third column reports the difference, where asterisks signify the mean differs from zero at ** $p<0.01$, * $p<0.05$, + $p<0.1$.