Online Appendix

Just What the Nurse Practitioner Ordered: Independent Prescriptive Authority and Population Mental Health

Alexander and Schnell (2019)

A Supplementary Tables

Table A1: Dates of Law Changes Granting NPs Independent Prescriptive Authority

Before 1990	
Alaska	Oregon
Arizona	Vermont
District of Columbia	Washington
Montana	
1990-2014	*Month granted*
Wyoming	February 1991
Iowa	June 1991
New Hampshire	June 1991
Utah	March 1992
New Mexico	March 1993
Delaware	July 1994
Maine	June 1995
Nebraska	April 1996
Idaho	March 2004
Colorado	June 2009
Hawaii	April 2010
Maryland	April 2010
North Dakota	April 2011
Nevada	June 2013
Rhode Island	June 2013
Kentucky	February 2014
Connecticut	May 2014
Minnesota	May 2014

Notes: As outlined in Section 3.1, the law changes in this table are derived from information from the *The Nurse Practitioner's* "Annual Legislative Update," correspondence with state nursing boards, and readings of primary source legislation. We define "independent prescriptive authority" as the ability to prescribe medication without physician collaboration or supervision. More information on the relevant bills and legislative processes are available from the authors by request.

Table A2: ICD-9 and ICD-10 Codes Included in Mental Health–Related Mortality

Suicides
ICD-9 codes:
E950-E959
ICD-10: [Recode 358]
424: Intentional self-harm (suicide) (*U03,X60-X84,Y87.0)
Or if manner of death is noted as suicide or self-inflicted

Injuries of undetermined intent
ICD-9: [Recode 282]
35200: Injury undetermined whether accidentally or purposely inflicted (E980-E989)
ICD-10: [Recode 113]
131: Events of undetermined intent (Y10-Y34,Y87.2,Y89.9)

Accidental deaths
Poisonings
ICD-9: [Recode 282]
31600: Accidental poisoning (E850-E869)
ICD-10: [Recode 113]
122: Accidental poisoning and exposure to noxious substances (X40-X49)

Drownings
ICD-9: [Recode 282]
32800: Accidental drowning and submersion (E910)
ICD-10: [Recode 113]
120: Accidental drowning and submersion (W65-W74)

Firearms
ICD-9: [Recode 282]
33000: Accident caused by handgun (E922.0)
33100: Accidents caused by all other and unspecified firearms (E922.1-E922.9)
ICD-10: [Recode 113]
119: Accidental discharge of firearms (W32-W34)

Trains
ICD-9: [Recode 282]
30200: Railway accidents (E800-E807)
30500: Motor vehicle traffice acccidents involving collision with train (E810)
ICD-10: [Recode 358]
384: Railway accidents (V05,V15,V80.6,V81.2-V81.9)
389: Motor vehicle accident involving collision with railway train (V25,V35,V45,V55,V65,V75,V81.0-V81.1,V87.6,V88.6)

Notes: ICD-9 codes in use through 1999; ICD-10 codes in use starting in 2000. On average over our sample period, 53.4% of mental health–related deaths were suicides; 31.9% were accidental poisonings; 6.6% were injuries of undetermined intent; and 5.8%, 1.4%, and 1.1% were accidental deaths involving drownings, firearms, and trains, respectively.

Table A3: Correlates of Law Changes Granting Independent Prescriptive Authority

A. Ind. & County-Level Outcomes	General Health		Insured		No. Psychiatrists		No. Prim. Care MD/DOs	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Indep. prescriptive authority	0.000	-0.003	0.006	0.007	-1.772	-1.817	-3.789	3.808
	(0.005)	(0.006)	(0.006)	(0.005)	(4.460)	(5.045)	(20.759)	(24.368)
Indep. Rx * underserved		0.009		-0.004		0.192		-32.503
		(0.007)		(0.014)		(3.032)		(27.077)
Observations	6,519,963	6,519,963	6,540,521	6,540,521	313,372	313,372	313,372	313,372
R^2	0.216	0.216	0.195	0.195	0.997	0.997	0.995	0.995
Mean dependent variable	2.44	2.44	0.85	0.85	158.90	158.90	1,115.98	1,115.98
$\beta_1 + \beta_2$		0.007		0.003		-1.625		-28.695
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.305		0.855		0.582		0.160

B. State-Level Outcomes	Unemployment Rates		Medicaid Expansion		Beer Taxes		Gun Control	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Indep. prescriptive authority	0.005	-0.043	0.107**	0.111***	-0.008	-0.008	0.063	0.075
	(0.222)	(0.217)	(0.041)	(0.038)	(0.014)	(0.014)	(0.069)	(0.071)
Indep. Rx * underserved		0.208		-0.017		0.002		-0.049
		(0.214)		(0.031)		(0.006)		(0.030)
Observations	313,372	313,372	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.837	0.837	0.556	0.556	0.955	0.955	0.955	0.955
Mean dependent variable	6.19	6.19	0.02	0.02	0.25	0.25	0.18	0.18
$\beta_1 + \beta_2$		0.164		0.094*		-0.007		0.026
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.589		0.098		0.676		0.690

C. State-Level Outcomes (cont.)	PDMP Implemented		Must-Access PDMP		Medical Marijuana		Recreational Marijuana	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Indep. prescriptive authority	0.174	0.174	0.001	-0.004	0.128*	0.147**	0.067	0.070
	(0.123)	(0.128)	(0.053)	(0.050)	(0.073)	(0.072)	(0.069)	(0.071)
Indep. Rx * underserved		0.000		0.022		-0.081		-0.014
		(0.053)		(0.039)		(0.057)		(0.016)
Observations	313,372	313,372	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.755	0.755	0.249	0.249	0.684	0.684	0.157	0.157
Mean dependent variable	0.59	0.59	0.02	0.02	0.17	0.17	0.00	0.00
$\beta_1 + \beta_2$		0.174		0.019		0.065		0.056
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.147		0.790		0.459		0.370

Notes: Observations in Columns (1)-(4) of Panel A are at the individual level and are weighted using BRFSS sample weights; corresponding regressions include the same controls as in Table 5. Observations in Columns (5)-(8) of Panel A and all columns in Panels B and C are at the county-quarter level and are population weighted; corresponding regressions include the same controls as in Table 4. Standard errors are clustered by state in all regressions. Individual-level outcomes are from the BRFSS, and county-level provider counts are from the ARF. State-level unemployment rates are from the Bureau of Labor Statistics, data on state-level beer taxes comes from the Urban-Brookings Tax Policy Center, data on gun control legislation (waiting periods or background checks for handgun and firearm purchases) comes from the State Firearm Laws project and the RAND State Firearm Law Database, Medicaid expansion dates come from the Kaiser Family Foundation, dates of medical and recreational marijuana legalization come from ProCon.org, and dates of state-level implementation of PDMPs and "must-access" PDMP laws are taken from **?**. * p < 0.10, ** p < 0.05, *** p < 0.01.

A.1 Mental Health–Related Mortality

Table A4: Mental Health–Related Mortality: Full Regression Results

	Suicides			Mental Health–Related Deaths		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	0.122	0.561	0.784*	-1.697	-0.438	0.182
	(0.983)	(1.019)	(0.421)	(1.880)	(1.985)	(1.058)
Indep. Rx * underserved		-1.877*	-1.415***		-5.387***	-3.403***
		(0.965)	(0.391)		(1.923)	(1.217)
Population density (per mile^2)	-0.001*	-0.001*	0.002***	-0.003***	-0.003***	0.003***
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)
Percent male	43.466	43.298	59.008**	-29.115	-29.597	3.114
	(46.660)	(46.698)	(29.278)	(100.041)	(100.116)	(50.645)
Percent black	63.023**	63.034**	34.073*	77.357	77.389	43.228
	(26.897)	(26.850)	(18.984)	(56.318)	(56.222)	(37.188)
Percent aged 18 and under	24.373	23.697	51.826	-36.633	-38.573	86.862
	(37.542)	(37.518)	(37.323)	(70.184)	(70.040)	(55.730)
Percent aged 65+	50.406	50.496	39.144	-182.712**	-182.452**	-113.002***
	(40.709)	(40.759)	(27.578)	(84.352)	(84.501)	(34.745)
Percent high school or less	3.438	2.999	-18.503	10.393	9.135	16.662
	(30.403)	(30.285)	(15.072)	(44.501)	(44.269)	(19.765)
Median household income	0.001**	0.001**	0.001**	0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Median household income^2	-0.000***	-0.000***	-0.000***	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Percent in poverty	-18.894**	-18.903**	-6.648	-39.736**	-39.761**	-8.980
	(8.747)	(8.741)	(4.014)	(17.090)	(17.060)	(10.268)
Percent unemployed	1.065**	1.067**	0.498*	2.023*	2.029*	1.141
	(0.519)	(0.519)	(0.254)	(1.031)	(1.031)	(0.684)
Psychiatrists per 100,000	0.124***	0.124***	0.096***	0.130	0.130	0.141***
	(0.045)	(0.045)	(0.027)	(0.084)	(0.084)	(0.039)
PC MDs/DOs per 100,000	-0.017**	-0.017**	-0.014***	-0.023**	-0.023**	-0.015*
	(0.007)	(0.006)	(0.004)	(0.011)	(0.011)	(0.008)
Observations	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.969	0.969	0.950	0.971	0.971	0.957
Mean dependent variable	28.59	28.59	14.89	51.48	51.48	29.05
$\beta_1 + \beta_2$		-1.316	-0.630		-5.825**	-3.221***
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.300	0.170		0.013	0.006

Notes: Observations are at the county-quarter level and are population weighted. Standard errors are clustered by state. All regressions include county, quarter, and year fixed effects and county-level population. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A5: Mental Health–Related Mortality: Subgroup Analysis

A. Suicides	(1) All	(2) Black	(3) Age 45-55	(4) Under 18	(5) Low Educ.	(6) Male	(7) Female
Indep. prescriptive authority	0.561	-3.097**	0.252	0.075	0.784*	0.268	0.230
	(1.019)	(1.380)	(0.201)	(0.056)	(0.421)	(0.797)	(0.206)
Indep. Rx * underserved	-1.877*	2.162**	-0.610*	-0.041	-1.415***	-1.315*	-0.587**
	(0.965)	(0.909)	(0.305)	(0.033)	(0.391)	(0.724)	(0.280)
Observations	313,372	310,148	313,400	313,376	313,372	313,400	313,400
R^2	0.969	0.858	0.928	0.695	0.950	0.968	0.915
Mean dependent variable	28.59	5.24	7.53	0.99	14.89	21.88	6.65
$\beta_1 + \beta_2$	-1.316	-0.935	-0.358	0.034	-0.630	-1.047	-0.358
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.300	0.151	0.239	0.453	0.170	0.281	0.224

B. Mental Health–Related Deaths	(1) All	(2) Black	(3) Age 45-55	(4) Under 18	(5) Low Educ.	(6) Male	(7) Female
Indep. prescriptive authority	-0.438	-2.342**	0.380	0.196**	0.182	-0.639	-0.026
	(1.985)	(1.162)	(0.472)	(0.093)	(1.058)	(1.348)	(0.527)
Indep. Rx * underserved	-5.387***	2.032*	-1.302**	-0.178	-3.403***	-3.678***	-1.727***
	(1.923)	(1.029)	(0.583)	(0.115)	(1.217)	(1.349)	(0.558)
Observations	313,372	310,148	313,400	313,376	313,372	313,400	313,400
R^2	0.971	0.926	0.950	0.805	0.957	0.970	0.944
Mean dependent variable	51.48	12.80	14.89	2.14	29.05	38.32	13.02
$\beta_1 + \beta_2$	-5.825**	-0.310	-0.923	0.018	-3.221***	-4.318**	-1.753***
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.013	0.555	0.154	0.893	0.006	0.015	0.007

Notes: Observations are at the county-quarter level and are population weighted. Standard errors are clustered by state. All regressions include county, quarter, and year fixed effects; additional controls include total population (or subgroup population), population density, percent male, percent black, percent aged 18 and under, percent aged 65 and over, percent with a high school degree or less, a quadratic in median income, percent in poverty, percent unemployed, and the number of practicing psychiatrists and primary care physicians per 100,000. A county is "underserved" if it had fewer than one psychiatrist per 30,000 people in 1990. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A6: Mental Health–Related Mortality: Time-Varying Underserved Measure

	Suicides			Mental Health–Related Deaths		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	0.122	0.238	0.542	-1.697	-1.155	-0.244
	(0.983)	(0.949)	(0.375)	(1.880)	(1.881)	(0.972)
Underserved		0.385	0.421**		0.815	0.730**
		(0.308)	(0.193)		(0.532)	(0.349)
Indep. Rx * underserved		-0.601	-0.597**		-2.812***	-2.106***
		(0.518)	(0.273)		(0.917)	(0.672)
Observations	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.969	0.969	0.950	0.971	0.971	0.957
Mean dependent variable	28.59	28.59	14.89	51.48	51.48	29.05

Notes: Observations are at the county-quarter level and are population weighted. Standard errors are clustered by state. All regressions include county, quarter, and year fixed effects; additional controls include total population (or subgroup population), population density, percent male, percent black, percent aged 18 and under, percent aged 65 and over, percent with a high school degree or less, a quadratic in median income, percent in poverty, percent unemployed, and the number of practicing psychiatrists and primary care physicians per 100,000. A county is "underserved" if it had fewer than one psychiatrist per 30,000 people in a given year. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A7: Mental Health–Related Mortality: Alternative Controls

A. No Controls	Suicides			Mental Health–Related Deaths		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	1.244	1.366	1.020	-1.473	-0.381	-0.260
	(0.822)	(0.975)	(1.048)	(1.694)	(1.971)	(1.602)
Indep. Rx * underserved		-0.515	0.296		-4.635**	-3.793***
		(1.252)	(0.704)		(2.040)	(1.286)
Observations	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.964	0.964	0.935	0.968	0.968	0.951
Mean dependent variable	28.59	28.59	14.89	51.48	51.48	29.05
$\beta_1 + \beta_2$		0.850	1.315		-5.016***	-4.053*
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.400	0.392		0.006	0.052

B. Additional State-Level Controls	Suicides			Mental Health–Related Deaths		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.813	-0.431	0.350	-2.649	-1.408	-0.047
	(1.097)	(1.200)	(0.658)	(1.901)	(2.218)	(1.203)
Indep. Rx * underserved		-1.643	-1.130**		-5.342**	-3.697**
		(1.132)	(0.536)		(2.432)	(1.566)
Observations	300,836	300,836	300,836	300,836	300,836	300,836
R^2	0.970	0.970	0.952	0.972	0.972	0.958
Mean dependent variable	28.59	28.59	14.89	51.48	51.48	29.05
$\beta_1 + \beta_2$		-2.074	-0.780		-6.749***	-3.744***
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.106	0.147		0.001	0.003

Notes: Observations are at the county-quarter level and are population weighted. Standard errors are clustered by state. Regressions in Panel A include county, quarter, and year fixed effects and control for population. Regressions in Panel B include all of the controls from our main specification in addition to state unemployment rates, state beer taxes, and indicators denoting whether the state requires universal background checks and waiting periods for handgun and firearm purchases, expanded Medicaid, allows medical marijuana, allows recreational marijuana, implemented a PDMP, and implemented a "must-access" PDMP. Data sources for these additional state-level controls are listed in the notes for Table A3. A county is "underserved" if it had fewer than one psychiatrist per 30,000 people in 1990. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A8: Mental Health–Related Mortality: Unweighted Regressions

	Suicides			Mental Health–Related Deaths		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	0.047	0.491**	0.210*	-0.250	0.749*	0.355
	(0.099)	(0.229)	(0.122)	(0.244)	(0.443)	(0.273)
Indep. Rx * underserved		-0.605**	-0.333***		-1.361***	-0.860***
		(0.261)	(0.124)		(0.486)	(0.286)
Observations	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.939	0.939	0.891	0.947	0.948	0.917
Mean dependent variable	3.01	3.01	1.81	5.01	5.01	3.18
$\beta_1 + \beta_2$		-0.114	-0.123**		-0.612***	-0.505***
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.183	0.039		0.008	0.003

Notes: Observations are at the county-quarter level and are not population weighted. Standard errors are clustered by state. All regressions include county, quarter, and year fixed effects; additional controls include population density, percent male, percent black, percent aged 18 and under, percent aged 65 and over, percent with a high school degree or less, a quadratic in median income, percent in poverty, percent unemployed, and the number of practicing psychiatrists and primary care physicians per 100,000. A county is "underserved" if it had fewer than one psychiatrist per 30,000 people in 1990. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A9: Mental Health–Related Mortality: Deaths per 100,000

A. Weighted	Suicide Rate			Mental Health–Related Death Rate		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	0.052	-0.014	0.116	-0.023	-0.008	0.192
	(0.095)	(0.107)	(0.261)	(0.237)	(0.269)	(0.646)
Indep. Rx * underserved		0.279*	0.256		-0.063	-0.789
		(0.156)	(0.348)		(0.282)	(0.640)
Observations	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.217	0.217	0.211	0.334	0.334	0.323
Mean dependent variable	3.32	3.32	6.56	5.54	5.54	11.48
$\beta_1 + \beta_2$		0.266*	0.372		-0.071	-0.596
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.060	0.331		0.777	0.379

B. Unweighted	Suicide Death Rate			Mental Health–Related Death Rate		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	0.032	0.088	0.144	-0.187	0.062	0.261
	(0.079)	(0.112)	(0.391)	(0.230)	(0.217)	(0.494)
Indep. Rx * underserved		-0.076	-0.400		-0.339**	-1.218***
		(0.112)	(0.399)		(0.164)	(0.363)
Observations	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.052	0.052	0.058	0.090	0.090	0.097
Mean dependent variable	3.91	3.91	7.23	6.04	6.04	11.45
$\beta_1 + \beta_2$		0.012	-0.256		-0.277	-0.957
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.887	0.459		0.248	0.103

Notes: Observations are at the county-quarter level; observations in Panel A (B) are weighted (not weighted) by population. Standard errors are clustered by state. All regressions include county, quarter, and year fixed effects; additional controls include population density, percent male, percent black, percent aged 18 and under, percent aged 65 and over, percent with a high school degree or less, a quadratic in median income, percent in poverty, percent unemployed, and the number of practicing psychiatrists and primary care physicians per 100,000. A county is "underserved" if it had fewer than one psychiatrist per 30,000 people in 1990. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A10: Mental Health–Related Mortality: State-Specific Linear Time Trends

	Suicides			Mental Health–Related Deaths		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-1.883	-1.587	-1.765	-2.320	-1.503	-1.849
	(1.695)	(1.841)	(1.725)	(1.550)	(1.717)	(1.315)
Indep. Rx * underserved		-1.248	-0.471		-3.435*	-1.516
		(1.105)	(0.615)		(1.957)	(1.044)
Observations	313,372	313,372	313,372	313,372	313,372	313,372
R^2	0.972	0.972	0.953	0.974	0.974	0.961
Mean dependent variable	28.59	28.59	14.89	51.48	51.48	29.05
$\beta_1 + \beta_2$		-2.835*	-2.236*		-4.939**	-3.365**
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.074	0.095		0.021	0.014

Notes: Observations are at the county-quarter level and are population weighted. Standard errors are clustered by state. All regressions include county, quarter, and year fixed effects and state-specific linear time trends; additional controls include total population (or subgroup population), population density, percent male, percent black, percent aged 18 and under, percent aged 65 and over, percent with a high school degree or less, a quadratic in median income, percent in poverty, percent unemployed, and the number of practicing psychiatrists and primary care physicians per 100,000. A county is "underserved" if it had fewer than one psychiatrist per 30,000 people in 1990. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A11: Suicides: "Leave Out" Robustness

	(1) ID	(2) NV	(3) UT	(4) CO	(5) WY	(6) NE	(7) NM	(8) ND	(9) MN
Indep. prescriptive authority	0.433	0.374	0.181	0.437	0.548	0.657	0.380	0.610	0.616
	(1.073)	(1.113)	(0.947)	(1.215)	(1.025)	(1.074)	(1.035)	(1.037)	(1.059)
Indep. Rx * underserved	-2.107**	-1.701*	-1.509	-1.444	-1.902*	-1.878*	-1.924*	-1.882*	-1.916*
	(1.016)	(0.869)	(0.930)	(0.925)	(0.968)	(0.947)	(1.003)	(0.989)	(1.015)
Observations	308,972	311,672	310,472	307,072	311,072	304,072	310,072	308,072	304,672
R^2	0.969	0.969	0.970	0.970	0.969	0.969	0.969	0.969	0.969
Mean dependent variable	28.69	28.34	28.57	28.77	28.63	28.72	28.69	28.65	28.89
$\beta_1 + \beta_2$	-1.674	-1.327	-1.328	-1.007	-1.354	-1.220	-1.545	-1.272	-1.300
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.210	0.313	0.306	0.420	0.290	0.346	0.237	0.331	0.336

	(10) IA	(11) NH	(12) KY	(13) MD	(14) DE	(15) RI	(16) CT	(17) ME	(18) HI
Indep. prescriptive authority	0.542	0.538	0.570	1.376*	0.547	0.685	0.655	0.406	0.529
	(1.043)	(1.033)	(1.050)	(0.748)	(1.039)	(1.045)	(1.047)	(1.081)	(1.078)
Indep. Rx * underserved	-1.918*	-1.854*	-1.814*	-2.176**	-1.869*	-2.006**	-1.982*	-1.867*	-1.852*
	(0.975)	(0.976)	(1.025)	(0.996)	(0.968)	(0.975)	(0.990)	(0.995)	(1.007)
Observations	303,472	312,372	301,372	310,972	313,072	312,872	312,572	311,772	312,872
R^2	0.969	0.969	0.969	0.970	0.969	0.969	0.970	0.969	0.969
Mean dependent variable	28.85	28.68	28.91	28.63	28.63	28.64	28.73	28.69	28.61
$\beta_1 + \beta_2$	-1.377	-1.316	-1.244	-0.800	-1.322	-1.321	-1.327	-1.460	-1.324
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.283	0.302	0.361	0.486	0.300	0.301	0.299	0.269	0.299

Notes: Observations are at the county-quarter level and are population weighted. Standard errors are clustered by state. All regressions include county, quarter, and year fixed effects; additional controls include total population (or subgroup population), population density, percent male, percent black, percent aged 18 and under, percent aged 65 and over, percent with a high school degree or less, a quadratic in median income, percent in poverty, percent unemployed, and the number of practicing psychiatrists and primary care physicians per 100,000. A county is "underserved" if it had fewer than one psychiatrist per 30,000 people in 1990. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A12: Mental Health–Related Deaths: "Leave Out" Robustness

	(1) ID	(2) NV	(3) UT	(4) CO	(5) WY	(6) NE	(7) NM	(8) ND	(9) MN
Indep. prescriptive authority	-0.286	-1.111	-0.631	-0.698	-0.456	-0.127	-0.913	-0.357	-0.381
	(2.136)	(2.025)	(2.019)	(2.324)	(1.996)	(2.083)	(1.978)	(2.012)	(2.049)
Indep. Rx * underserved	-5.610**	-4.885***	-5.160**	-4.975**	-5.437***	-5.437***	-5.446***	-5.456***	-5.394***
	(2.102)	(1.745)	(1.960)	(1.975)	(1.932)	(1.874)	(1.989)	(1.965)	(2.012)
Observations	308,972	311,672	310,472	307,072	311,072	304,072	310,072	308,072	304,672
R^2	0.971	0.972	0.972	0.972	0.971	0.971	0.972	0.971	0.971
Mean dependent variable	51.68	51.06	51.58	51.87	51.56	51.74	51.65	51.59	52.08
$\beta_1 + \beta_2$	-5.896**	-5.996**	-5.791**	-5.674**	-5.892**	-5.565**	-6.359***	-5.813**	-5.776**
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.025	0.013	0.015	0.010	0.012	0.015	0.009	0.014	0.018

	(10) IA	(11) NH	(12) KY	(13) MD	(14) DE	(15) RI	(16) CT	(17) ME	(18) HI
Indep. prescriptive authority	-0.401	-0.439	-0.576	1.234	-0.470	-0.485	-0.420	-0.641	-0.692
	(2.039)	(2.016)	(2.013)	(1.375)	(2.027)	(1.999)	(2.023)	(2.131)	(2.051)
Indep. Rx * underserved	-5.495***	-5.378***	-5.261**	-6.740***	-5.427***	-5.361***	-5.444***	-5.471***	-5.168**
	(1.947)	(1.937)	(2.003)	(1.543)	(1.932)	(1.969)	(1.993)	(1.971)	(2.004)
Observations	303,472	312,372	301,372	310,972	313,072	312,872	312,572	311,772	312,872
R^2	0.971	0.971	0.971	0.972	0.971	0.971	0.972	0.971	0.972
Mean dependent variable	51.96	51.65	52.06	51.90	51.56	51.58	51.71	51.68	51.55
$\beta_1 + \beta_2$	-5.896**	-5.816**	-5.837**	-5.507***	-5.897**	-5.847**	-5.864**	-6.112**	-5.861**
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.012	0.013	0.018	0.009	0.012	0.013	0.012	0.013	0.012

Notes: Observations are at the county-quarter level and are population weighted. Standard errors are clustered by state. All regressions include county, quarter, and year fixed effects; additional controls include total population (or subgroup population), population density, percent male, percent black, percent aged 18 and under, percent aged 65 and over, percent with a high school degree or less, a quadratic in median income, percent in poverty, percent unemployed, and the number of practicing psychiatrists and primary care physicians per 100,000. A county is "underserved" if it had fewer than one psychiatrist per 30,000 people in 1990. * p < 0.10, ** p < 0.05, *** p < 0.01.

A.2 Self-Reported Mental Health

Table A13: Self-Reported Mental Health: Full Regression Results

	Days in Poor Mental Health			21+ Days in Poor Mental Health		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.169**	-0.116	-0.135	-0.005**	-0.003**	-0.002
	(0.066)	(0.072)	(0.130)	(0.002)	(0.001)	(0.004)
Indep. Rx * underserved		-0.171*	-0.274**		-0.006	-0.012*
		(0.090)	(0.133)		(0.004)	(0.006)
Male	-1.004***	-1.004***	-1.060***	-0.014***	-0.014***	-0.016***
	(0.027)	(0.027)	(0.043)	(0.001)	(0.001)	(0.001)
White	0.173**	0.173**	0.047	-0.001	-0.001	-0.003
	(0.074)	(0.074)	(0.138)	(0.002)	(0.002)	(0.003)
Black	-0.443***	-0.443***	-0.796***	-0.014***	-0.014***	-0.024***
	(0.136)	(0.136)	(0.211)	(0.004)	(0.004)	(0.005)
Hispanic	-0.552***	-0.552***	-1.029***	-0.017***	-0.017***	-0.029***
	(0.110)	(0.110)	(0.174)	(0.003)	(0.003)	(0.004)
Health insurance	-0.487***	-0.487***	-0.372***	-0.013***	-0.013***	-0.011***
	(0.040)	(0.040)	(0.050)	(0.001)	(0.001)	(0.001)
Married	-0.750***	-0.750***	-0.702***	-0.015***	-0.015***	-0.015***
	(0.022)	(0.022)	(0.030)	(0.000)	(0.000)	(0.001)
Age: 18 to 34	0.085**	0.085**	-0.011	-0.011***	-0.011***	-0.013***
	(0.039)	(0.039)	(0.072)	(0.001)	(0.001)	(0.002)
Age: 35 to 44	0.220***	0.220***	0.190***	-0.001	-0.001	-0.001
	(0.031)	(0.031)	(0.065)	(0.001)	(0.001)	(0.002)
Age: 55 to 64	-0.775***	-0.775***	-1.015***	-0.015***	-0.015***	-0.023***
	(0.036)	(0.036)	(0.065)	(0.001)	(0.001)	(0.002)
Age: 65+	-1.880***	-1.880***	-2.337***	-0.037***	-0.037***	-0.051***
	(0.044)	(0.044)	(0.069)	(0.001)	(0.001)	(0.002)
Education: high school or less	0.000	0.000		0.002***	0.002***	
	(0.021)	(0.021)		(0.001)	(0.001)	
Education: college or more	-0.595***	-0.595***		-0.014***	-0.014***	
	(0.020)	(0.020)		(0.000)	(0.000)	
Income: 1st quintile	1.311***	1.311***	1.164***	0.027***	0.027***	0.024***
	(0.032)	(0.032)	(0.052)	(0.001)	(0.001)	(0.002)
Income: 2nd quintile	0.635***	0.635***	0.427***	0.009***	0.009***	0.004***
	(0.019)	(0.019)	(0.025)	(0.001)	(0.001)	(0.001)
Income: 3rd quintile	0.308***	0.308***	0.062	0.000	0.000	-0.005***
	(0.032)	(0.032)	(0.040)	(0.001)	(0.001)	(0.001)
Income: 4th quintile	0.018	0.018	-0.202***	-0.006***	-0.006***	-0.011***
	(0.036)	(0.036)	(0.037)	(0.001)	(0.001)	(0.001)
Income: 5th quintile	-0.449***	-0.449***	-0.710***	-0.015***	-0.015***	-0.021***
	(0.046)	(0.046)	(0.073)	(0.001)	(0.001)	(0.002)
Employment: for wages	-0.388***	-0.388***	-0.478***	-0.012***	-0.012***	-0.012**
	(0.084)	(0.084)	(0.110)	(0.004)	(0.004)	(0.006)
Employment: self-employed	-0.276***	-0.276***	-0.302**	-0.008**	-0.008**	-0.006
	(0.095)	(0.095)	(0.142)	(0.004)	(0.004)	(0.006)
Employment: out of work	6.868***	6.868***	6.448***	0.183***	0.183***	0.174***
	(0.131)	(0.131)	(0.168)	(0.005)	(0.005)	(0.007)
Employment: homemaker	-0.215**	-0.215**	-0.079	-0.004	-0.004	0.003
	(0.083)	(0.083)	(0.137)	(0.003)	(0.003)	(0.005)
Employment: student	-0.208**	-0.208**	-0.437***	-0.020***	-0.020***	-0.022***
	(0.103)	(0.103)	(0.130)	(0.004)	(0.004)	(0.006)
Employment: retired	0.049	0.049	0.173	0.003	0.003	0.009*
	(0.075)	(0.075)	(0.115)	(0.003)	(0.003)	(0.005)
Observations	6,540,521	6,540,521	2,606,231	6,540,521	6,540,521	2,606,231
R^2	0.083	0.083	0.083	0.052	0.052	0.052
Mean dependent variable	3.36	3.36	3.91	0.06	0.06	0.07
$\beta_1 + \beta_2$		-0.287***	-0.409***		-0.009**	-0.014**
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.001	0.000		0.045	0.013

Notes: Observations are at the individual level with BRFSS sample weights. Standard errors are clustered by state. All regressions include state and year fixed effects; indicators denoting missing information for marital status, race, Hispanic, and health insurance are also included. For income, education, and employment, the omitted category is an indicator denoting missing information. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A14: Days in Poor Mental Health: Subgroup Analysis

A. Days in Poor Mental Health	(1) All	(2) Black	(3) Age 45-54	(4) Low Educ.	(5) Low Inc.	(6) Male	(7) Female
Indep. prescriptive authority	-0.116	0.041	-0.319***	-0.135	-0.240	-0.099	-0.130
	(0.072)	(0.098)	(0.098)	(0.130)	(0.195)	(0.062)	(0.102)
Indep. Rx * underserved	-0.171*	-0.636***	0.036	-0.274**	-0.021	-0.116	-0.228
	(0.090)	(0.106)	(0.100)	(0.133)	(0.193)	(0.073)	(0.148)
Observations	6,540,521	515,582	1,221,434	2,606,231	2,275,392	2,599,150	3,941,371
R^2	0.083	0.068	0.134	0.083	0.097	0.080	0.080
Mean dependent variable	3.36	3.81	3.70	3.91	4.39	2.80	3.89
$\beta_1 + \beta_2$	-0.287***	-0.595***	-0.283***	-0.409***	-0.261*	-0.216***	-0.357***
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.001	0.000	0.000	0.000	0.064	0.003	0.007

B. 21+ Days in Poor Mental Health	(1) All	(2) Black	(3) Age 45-54	(4) Low Educ.	(5) Low Inc.	(6) Male	(7) Female
Indep. prescriptive authority	-0.003**	0.002	-0.010***	-0.002	-0.005	-0.003**	-0.003
	(0.001)	(0.002)	(0.003)	(0.004)	(0.005)	(0.001)	(0.002)
Indep. Rx * underserved	-0.006	-0.017***	-0.000	-0.012*	-0.003	-0.003	-0.009
	(0.004)	(0.004)	(0.005)	(0.006)	(0.006)	(0.003)	(0.007)
Observations	6,540,521	515,582	1,221,434	2,606,231	2,275,392	2,599,150	3,941,371
R^2	0.052	0.039	0.091	0.052	0.062	0.052	0.051
Mean dependent variable	0.06	0.07	0.07	0.07	0.08	0.05	0.07
$\beta_1 + \beta_2$	-0.009**	-0.016***	-0.010**	-0.014**	-0.008	-0.006**	-0.011*
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.045	0.000	0.014	0.013	0.105	0.017	0.067

Notes: Observations are at the individual level with BRFSS sample weights. Standard errors are clustered by state. All regressions include state and year fixed effects; additional controls include indicators for age groups, education groups, income quintiles, and employment status and indicators denoting whether the respondent is male, white, black, Hispanic, married, and has health insurance. A state is "underserved" if the population-weighted average of binary, underserved categorizations across all counties in the state is less than the median across all states in 1990. "Low Educ." is defined as having a high school degree or less; "Low Inc." is defined as being in the bottom two quintiles of income. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A15: Self-Reported Mental Health: Alternative Underserved Measures

A. Time-varying	Days in Poor Mental Health			21+ Days in Poor Mental Health		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.169**	-0.128*	-0.168	-0.005**	-0.003**	-0.003
	(0.066)	(0.075)	(0.126)	(0.002)	(0.002)	(0.003)
Underserved		0.056	0.106		0.002	0.004
		(0.118)	(0.174)		(0.002)	(0.004)
Indep. Rx * underserved		-0.168*	-0.210		-0.006*	-0.009**
		(0.096)	(0.132)		(0.003)	(0.004)
Observations	6,540,521	6,540,521	2,606,231	6,540,521	6,540,521	2,606,231
R^2	0.083	0.083	0.083	0.052	0.052	0.052
Mean dependent variable	3.36	3.36	3.91	0.06	0.06	0.07

B. Continuous	Days in Poor Mental Health			21+ Days in Poor Mental Health		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.169**	-0.059	-0.062	-0.005**	-0.001	0.002
	(0.066)	(0.085)	(0.150)	(0.002)	(0.002)	(0.005)
Indep. Rx * underserved		-0.483**	-0.700**		-0.018	-0.032**
		(0.232)	(0.325)		(0.012)	(0.016)
Observations	6,540,521	6,540,521	2,606,231	6,540,521	6,540,521	2,606,231
R^2	0.083	0.083	0.083	0.052	0.052	0.052
Mean dependent variable	3.36	3.36	3.91	0.06	0.06	0.07
$\beta_1 + \beta_2$		-0.543***	-0.762***		-0.018*	-0.030**
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.005	0.002		0.086	0.023

Notes: Observations are at the individual level with BRFSS sample weights. Standard errors are clustered by state. All regressions include state and year fixed effects; additional controls include indicators for age groups, education groups, income quintiles, and employment status and indicators denoting whether the respondent is male, white, black, Hispanic, married, and has health insurance. In Panel A, a state is "underserved" if the population-weighted average of binary, underserved categorizations across all counties in the state is less than the median across all states in a given year (binary). In Panel B, "underserved" is the population-weighted average of binary, underserved categorizations across all counties in the state in 1990 (continuous between zero and one). "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A16: Self-Reported Mental Health: Alternative Controls

A. No Controls	Days in Poor Mental Health			21+ Days in Poor Mental Health		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.240***	-0.195**	-0.224	-0.006***	-0.005**	-0.004
	(0.079)	(0.092)	(0.159)	(0.002)	(0.002)	(0.004)
Indep. Rx * underserved		-0.142	-0.236*		-0.006	-0.011**
		(0.086)	(0.133)		(0.004)	(0.005)
Observations	6,545,759	6,545,759	2,606,851	6,545,759	6,545,759	2,606,851
R^2	0.003	0.003	0.005	0.002	0.002	0.003
Mean dependent variable	3.36	3.36	3.91	0.06	0.06	0.07
$\beta_1 + \beta_2$		-0.338***	-0.460***		-0.010***	-0.015***
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.000	0.000		0.009	0.001

B. Only Demographic Controls	Days in Poor Mental Health			21+ Days in Poor Mental Health		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.234***	-0.187**	-0.224	-0.006***	-0.004**	-0.004
	(0.079)	(0.091)	(0.159)	(0.002)	(0.002)	(0.004)
Indep. Rx * underserved		-0.149*	-0.252*		-0.006	-0.011**
		(0.083)	(0.132)		(0.004)	(0.005)
Observations	6,545,759	6,545,759	2,606,851	6,545,759	6,545,759	2,606,851
R^2	0.015	0.015	0.020	0.005	0.005	0.009
Mean dependent variable	3.36	3.36	3.91	0.06	0.06	0.07
$\beta_1 + \beta_2$		-0.336***	-0.476***		-0.010***	-0.015***
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.000	0.000		0.010	0.001

C. Additional State-Level Controls	Days in Poor Mental Health			21+ Days in Poor Mental Health		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.179***	-0.104	-0.100	-0.004**	-0.002*	-0.000
	(0.061)	(0.069)	(0.105)	(0.002)	(0.001)	(0.002)
Indep. Rx * underserved		-0.231**	-0.352**		-0.008	-0.015**
		(0.109)	(0.136)		(0.005)	(0.006)
Observations	6,540,521	6,540,521	2,606,231	6,540,521	6,540,521	2,606,231
R^2	0.083	0.083	0.083	0.052	0.052	0.052
Mean dependent variable	3.36	3.36	3.91	0.06	0.06	0.07
$\beta_1 + \beta_2$		-0.335***	-0.453***		-0.010**	-0.015**
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.001	0.000		0.046	0.012

Notes: Observations are at the individual level with BRFSS sample weights. Standard errors are clustered by state. All regressions include state and year fixed effects. Regressions in Panel B also include indicators for age groups and indicators denoting whether the respondent is male, white, black, or Hispanic. Regressions in Panel C include all controls from our main specification in addition to state unemployment rates, state beer taxes, and indicators denoting whether the state requires universal background checks and waiting periods for handgun and firearm purchases, expanded Medicaid, allows medical marijuana, allows recreational marijuana, implemented a PDMP, and implemented a "must-access" PDMP. Data sources for these additional state-level controls are listed in the notes for Table A3. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A17: Self-Reported Mental Health: Adjusting Sampling Weights for 2011 Redesign

	Days in Poor Mental Health			21+ Days in Poor Mental Health		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.170**	-0.110	-0.128	-0.005**	-0.003*	-0.001
	(0.071)	(0.079)	(0.138)	(0.002)	(0.001)	(0.004)
Indep. Rx * underserved		-0.189*	-0.292*		-0.007	-0.013*
		(0.103)	(0.149)		(0.005)	(0.006)
Observations	6,540,521	6,540,521	2,606,231	6,540,521	6,540,521	2,606,231
R^2	0.082	0.082	0.081	0.051	0.051	0.051
Mean dependent variable	3.34	3.34	3.87	0.06	0.06	0.07
$\beta_1 + \beta_2$		-0.299***	-0.419***		-0.009**	-0.014**
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.002	0.001		0.049	0.017

Notes: Observations are at the individual level with adjusted BRFSS sample weights. Following **?**, we reconstruct each individual's sample weight as the fraction of their assigned BRFSS sample weight over the sum of all individuals' sample weights for that year. Standard errors are clustered by state. All regressions include state and year fixed effects; additional controls include indicators for age groups, education groups, income quintiles, and employment status and indicators denoting whether the respondent is male, white, black, Hispanic, married, and has health insurance. A state is "underserved" if the population-weighted average of binary, underserved categorizations across all counties in the state is less than the median across all states in 1990. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A18: Self-Reported Mental Health: State-Specific Linear Time Trends

	Days in Poor Mental Health			21+ Days in Poor Mental Health		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample	Full Sample	Low Educ.	Full Sample	Full Sample	Low Educ.
Indep. prescriptive authority	-0.006	-0.063	-0.015	0.001	-0.000	0.001
	(0.111)	(0.156)	(0.161)	(0.002)	(0.002)	(0.002)
Indep. Rx * underserved		0.152	0.023		0.002	-0.003
		(0.189)	(0.235)		(0.003)	(0.004)
Observations	6,540,521	6,540,521	2,606,231	6,540,521	6,540,521	2,606,231
R^2	0.084	0.084	0.083	0.053	0.053	0.053
Mean dependent variable	3.36	3.36	3.91	0.06	0.06	0.07
$\beta_1 + \beta_2$		0.089	0.007		0.002	-0.001
P-value (F-test: $\beta_1 + \beta_2 = 0$)		0.419	0.968		0.347	0.732

Notes: Observations are at the individual level with BRFSS sample weights. Standard errors are clustered by state. All regressions include state and year fixed effects and state-specific time trends; additional controls include indicators for age groups, education groups, income quintiles, and employment status and indicators denoting whether the respondent is male, white, black, Hispanic, married, and has health insurance. A state is "underserved" if the population-weighted average of binary, underserved categorizations across all counties in the state is less than the median across all states in 1990. "Low Educ." is defined as having a high school degree or less. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A19: Days in Poor Mental Health: "Leave Out" Robustness

	(1) ID	(2) NV	(3) UT	(4) CO	(5) WY	(6) NE	(7) NM	(8) ND	(9) MN
Indep. prescriptive authority	-0.116	-0.077	-0.117	-0.082	-0.116	-0.116	-0.115	-0.116	-0.121
	(0.072)	(0.070)	(0.073)	(0.089)	(0.072)	(0.073)	(0.073)	(0.072)	(0.073)
Indep. Rx * underserved	-0.220**	-0.212**	-0.171*	-0.206**	-0.171*	-0.180*	-0.171*	-0.190**	-0.155
	(0.087)	(0.088)	(0.090)	(0.102)	(0.090)	(0.095)	(0.090)	(0.092)	(0.112)
Observations	6,430,612	6,471,578	6,398,983	6,387,373	6,443,881	6,329,702	6,420,995	6,459,761	6,387,329
R^2	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083
Mean dependent variable	3.36	3.36	3.36	3.37	3.36	3.37	3.36	3.36	3.37
$\beta_1 + \beta_2$	-0.336***	-0.288***	-0.287***	-0.288***	-0.287***	-0.297***	-0.287***	-0.306***	-0.276**
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.000	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.012

	(10) IA	(11) NH	(12) KY	(13) MD	(14) DE	(15) RI	(16) CT	(17) ME	(18) HI
Indep. prescriptive authority	-0.116	-0.116	-0.118	-0.141	-0.114	-0.118	-0.129*	-0.147**	-0.114
	(0.073)	(0.073)	(0.073)	(0.091)	(0.073)	(0.074)	(0.073)	(0.067)	(0.077)
Indep. Rx * underserved	-0.171*	-0.171*	-0.105	-0.145	-0.173*	-0.169*	-0.155*	-0.139	-0.172*
	(0.090)	(0.090)	(0.081)	(0.106)	(0.091)	(0.092)	(0.091)	(0.086)	(0.094)
Observations	6,427,817	6,445,001	6,384,413	6,380,399	6,462,560	6,445,858	6,419,326	6,431,572	6,428,946
R^2	0.083	0.083	0.083	0.084	0.083	0.083	0.083	0.083	0.083
Mean dependent variable	3.37	3.36	3.35	3.37	3.36	3.36	3.37	3.36	3.37
$\beta_1 + \beta_2$	-0.287***	-0.287***	-0.222***	-0.285***	-0.287***	-0.287***	-0.284***	-0.286***	-0.286***
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.001	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.001

Notes: Observations are at the individual level with BRFSS sample weights. Standard errors are clustered by state. All regressions include state and year fixed effects; additional controls include indicators for age groups, education groups, income quintiles, and employment status and indicators denoting whether the respondent is male, white, black, Hispanic, married, and has health insurance. A state is "underserved" if the population-weighted average of binary, underserved categorizations across all counties in the state is less than the median across all states in 1990. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A20: 21+ Days in Poor Mental Health: "Leave Out" Robustness

	(1) ID	(2) NV	(3) UT	(4) CO	(5) WY	(6) NE	(7) NM	(8) ND	(9) MN
Indep. prescriptive authority	-0.003**	-0.003*	-0.003**	-0.002	-0.003**	-0.003**	-0.003**	-0.003**	-0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Indep. Rx * underserved	-0.008	-0.006	-0.006	-0.007	-0.006	-0.006	-0.006	-0.007	-0.008
	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)	(0.006)
Observations	6,430,612	6,471,578	6,398,983	6,387,373	6,443,881	6,329,702	6,420,995	6,459,761	6,387,329
R^2	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052
Mean dependent variable	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
$\beta_1 + \beta_2$	-0.011**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009*	-0.009**	-0.010**	-0.011*
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.028	0.045	0.045	0.044	0.046	0.069	0.046	0.044	0.075

	(10) IA	(11) NH	(12) KY	(13) MD	(14) DE	(15) RI	(16) CT	(17) ME	(18) HI
Indep. prescriptive authority	-0.003**	-0.003**	-0.003**	-0.003**	-0.003**	-0.003*	-0.003**	-0.003***	-0.003*
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Indep. Rx * underserved	-0.006	-0.006	-0.001	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006
	(0.004)	(0.004)	(0.002)	(0.005)	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)
Observations	6,427,817	6,445,001	6,384,413	6,380,399	6,462,560	6,445,858	6,419,326	6,431,572	6,428,946
R^2	0.052	0.052	0.051	0.052	0.052	0.052	0.052	0.052	0.052
Mean dependent variable	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
$\beta_1 + \beta_2$	-0.009**	-0.009**	-0.004***	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**
P-value (F-test: $\beta_1 + \beta_2 = 0$)	0.045	0.046	0.009	0.045	0.045	0.046	0.046	0.045	0.046

Notes: Observations are at the individual level with BRFSS sample weights. Standard errors are clustered by state. All regressions include state and year fixed effects; additional controls include indicators for age groups, education groups, income quintiles, and employment status and indicators denoting whether the respondent is male, white, black, Hispanic, married, and has health insurance. A state is "underserved" if the population-weighted average of binary, underserved categorizations across all counties in the state is less than the median across all states in 1990. * p < 0.10, ** p < 0.05, *** p < 0.01.