Supplemental Appendix

Medicaid Expansion's Spillover to the Criminal Justice System: Evidence from Six Urban Counties

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	Inpatient		Residential	Outpatient			
	Psychiatric	Detoxification	Psychiatric	Individual therapy	Group therapy	Buprenorphine	Methadone
Midwest							
MN	Yes		Yes	Yes		Yes	
WI	\$3/day; \$75/stay		No	\$0.50 – \$3 copay		Copay of up to \$12/month	
Southwest							
AZ		Yes	Yes	Yes	Yes	Yes	Yes
ТХ	15-day max	Requires prior authorization	No	30/yea	ar	Yes	Only at OTP
Southeast							
LA		Yes	No	Yes		\$0.50 – \$3 copay	No
MS	Requires pri	or authorization	No	36/year	24/year	\$3 copay & prior	authorization

A1. Sample state differences in Medicaid coverage of behavioral health services

SOURCES/NOTES All data comes from the Kaiser Family Foundation Medicaid Behavioral Health Services Database. Available at: <u>https://www.kff.org/data-collection/medicaid-behavioral-health-services-database/</u>.

	Change in	n intercept	Change in slope		
	Coefficient	95% CI	Coefficient	95% CI	
Midwest					
Month 7	-0.71	-2.28, 0.85	-0.07	-0.13, -0.01	
Month 10	-0.88	-2.59, 0.82	-0.09	-0.14, -0.00	
Month 13	-0.73	-3.70, 2.23	-0.09	-0.18, -0.00	
Month 18	-0.87	-0.38, -1.12	-0.03	-0.04, -0.01	
Southwest					
Month 7	-0.91	-1.93, 0.10,	-0.07	-0.11, -0.03	
Month 10	-0.35	-1.55, 0.84	-0.08	-0.12, -0.04	
Month 13	-0.97	-3.09, 1.15	-0.21	-0.27, -0.15	
Month 18	-2.00	-2.44, -1.56	-0.07	-0.08, -0.06	
Southeast					
Month 7	-0.28	-1.18, 1.13	-0.02	-0.08, 0.03	
Month 10	-0.03	-1.69, 1.63	-0.03	-0.09, 0.02	
Month 13	-0.34	-0.70, 0.66	0.08	-0.02, 0.17	
Month 18	0.04	-0.50, 0.58	0.07	0.06, 0.09	

A2. Falsification test of relationship between Medicaid expansion and the probability of re-arrest

Sources/Notes: SOURCES Authors' analyses of arrest data from county jails. Observations are at the person-month level NOTES Estimates are from comparative interrupted time series regressions. Regressions for the likelihood of re-arrest are linear probability models. Regressions for the number of arrests are Poisson regression models. Each full sample regression is adjusted with gender and prior contact with the criminal justice system (in the pre-period) and an interaction between these variables and the running monthly counter to account for a time-varying relationship between the outcome and the covariates. The Midwest pair also adjusts for whether the arrest was a felony or misdemeanor and the interaction of this variable with the monthly counter. The Southwest county pair also adjusts for whether the arrest was for a parole violation and for whether the arrestee was Hispanic/Latino plus the interactions of these two variables with the monthly counter. Regressions using the Southeast county pair also adjust for whether the arrest of this variable with the monthly time trend. [§] denotes that p-value is not statistically significant after Bonferroni adjustment for multiple comparisons.

	Change	Change in intercept		Change in slope		
	Coefficient	95% CI	Coefficient	95% CI		
Midwest						
Month 7	0.003	-0.05, 0.06	-0.0001	-0.002, 0.002		
Month 10	-0.004	-0.06, 0.14	-0.001	-0.002, 0.001		
Month 13	0.02	-0.08, 0.06	-0.0001	-0.004, 0.0003		
Month 18	-0.04	-0.06, -0.02	-0.001	-0.002, -0.001		
Southwest						
Month 7	0.03	-0.02, 0.08	0.003	0.005, 0.001		
Month 10	0.04	-0.01, 0.08	0.002	0.0005, 0.004		
Month 13	0.00	-0.07, 0.07	-0.004	-0.006, -0.002		
Month 18	-0.08	-0.10, -0.06	-0.003	-0.003, -0.002		
Southeast						
Month 7	0.01	-0.04, 0.07	0.0002	-0.002, 0.002		
Month 10	-0.01	0.01, 0.05	-0.002	-0.004, -0.0004		
Month 13	-0.07	-0.06, 0.04	0.003	0.001, 0.005		
Month 18	-0.004	-0.02, 0.01	0.004	0.003, 0.004		

A3. Falsification test of relationship between Medicaid expansion and the number of arrests to three months prior to Medicaid expansion

Sources/Notes: SOURCES Authors' analyses of arrest data from county jails. Observations are at the person-month level NOTES Estimates are from comparative interrupted time series regressions. Regressions for the likelihood of re-arrest are linear probability models. Regressions for the number of arrests are Poisson regression models. Each full sample regression is adjusted with gender and prior contact with the criminal justice system (in both the pre- and post-period) and an interaction between these variables and the running monthly counter to account for a time-varying relationship between the outcome and the covariates. The Midwest pair also adjusts for whether the arrest was a felony or misdemeanor and the interaction of this variable with the monthly counter. The Southwest county pair also adjusts for whether the arrest was for a parole violation and for whether the arrestee was Hispanic/Latino plus the interactions of these two variables with the monthly counter. Regressions using the Southeast county pair also adjust for whether the arrest of the southeast county pair also adjust for monthly time trend. [§] denotes that p-value is not statistically significant after Bonferroni adjustment for multiple comparisons.

	Probability	of Re-arrest	Number of Arrests		
	Change in Level	Change in Slope	Change in Level	Change in Slope	
Midwest					
24 months post	-0.87	-0.03	-0.04	-0.001	
18 months post	-0.96	-0.01	-0.04	-0.001	
Southwest					
24 months post	-2.00	-0.07	-0.08	-0.003	
18 months post	-1.84	-0.07	-0.07	-0.003	
Southeast					
24 months post	0.04	0.07	-0.005	0.004	
18 months post	0.17	0.05	0.14	0.004	

A4. Comparison of estimates with full post-period (24 months) compared to truncated post-period (18 months)

Sources/Notes: SOURCES Authors' analyses of arrest data from county jails. Observations are at the person-month level NOTES Estimates are from comparative interrupted time series regressions. Regressions for the likelihood of re-arrest are linear probability models. Regressions for the number of arrests are Poisson regression models. Each full sample regression is adjusted with gender and prior contact with the criminal justice system (in both the pre- and post-period) and an interaction between these variables and the running monthly counter to account for a time-varying relationship between the outcome and the covariates. The Midwest pair also adjusts for whether the arrest was a felony or misdemeanor and the interaction of this variable with the monthly counter. The Southwest county pair also adjusts for whether the arrest was for a parole violation and for whether the arrestee was Hispanic/Latino plus the interactions of these two variables with the monthly counter. Regressions using the Southeast county pair also adjust for whether the arrest.

A5. Comparison of individual-level and county-level CITS standard errors for estimates of the change in the probability of re-arrests and the number of arrests

	Probability of	f Re-arrest	Number of Arrests		
	Change in Intercept	Change in Slope	Change in Intercept	Change in Slope	
Midwest					
Arrestee-level	0.11	0.007	0.038	0.002	
County-level	0.57*	0.03*	0.006	0.0003	
Southwest					
Arrestee-level	0.09	0.005	0.03	0.001	
County-level	0.69	0.03	0.02	0.001	
Southeast					
Arrestee-level	0.13	0.008	0.51	0.003	
County-level	0.44	0.02	0.01	0.001	

Sources/Notes: SOURCES Authors' analyses of arrest data from county jails. NOTES Estimates are from comparative interrupted time series regressions. Regressions for the likelihood of re-arrest are linear probability models. Regressions for the number of arrests are ordinary least squares regression models. The Midwest pair adjusts for whether the arrest was a felony or misdemeanor and the interaction of this variable with the monthly counter. The Southwest county pair also adjusts for whether the arrest was for a parole violation and for whether the arrestee was Hispanic/Latino plus the interactions of these two variables with the monthly counter. Regressions using the Southeast county pair also adjust for whether the arrestee the arrestee was African-American and the interaction of this variable with the monthly time trend. *denotes that p-value becomes non-significant at the county-level analysis compared to the arrestee-level analysis.