

A1. Change in average monthly health care use following the transition to Dual enrollment among adults with psychiatric disabilities, Missouri 2004 - 2007

MISSOURI	A	B	C	D	E
Person-months (N)	175711	175711	110048	162093	167715
ANY USE (β)					
Outpatient, all cause	0.246**	0.246**	0.177**	0.248**	0.255**
Outpatient, MHSUD	0.0657**	0.0684**	0.0684**	0.0804**	0.0643**
Emergency department, all cause	0.215**	0.236**	0.254**	0.230**	0.223**
Emergency department, MHSUD	0.216**	0.250**	0.286**	0.212**	0.202**
Inpatient admission, all cause	0.102*	0.106	0.180**	0.108*	0.106*
Inpatient admission, MHSUD	0.182**	0.244**	0.202**	0.193**	0.169**
QUANTITY OF USE (β)					
Outpatient visits, all cause	0.0697**	0.0579**	0.0431**	0.0871**	0.0678**
Outpatient visits, MHSUD	-0.00916	-0.015	-0.0199	0.0215	-0.0096
Emergency department visits, all cause	0.269**	0.272**	0.326**	0.289**	0.270**
Emergency department visits, MHSUD	0.280**	0.299**	0.339**	0.253**	0.261**
Inpatient admissions, all cause	0.105*	0.121*	0.182**	0.0885	0.105*
Inpatient admissions, MHSUD	0.166**	0.228**	0.177**	0.165*	0.155*
Inpatient days, all cause	0.438**	0.395**	0.439**	0.407**	0.324**
Inpatient days, MHSUD	0.595**	0.496**	0.520**	0.559**	0.486**
Enrollment duration, pre and post transition	X	X	X	X	X
Person-level demographics	X	X	X	X	X
Transition year fixed effects	X	X	X	X	X
Include only subject with a diagnosis of bipolar disorder or schizophrenia			X		
Exclude transition months (-1,0,+1)				X	
Exclude subjects with inpatient stay > 3months pre or post transition					X
Include quadratic terms for pre and post trends		X			

Authors' calculations using merged Medicare and Medicaid claims and enrollment data. Binomial and gamma-log GEE coefficients are presented for "any use" and "quantity of use" outcomes respectively.

MHSUD refers to mental health or substance use diagnosis.

All models include age, sex, race, months observed pre-transition, months observed post-transition and transition year fixed effects. Gamma-log models include all beneficiaries yielding estimates of unconditional use.

*p < 0.05, **p < 0.01

A2. Change in average monthly health care use following the transition to Dual enrollment among adults with psychiatric disabilities, South Carolina 2004 - 2007

South Carolina	A	B	C	D	E
Person-months (N)	52899	52899	33079	53591	51988
ANY USE (β)					
Outpatient, all cause	0.0980*	0.0428	0.0843	0.198**	0.103*
Outpatient, MHSUD	0.0506	0.00711	0.07	0.105*	0.0517
Emergency department, all cause	0.0958	0.109	0.0932	0.0755	0.0971
Emergency department, MHSUD	0.161	0.0755	0.246	0.125	0.153
Inpatient admission, all cause	0.246**	0.264*	0.350**	0.126	0.254**
Inpatient admission, MHSUD	0.357**	0.329	0.540**	0.172	0.342*
QUANTITY OF USE (β)					
Outpatient visits, all cause	-0.00234	-0.0173	-0.028	0.0492	-0.00121
Outpatient visits, MHSUD	0.0202	0.0036	0.0153	-0.0381	0.0213
Emergency department visits, all cause	0.0905	0.116	0.07	0.0511	0.0924
Emergency department visits, MHSUD	0.047	-0.0925	0.0845	0.0913	0.0485
Inpatient admissions, all cause	0.260**	0.268*	0.295**	0.144	0.268**
Inpatient admissions, MHSUD	0.374**	0.337	0.540**	0.169	0.366**
Inpatient days, all cause	0.542**	0.588**	0.892**	0.350*	0.573**
Inpatient days, MHSUD	0.870**	0.978**	1.090**	0.456	0.907**
Enrollment duration, pre and post transition	X	X	X	X	X
Person-level demographics	X	X	X	X	X
Transition year fixed effects	X	X	X	X	X
Include only subject with a diagnosis of bipolar disorder or schizophrenia			X		
Exclude transition months (-1,0,+1)				X	
Exclude subjects with inpatient stay > 3months pre or post transition					X
Include quadratic terms for pre and post trends		X			

Authors' calculations using merged Medicare and Medicaid claims and enrollment data. Binomial and gamma-log GEE coefficients are presented for "any use" and "quantity of use" outcomes respectively.

MHSUD refers to mental health or substance use diagnosis.

All models include age, sex, race, months observed pre-transition, months observed post-transition and transition year fixed effects. Gamma-log models include all beneficiaries yielding estimates of unconditional use.

*p < 0.05, **p < 0.01

A3. Change in average monthly health care use following the transition to dual enrollment among adults with psychiatric disabilities, Missouri 2004-2007.

Complete regression results for preferred specification.

	BINARY OUTCOMES						COUNT/CONTINUOUS OUTCOMES							
	Outpatient	Outpatient MHSUD	ED	ED MHSUD	Inpatient	Inpatient MHSUD	Outpatient	Outpatient MHSUD	ED	ED MHSUD	Inpatient Admission	Inpatient Admission MHSUD	Inpatient Days	Inpatient MHSUD days
Baseline trend	0.00144 0.002	0.00917** 0.003	-0.00397 0.003	-0.0134* 0.006	-0.00957* 0.004	-0.0210** 0.006	0.00202 0.002	0.00412 0.003	-0.0024 0.003	-0.0138* 0.006	-0.00836* 0.004	-0.0206** 0.006	-0.0107 0.008	-0.0186 0.012
Dual Coverage	0.246** 0.022	0.0657** 0.021	0.215** 0.029	0.216** 0.056	0.102* 0.042	0.182** 0.06	0.0697** 0.013	-0.00916 0.016	0.269** 0.032	0.280** 0.061	0.105* 0.041	0.166** 0.061	0.438** 0.08	0.595** 0.124
Trend change	-0.00343 0.003	-0.0117** 0.003	0.00536 0.003	0.0148* 0.006	0.00937* 0.004	0.0208** 0.006	-0.00640** 0.002	-0.0109** 0.003	0.0049 0.004	0.0161* 0.006	0.00795 0.004	0.0212** 0.006	0.0173* 0.008	0.0313* 0.013
Transition year, 2005	-0.195** 0.029	-0.193** 0.033	0.0855** 0.031	0.0504 0.058	0.0655 0.045	0.105 0.062	-0.0838* 0.033	-0.113* 0.049	0.0683 0.038	0.0521 0.067	0.0388 0.045	0.102 0.066	0.0247 0.085	0.0562 0.131
Transition year, 2006	-0.0432 0.029	0.0449 0.032	-0.0274 0.031	-0.115* 0.057	0.0128 0.044	-0.101 0.061	0.116** 0.032	0.166** 0.047	-0.00309 0.038	-0.121 0.066	0.00351 0.045	-0.0648 0.066	0.351** 0.084	0.325* 0.13
Transition year, 2007	-0.137** 0.04	-0.0344 0.045	0.000949 0.045	-0.122 0.083	0.0659 0.062	-0.0227 0.087	0.0364 0.045	0.0715 0.067	-0.0162 0.053	-0.127 0.093	0.015 0.063	-0.0291 0.092	0.136 0.118	0.106 0.183
Male	-0.264** 0.017	-0.106** 0.019	-0.232** 0.019	0.0276 0.034	0.0237 0.026	0.160** 0.036	-0.0258 0.019	0.0648* 0.029	-0.191** 0.022	0.0887* 0.039	0.00857 0.026	0.179** 0.038	0.151** 0.049	0.253** 0.076
Race, Black	-0.369** 0.023	-0.287** 0.027	0.0186 0.025	0.0757 0.046	0.191** 0.034	0.104* 0.049	-0.138** 0.026	-0.0833* 0.04	0.0607* 0.03	0.0445 0.053	0.221** 0.036	0.0719 0.053	0.381** 0.067	0.329** 0.104
Race, Other	-0.085 0.064	-0.0627 0.073	0.0185 0.07	-0.0715 0.131	-0.178 0.11	-0.349* 0.16	-0.270** 0.074	-0.349** 0.11	0.0204 0.085	-0.18 0.148	-0.179 0.1	-0.396** 0.147	-0.331 0.188	-0.503 0.291
Age as of January 1, 2004	-0.00862** 0.001	-0.0193** 0.001	-0.0151** 0.001	-0.0298** 0.002	0.00197 0.001	-0.0221** 0.002	-0.0109** 0.001	-0.0158** 0.001	-0.0147** 0.001	-0.0326** 0.002	0.00163 0.001	-0.0231** 0.002	0.00624** 0.002	-0.00689 0.004
Number of months observed pre-transition	0.0118** 0.002	0.0112** 0.002	-0.0127** 0.002	-0.0139** 0.004	-0.0126** 0.003	-0.0227** 0.005	0.00906** 0.002	0.00939** 0.004	-0.0102** 0.003	-0.0175** 0.005	-0.0110** 0.003	-0.0235** 0.005	0.00324 0.006	0.000787 0.01
Number of months observed post-transition	0.00502** 0.001	0.00263* 0.001	-0.00273** 0.001	-0.00450* 0.002	-0.00202 0.001	-0.00741** 0.002	0.00998** 0.001	0.0105** 0.002	-0.00388** 0.001	-0.00530* 0.002	-0.00278 0.001	-0.00780** 0.002	0.00312 0.003	-0.00127 0.004
Constant	0.806** 0.069	0.210** 0.077	-1.113** 0.079	-1.980** 0.146	-2.750** 0.112	-2.209** 0.154	0.879** 0.072	0.567** 0.106	-1.047** 0.093	-1.741** 0.165	-2.724** 0.111	-2.142** 0.164	-1.391** 0.211	-1.286** 0.327
N	175711	175711	175711	175711	175711	175711	175711	175711	175711	175711	175711	175711	175711	175711

Authors' calculations using merged Medicare and Medicaid claims and enrollment data. Reference categories are: Transition year- 2004; Race- White. Unexponentiated regression coefficients from GEE models and clustered standard errors are presented. Gamma-log models include all beneficiaries yielding estimates of unconditional use. Predicted estimates are calculated using the regression coefficients. *p<0.05; **p<0.01

A4. Change in average monthly health care use following the transition to dual enrollment among adults with psychiatric disabilities, South Carolina 2004-2007.

Complete regression results for preferred specification.

	BINARY OUTCOMES						COUNT/CONTINUOUS OUTCOMES							
	Outpatient	Outpatient MHSUD	ED	ED MHSUD	Inpatient	Inpatient MHSUD	Outpatient	Outpatient MHSUD	ED	ED MHSUD	Inpatient Admission	Inpatient Admission MHSUD	Inpatient Days	Inpatient MHSUD days
Baseline trend	0.0144** 0.004	0.00764 0.005	0.00398 0.006	-0.0109 0.012	-0.00021 0.009	-0.00336 0.014	0.0130** 0.005	0.012 0.007	-0.000482 0.007	-0.00578 0.013	-0.000657 0.009	-0.00611 0.014	0.0122 0.016	-0.00431 0.025
Dual Coverage	0.0980* 0.04	0.0506 0.041	0.0958 0.054	0.161 0.114	0.246** 0.086	0.357** 0.135	-0.00234 0.025	0.0202 0.036	0.0905 0.061	0.047 0.129	0.260** 0.087	0.374** 0.14	0.542** 0.162	0.870** 0.244
Trend change	-0.0143** 0.005	-0.0123* 0.005	-0.00496 0.006	0.00241 0.012	-0.0057 0.01	-0.0101 0.015	-0.0152** 0.005	-0.016 0.009	0.00398 0.007	-0.00202 0.014	-0.00476 0.009	-0.00761 0.015	-0.0251 0.017	-0.0162 0.026
Transition year, 2005	-0.160** 0.048	-0.0392 0.053	0.0752 0.059	-0.0699 0.121	0.116 0.09	0.149 0.135	-0.0588 0.074	0.113 0.131	0.0984 0.074	-0.136 0.135	0.111 0.093	0.153 0.145	0.227 0.165	0.101 0.248
Transition year, 2006	0.241** 0.054	0.0145 0.057	0.0612 0.065	-0.055 0.128	0.17 0.101	-0.0659 0.15	0.0658 0.079	0.104 0.138	0.056 0.082	0.139 0.15	0.155 0.103	0.0385 0.161	0.214 0.183	-0.0171 0.275
Transition year, 2007	0.123 0.076	-0.0168 0.083	0.251** 0.093	0.0547 0.185	0.409** 0.144	0.545** 0.209	0.201 0.114	0.505* 0.2	0.267* 0.117	0.13 0.215	0.391** 0.148	0.564* 0.231	0.646* 0.262	0.513 0.394
Male	-0.279** 0.029	-0.124** 0.031	-0.244** 0.036	0.219** 0.07	-0.104 0.054	0.314** 0.079	0.054 0.045	0.168* 0.079	-0.182** 0.044	0.275** 0.08	-0.152** 0.055	0.337** 0.086	0.00631 0.098	0.466** 0.147
Race, Black	-0.0147 0.028	0.164** 0.03	-0.0412 0.034	0.0659 0.069	0.0609 0.052	-0.0873 0.08	0.229** 0.043	0.452** 0.077	-0.0247 0.043	0.0253 0.078	0.113* 0.054	-0.129 0.084	0.153 0.095	0.0449 0.143
Race, Other	0.195 0.107	0.536** 0.109	-0.418** 0.148	-0.508 0.327	-0.346 0.231	-0.268 0.327	0.317 0.162	0.782** 0.288	-0.525** 0.16	-0.481 0.291	-0.397* 0.2	-0.472 0.312	-0.553 0.354	-0.823 0.532
Age as of January 1, 2004	-0.00374** 0.001	-0.0195** 0.001	-0.00536** 0.002	-0.0241** 0.003	0.000983 0.002	-0.0172** 0.004	-0.00944** 0.002	-0.0163** 0.004	-0.00798** 0.002	-0.0283** 0.004	-0.000881 0.003	-0.0181** 0.004	-0.00248 0.004	-0.0114 0.007
Number of months observed pre-transition	0.00719* 0.003	-0.00668 0.004	-0.00484 0.004	-0.00936 0.009	-0.00488 0.006	-0.0296** 0.01	0.00284 0.005	-0.00485 0.009	-0.0138** 0.005	-0.000604 0.01	-0.00546 0.007	-0.0258* 0.01	-0.0231 0.012	-0.0483** 0.018
Number of months observed post-transition	0.00723** 0.002	0.00255 0.002	0.00135 0.002	-0.00414 0.004	0.00513 0.003	-0.000058 0.005	0.00409 0.003	0.00297 0.004	-0.00153 0.003	-0.00393 0.005	0.00544 0.003	0.00224 0.005	0.00548 0.006	-0.00367 0.009
Constant	0.152 0.125	-0.0168 0.137	-1.740** 0.158	-2.503** 0.316	-3.386** 0.247	-3.390** 0.377	0.467** 0.168	-0.104 0.287	-1.199** 0.193	-2.346** 0.362	-3.270** 0.248	-3.403** 0.39	-1.181** 0.445	-0.876 0.669
N	52899	52899	52899	52899	52899	52899	52899	52899	52899	52899	52899	52899	52899	52899

Authors' calculations using merged Medicare and Medicaid claims and enrollment data. Reference categories are: Transition year- 2004; Race- White. Unexponentiated regression coefficients from GEE models and clustered standard errors are presented. Gamma-log models include all beneficiaries yielding estimates of unconditional use. Predicted estimates are calculated using the regression coefficients. *p<0.05; **p<0.01