

Appendix Table 1a. Coefficient estimates from models of episodes of mental health care among those with probable mental illness in initiation and follow-up phase

	Initiation of Mental Health Care		Adequate Mental Health Care		Episode with only RX Events	
	Coef.	SE	Coef.	SE	Coef.	SE
Race/Ethnicity						
Black	-0.72 ***	[0.10]	-0.65 ***	[0.14]	-0.38 **	[0.13]
Latino	-0.46 ***	[0.10]	-0.41 **	[0.15]	-0.55 ***	[0.13]
Need-Related Variables - Mental Health						
Severe psychological distress (K-6)	-0.01	[0.04]	0.06 ***	[0.01]	-0.01	[0.01]
Probable depressive disorder (PHQ-2)	0.01	[0.01]	0.01	[0.05]	-0.04	[0.04]
Mental health component SF-12	-0.02 **	[0.01]	0.00	[0.01]	0.00	[0.01]
<i>Self-rated mental health</i>						
Very Good	0.26	[0.17]	0.20	[0.31]	-0.15	[0.26]
Good	0.34 *	[0.15]	0.90 **	[0.28]	-0.45	[0.25]
Fair	0.79 ***	[0.16]	1.55 ***	[0.28]	-0.78 **	[0.25]
Poor	0.71 ***	[0.20]	1.97 ***	[0.30]	-1.30 ***	[0.29]
Need-Related Variables - Physical Health						
1 physical health comorbidity	0.03	[0.12]	0.14	[0.16]	0.02	[0.14]
2+ physical health comorbidities	0.37 **	[0.12]	0.17	[0.16]	0.19	[0.15]
Physical health component SF-12	0.00	[0.00]	0.01	[0.01]	-0.01	[0.01]
Any work limitation	0.04	[0.10]	0.57 ***	[0.14]	-0.20	[0.13]
Other Need-Related Variables						
Female	0.40 ***	[0.08]	0.10	[0.11]	0.14	[0.12]
<i>Age</i>						
18-24	-0.20	[0.17]	-0.09	[0.27]	-0.33	[0.24]
25-34	-0.01	[0.14]	0.05	[0.19]	-0.25	[0.19]
45-54	0.08	[0.12]	0.03	[0.16]	0.19	[0.15]
55-64	-0.02	[0.14]	-0.60 **	[0.18]	0.67 ***	[0.16]
65-74	-0.26	[0.18]	-1.55 ***	[0.25]	1.11 ***	[0.22]
75+	-0.33	[0.18]	-1.79 ***	[0.36]	1.17 ***	[0.24]
Married	-0.04	[0.08]	-0.38 **	[0.12]	0.32 **	[0.12]
Panel	0.03	[0.03]	0.03	[0.04]	-0.05	[0.04]
Non-Need-Related Variables - SES						
<i>% Federal Poverty Level</i>						
100-124%	0.04	[0.16]	0.14	[0.20]	0.06	[0.19]
125-199%	0.02	[0.12]	-0.15	[0.17]	0.05	[0.15]
200-399%	0.07	[0.12]	0.16	[0.17]	0.06	[0.14]
400%+	0.30 *	[0.13]	0.45 *	[0.20]	-0.23	[0.17]
<i>Education</i>						
HS grad	0.16	[0.10]	0.38 **	[0.13]	0.04	[0.12]
Any college	0.32 **	[0.11]	0.45 **	[0.15]	-0.04	[0.14]
College grad	0.10	[0.13]	1.14 ***	[0.19]	-0.59 **	[0.20]
Other Non-Need Related Variables						
<i>Insurance</i>						
Any uninsured	-0.34 **	[0.12]	-0.53 **	[0.19]	0.08	[0.16]
Any public, never uninsured	-0.06	[0.12]	0.30	[0.16]	-0.23	[0.14]
HMO	0.04	[0.09]	0.04	[0.12]	-0.04	[0.11]
Employed	-0.22 *	[0.10]	-0.76 ***	[0.14]	0.30 *	[0.13]
<i>Region</i>						
Midwest	-0.02	[0.11]	-0.37 *	[0.16]	0.30	[0.16]
South	-0.04	[0.11]	-0.42 **	[0.15]	0.30 *	[0.13]
West	-0.04	[0.11]	-0.56 ***	[0.17]	0.41 **	[0.16]
Urbanicity	-0.03	[0.10]	0.18	[0.12]	-0.06	[0.12]
Constant	-0.98	[0.54]	-4.29 ***	[0.78]	0.87	[0.76]

Data: Panels 9-13 (2004-2009) Medical Expenditure Panel Survey, *** p<0.001, ** p<0.01, * p<0.05

Appendix Table 1b. Coefficient estimates from models of episodes of mental health care among those with probable mental illness in follow-up and termination phases

	2 PM for # of Visits				2 PM for Length of Episode				ER/IP Event within Episode		Proportion Visits within Episode		Proportion Visits within Episode			
	Number of Visits = 0		Number of Visits, if >0 Visits		Length of Episode = 1		Length of Episode, if Length > 1				Episode Expenditures		Specialist		PCP	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE		
Race/Ethnicity																
Black	-0.46	*** [0.14]	-4.17	** [1.77]	0.30	* [0.15]	-19.09	[17.88]	-0.18	[0.14]	0.45	[0.26]	0.06	** [0.02]	0.01	[0.02]
Latino	-0.54	*** [0.14]	-5.03	*** [1.64]	0.13	[0.15]	-26.13	[15.65]	-0.02	[0.13]	0.04	[0.29]	0.03	[0.02]	0.05	** [0.02]
Need-Related Variables - Mental Health																
Severe psychological distress (K-6)	0.01	[0.01]	0.47	** [0.19]	-0.01	[0.01]	0.88	[1.65]	0.00	[0.01]	0.02	[0.03]	0.00	[0.00]	0.00	[0.00]
Probable depressive disorder (PHQ-2)	-0.02	[0.04]	0.24	[0.65]	0.01	[0.05]	9.45	[5.43]	0.02	[0.04]	-0.11	[0.08]	-0.01	[0.01]	0.00	[0.00]
Mental health component SF-12	0.01	[0.01]	0.15	[0.11]	0.00	[0.01]	0.03	[0.92]	-0.01	[0.01]	0.00	[0.01]	0.00	[0.00]	0.00	[0.00]
<i>Self rated mental health</i>																
Very Good	-0.28	[0.26]	2.26	[3.33]	-0.52	[0.30]	34.51	[31.54]	0.54	* [0.23]	-0.79	[0.72]	0.02	[0.03]	-0.02	[0.03]
Good	-0.52	* [0.24]	2.53	* [3.29]	-0.32	[0.29]	57.15	[30.78]	0.53	* [0.22]	0.06	[0.57]	0.04	[0.03]	-0.01	[0.02]
Fair	-0.91	*** [0.24]	6.40	** [3.39]	-0.62	* [0.30]	73.57	** [28.73]	0.93	*** [0.22]	0.32	[0.56]	0.07	* [0.03]	0.00	[0.03]
Poor	-1.37	*** [0.28]	7.45	* [3.8]	-1.05	** [0.33]	86.03	** [30.77]	1.29	*** [0.23]	1.11	[0.58]	0.12	*** [0.03]	0.00	[0.03]
Need-Related Variables - Physical Health																
1 physical health comorbidity	-0.07	[0.15]	3.14	[1.76]	-0.29	[0.15]	13.80	[17.84]	0.31	* [0.14]	0.27	[0.32]	-0.02	[0.02]	-0.01	[0.02]
2+ physical health comorbidities	0.07	[0.15]	4.41	** [1.86]	-0.06	[0.16]	43.98	** [16.96]	0.33	* [0.15]	0.35	[0.32]	-0.01	[0.02]	-0.03	[0.02]
Physical health component SF-12	-0.01	[0.01]	0.13	[0.09]	0.00	[0.01]	0.40	[0.59]	0.00	[0.01]	0.01	[0.01]	0.00	[0.00]	0.00	[0.00]
Any work limitation	-0.16	[0.13]	6.51	*** [2.11]	-0.07	[0.13]	66.63	*** [15.16]	0.44	*** [0.12]	0.41	[0.24]	0.00	[0.02]	-0.02	[0.01]
Other Need-Related Variables																
Female	0.12	[0.12]	0.80	[1.47]	-0.04	[0.12]	0.17	[12.66]	0.02	[0.10]	-0.06	[0.22]	-0.02	[0.01]	0.00	[0.01]
<i>Age</i>																
18-24	-0.31	[0.24]	-3.98	[2.78]	0.15	[0.25]	-74.32	* [32.05]	-0.36	[0.25]	0.29	[0.44]	0.04	[0.03]	0.00	[0.03]
25-34	-0.13	[0.19]	-0.70	[2.05]	-0.12	[0.19]	-40.22	[24.58]	-0.04	[0.18]	0.11	[0.33]	0.04	[0.03]	-0.02	[0.02]
45-54	0.22	[0.15]	1.54	[2.19]	-0.21	[0.17]	12.66	[20.22]	0.07	[0.16]	-0.36	[0.27]	-0.02	[0.02]	-0.02	[0.02]
55-64	0.60	*** [0.17]	-2.02	[2.15]	-0.09	[0.16]	-18.00	[20.58]	-0.23	[0.15]	-1.23	*** [0.37]	-0.07	** [0.02]	0.00	[0.02]
65-74	1.01	*** [0.22]	-4.71	[3.04]	0.50	* [0.23]	-2.15	[24.29]	-0.65	** [0.21]	N/A		-0.12	*** [0.02]	-0.01	[0.02]
75+	1.25	*** [0.24]	-9.43	*** [3.1]	0.28	[0.24]	-89.31	*** [25.6]	-0.88	*** [0.22]	-0.64	[0.56]	-0.07	* [0.03]	-0.02	[0.02]
Married	0.30	** [0.12]	-2.39	[1.35]	-0.07	[0.11]	-12.88	[11.56]	-0.14	[0.11]	0.32	[0.26]	-0.03	[0.02]	-0.01	[0.01]
<i>Individual's Total # of Episodes</i>																
2 Episodes	0.65	*** [0.11]	-18.04	*** [2.13]	0.15	[0.13]	-271.40	*** [16.65]	-1.05	*** [0.12]	-0.56	* [0.24]	-0.04	* [0.02]	-0.04	** [0.01]
> 2 Episodes	1.32	*** [0.13]	-24.47	*** [1.87]	1.16	*** [0.13]	-389.24	*** [17.23]	-2.03	*** [0.14]	-1.01	*** [0.28]	-0.10	*** [0.02]	-0.05	*** [0.01]
Panel	-0.04	[0.04]	0.61	[0.54]	-0.01	[0.03]	6.17	[4.24]	0.01	[0.04]	-0.08	[0.07]	0.00	[0.00]	-0.01	[0.00]
Non-Need-Related Variables - SES																
<i>% Federal Poverty Level</i>																
100-124%	0.31	[0.20]	1.06	[2.64]	-0.44	* [0.19]	-11.12	[29]	0.25	[0.19]	0.09	[0.36]	-0.03	[0.02]	-0.02	[0.02]
125-199%	0.06	[0.16]	0.47	[2.61]	-0.18	[0.15]	-11.11	[17.4]	0.14	[0.14]	0.28	[0.27]	-0.02	[0.02]	0.01	[0.02]
200-399%	0.12	[0.15]	1.41	[2.18]	-0.31	* [0.16]	-0.05	[18.16]	0.19	[0.15]	-0.52	[0.34]	-0.01	[0.02]	0.00	[0.02]
400%+	-0.27	[0.18]	5.16	[2.64]	-0.33	[0.19]	43.06	* [20.17]	0.51	** [0.17]	-0.37	[0.46]	0.06	* [0.03]	-0.01	[0.02]
<i>Education</i>																
HS grad	0.01	[0.13]	1.62	[1.58]	-0.03	[0.13]	22.31	[13.7]	0.17	[0.12]	0.43	[0.24]	0.00	[0.02]	0.01	[0.01]
Any college	-0.08	[0.16]	0.41	[2.07]	0.04	[0.16]	-8.68	[17.78]	0.05	[0.15]	-0.03	[0.31]	0.01	[0.02]	0.02	[0.02]
College grad	-0.54	** [0.19]	9.85	*** [2.66]	-0.32	[0.21]	28.46	[19.85]	0.62	*** [0.17]	0.01	[0.43]	0.11	*** [0.03]	0.01	[0.02]
Other Non-Need Related Variables																
<i>Insurance</i>																
Any uninsured	0.23	[0.17]	0.11	[2.13]	0.27	[0.17]	-34.84	[21.97]	-0.39	* [0.17]	0.30	[0.37]	0.00	[0.02]	0.02	[0.02]
Any public, never uninsured	-0.17	[0.14]	4.22	* [1.92]	-0.16	[0.18]	29.65	[16.34]	0.26	[0.15]	0.62	[0.32]	0.00	[0.02]	0.04	** [0.01]
HMO	0.00	[0.11]	0.31	[1.62]	0.09	[0.11]	-2.84	[12.95]	-0.05	[0.10]	0.12	[0.23]	-0.01	[0.01]	0.01	[0.01]
Employed	0.29	* [0.14]	-4.04	** [1.68]	0.40	* [0.16]	-14.14	[16.19]	-0.29	* [0.14]	0.26	[0.29]	-0.05	* [0.02]	0.02	[0.01]
<i>Region</i>																
Midwest	0.30	[0.17]	-2.27	[2.21]	-0.01	[0.16]	29.69	[19.14]	-0.07	[0.17]	0.16	[0.32]	-0.07	*** [0.02]	0.00	[0.01]
South	0.26	[0.14]	-5.83	*** [1.92]	0.23	[0.16]	-9.85	[16.84]	-0.29	[0.16]	-0.14	[0.30]	-0.07	*** [0.02]	0.01	[0.01]
West	0.23	[0.16]	-1.35	[2.38]	0.19	[0.18]	-6.89	[18.66]	-0.33	* [0.17]	-0.33	[0.37]	-0.07	** [0.02]	0.04	* [0.02]

Urbanicity	-0.09	[0.13]	2.74	[1.59]	-0.17	[0.13]	2.52	[15.5]	0.09	[0.13]	-0.25	[0.26]	0.04 **	[0.01]	-0.03 *	[0.01]
Constant	-0.15	[0.81]	-2.49	[13.9]	-0.60	[0.72]	309.61 ***	[88.19]	6.63 ***	[0.71]	-2.95	[1.73]	0.19 *	[0.09]	0.26 **	[0.09]

Data: Panels 9-13 (2004-2009) Medical Expenditure Panel Survey, *** p<0.001, ** p<0.01, * p<0.05

Sensitivity Analysis: Episode Initiation

	Episode = 0 treated as Initiation = 0		Episode = 0 treated as Initiation = 1		Episode = 0 treated as Initiation = .	
	Coef.	SE	Coef.	SE	Coef.	SE
Race/Ethnicity						
Black	-0.72 ***	[0.10]	-1 ***	[0.10]	-0.93 ***	[0.11]
Latino	-0.46 ***	[0.10]	-0.57 ***	[0.11]	-0.56 ***	[0.11]
Mental Health Status Variables						
Severe psychological distress (K-6)	-0.01	[0.04]	0	[0.04]	0.01	[0.04]
Probable depressive disorder (PHQ-2)	0.01	[0.01]	0.03 **	[0.01]	0.02	[0.01]
Mental health component SF-12	-0.02 **	[0.01]	-0.02 **	[0.01]	-0.02 ***	[0.01]
<i>Self rated mental health</i>						
Very Good	0.26	[0.17]	0.37 *	[0.18]	0.32	[0.17]
Good	0.34 *	[0.15]	0.58 ***	[0.16]	0.45 **	[0.16]
Fair	0.79 ***	[0.16]	1.16 ***	[0.16]	1.05 **	[0.16]
Poor	0.71 ***	[0.20]	1.47 ***	[0.21]	1.26 **	[0.22]
Other Health Status Variables						
1 physical health comorbidity	0.03	[0.12]	0.07	[0.11]	0.07	[0.13]
2+ physical health comorbidities	0.37 **	[0.12]	0.42 ***	[0.12]	0.47 ***	[0.13]
Physical health component SF-12	0	[0.00]	0	[0.00]	0	[0.00]
Any work limitation	0.04	[0.10]	0.4 ***	[0.11]	0.27 *	[0.12]
Other Covariates						
Female	0.4 ***	[0.08]	0.49 ***	[0.09]	0.53 ***	[0.09]
<i>Age</i>						
18-24	-0.2	[0.17]	-0.31	[0.17]	-0.31	[0.18]
25-34	-0.01	[0.14]	0	[0.14]	-0.01	[0.15]
45-54	0.08	[0.12]	0.09	[0.12]	0.07	[0.13]
55-64	-0.02	[0.14]	-0.2	[0.14]	-0.17	[0.15]
65-74	-0.26	[0.18]	-0.75 ***	[0.18]	-0.64 **	[0.20]
75+	-0.33	[0.18]	-0.92 ***	[0.19]	-0.78 ***	[0.19]
Married	-0.04	[0.08]	-0.13	[0.09]	-0.08	[0.09]
<i>% Federal Poverty Level</i>						
100-124%	0.04	[0.16]	0.05	[0.16]	0.07	[0.17]
125-199%	0.02	[0.12]	-0.04	[0.13]	0	[0.14]
200-399%	0.07	[0.12]	0.11	[0.12]	0.13	[0.12]
400%+	0.3 *	[0.13]	0.28 *	[0.14]	0.36 *	[0.15]
<i>Education</i>						
HS grad	0.16	[0.10]	0.28 **	[0.10]	0.24 *	[0.10]
Any college	0.32 **	[0.11]	0.45 ***	[0.12]	0.44 ***	[0.12]
College grad	0.1	[0.13]	0.46 **	[0.15]	0.32 *	[0.16]
<i>Insurance</i>						
Any uninsured	-0.34 **	[0.12]	-0.67 ***	[0.12]	-0.55 **	[0.13]
Any public, never uninsured	-0.06	[0.12]	0	[0.12]	-0.02	[0.13]
HMO	0.04	[0.09]	0.01	[0.09]	0	[0.10]
Employed	-0.22 *	[0.10]	-0.46 ***	[0.10]	-0.41 **	[0.11]
<i>Region</i>						
Midwest	-0.02	[0.11]	-0.11	[0.13]	-0.04	[0.13]
South	-0.04	[0.11]	-0.11	[0.11]	-0.07	[0.12]
West	-0.04	[0.11]	-0.26 *	[0.12]	-0.13	[0.12]
Urbanicity	-0.03	[0.10]	0.03	[0.10]	0	[0.11]
<i>Individual's Total # of Episodes</i>						
2 Episodes						
> 2 Episodes						
Panel	0.03	[0.03]	0.05	[0.03]	0.04	[0.03]
Constant	-0.98	[0.54]	-1.22 *	[0.58]	-1.26 *	[0.60]

Data: Panels 9-13 (2004-2009) Medical Expenditure Panel Survey, *** p<0.001, ** p<0.01, * p<0.05