Supplement Figure 1

Psychiatric Symptoms:	Please rate the severity	y of the patient's	s <u>current</u> psychiatric symptoms:

	None	Mild	Moderate	Severe	Don't Know
a. Depressive symptoms					
b. Anxiety symptoms					
c. Psychotic symptoms					
d. Manic symptoms					
e. Alcohol/other substance use symptoms					
f. Sleeping problems					

Supplement: Table 2 Association of sleep problems with psychiatric hospitalization in Medicaid psychiatric patients.

	Bivariate ^a			Multivariate ^a			
Variable	OR	95% CI	р	AOR	95% CI	р	
Severity of sleep problems							
None	1.00		Ref.	1.00		Ref.	
Mild	1.57	1.12-2.19	.008	1.51	1.04-2.19	.029	
Moderate	2.43	1.78-3.32	<.001	1.98	1.35-2.90	<.001	
Severe	2.80	1.91-4.12	<.001	1.68	1.06-2.68	.028	
Age							
<18	1.00		Ref.	1.00		Ref.	
18-35	2.37	1.74-3.24	<.001	.58	.3694	.028	
36-45	1.78	1.28- 2.46	<.001	.42	.2670	<.001	
>45	1.25	.89- 1.74	.196	.34	.2058	<.001	
Sex							
Female	1.00		Ref.	1.00		Ref.	
Male	1.31	1.06-1.62	.014	1.13	.85-1.49	.398	
Race/ethnicity							
Non-Hispanic white	1.00		Ref.	1.00		Ref.	
African American	1.63	1.28-2.08	<.001	1.24	.91-1.69	.169	
Hispanic	1.10	.78-1.55	.596	1.12	.74-1.70	.598	
Other, mixed, or unknown	.71	.37-1.37	.311	.51	.22-1.14	.102	
Diagnosis ^b							
Schizophrenia	2.96	2.35-3.73	<.001	.83	.33-2.09	.695	
Major depression	.66	.5185	.002	.84	.34-2.08	.712	
Bipolar disorder	1.37	1.05-1.78	.019	.50	.20-1.25	.136	
Anxiety disorder	.49	.3567	<.001	.29	.1078	.015	
Childhood disorder	.42	.3156	<.001	.18	.0747	<.001	
Substance use disorder	2.79	2.07-3.75	<.001	.54	.20-1.48	.230	
Other disorder	.85	.64-1.12	.254	.44	.17-1.14	.093	
Psychiatric comorbidity							
1 disorder	1.00		Ref.	1.00		Ref.	
2 disorders	1.25	.99- 1.58	.058	3.09	1.16-8.27	.024	
3 or more disorders	1.49	.99- 2.24	.058	8.31	1.18-58.43	.033	
Moderate to severe							
symptoms							
Depressive symptoms	1.47	1.18- 1.82	.001	1.19	.86-1.63	.296	
Anxiety symptoms	1.27	1.03-1.58	.027	1.15	.84-1.56	.379	
Psychotic symptoms	5.19	4.09-6.60	<.001	2.81	1.98-3.99	<.001	
Manic symptoms	3.12	2.32-4.20	<.001	1.37	.91-2.08	.136	
Alcohol or other substance							
use symptoms	4.56	3.45-6.01	<.001	2.39	1.62-3.53	<.001	

General medical conditions						
None	1.00		Ref.	1.00		Ref.
1 condition	1.31	.97-1.77	.079	1.33	.93-1.91	.119
2 or more conditions	1.16	.83-1.62	.391	1.00	.66-1.51	.988
Psychiatric medication						
prescribed ^c						
Antidepressants	.60	.4874	<.001	.85	.62-1.16	.301
Antipsychotics	3.63	2.87-4.61	<.001	1.80	1.29-2.50	<.001
Benzodiazepines	.72	.5594	.016	.76	.54-1.08	.130
Mood stabilizers	2.17	1.71-2.74	<.001	1.95	1.40-2.70	<.001
Non-benzodiazepine						
hypnotics	.74	.43-1.26	.268	.92	.51-1.64	.772

^a Results from binary logistic regression analyses. OR stands for odds ratio, AOR for adjusted odds ratio and CI for confidence interval. Analyses were weighted by the clinician's Medicaid caseload, as well as the number of psychiatrists treating Medicaid patients in each state.

^b Patients with each diagnosis were compared with all other patients not carrying that diagnosis. For example, patients with a diagnosis of schizophrenia were compared with all patients without a diagnosis of schizophrenia.

^c Patients prescribed each type of medication were compared to all other patients not prescribed that type of medication.

Supplement: Table 3 Association of sleep problems with emergency department visits in Medicaid psychiatric patients.

patients.	Bivariate ^a			Multivariate ^a			
Variable	OR	95% CI	р	AOR	95% CI	р	
Severity of sleep problems							
None	1.00		Ref.	1.00		Ref.	
Mild	1.42	1.03-1.95	.033	1.29	.91-1.83	.148	
Moderate	2.43	1.80-3.28	<.001	1.79	1.26-2.55	.001	
Severe	3.77	2.59-5.47	<.001	2.37	1.52-3.70	<.001	
Age							
<18	1.00		Ref.	1.00		Ref.	
18-35	2.70	1.98-3.67	<.001	.89	.57-1.39	.604	
36-45	2.24	1.63-3.09	<.001	.74	.46-1.19	.217	
>45	1.47	1.07-2.04	.019	.51	.3185	.010	
Sex							
Female	1.00		Ref.	1.00		Ref.	
Male	1.07	.87-1.32	.510	.98	.76-1.26	.871	
Race/ethnicity							
Non-Hispanic white	1.00		Ref.	1.00		Ref.	
African American	1.35	1.06-1.71	.015	1.12	.84-1.50	.434	
Hispanic	1.09	.78-1.52	.597	1.08	.73-1.59	.708	
Other, mixed, or unknown	.75	.40-1.37	.347	.58	.27-1.26	.170	
Diagnosis ^b							
Schizophrenia	2.18	1.74-2.74	<.001	.60	.25-1.43	.249	
Major depression	.88	.69-1.12	.302	.74	.32-1.72	.487	
Bipolar disorder	1.21	.93-1.56	.153	.39	.1694	.036	
Anxiety disorder	.69	.5291	.010	.39	.15-1.00	.051	
Childhood disorder	.40	.3052	<.001	.23	.0958	.002	
Substance use disorder	2.89	2.15-3.90	<.001	.66	.26-1.70	.391	
Other disorder	.87	.66- 1.13	.293	.41	.1799	.046	
Psychiatric comorbidity							
1 disorder	1.00		Ref.	1.00		Ref.	
2 disorders	1.31	1.04-1.63	.020	2.70	1.08-6.76	.034	
3 or more disorders	1.38	.92-2.07	.116	5.49	.89-33.66	.066	
Moderate to severe symptoms							
Depressive symptoms	1.63	1.32-2.01	<.001	1.06	.78-1.43	.728	
Anxiety symptoms	1.65	1.34-2.03	<.001	1.41	1.05-1.89	.021	
Psychotic symptoms	3.64	2.89-4.60	<.001	2.01	1.44-2.81	<.001	
Manic symptoms	2.46	1.83-3.31	<.001	1.24	.83-1.85	.286	
Alcohol or other substance							
use symptoms	4.65	3.51-6.17	<.001	2.33	1.59-3.42	<.001	

General medical conditions						
None	1.00		Ref.	1.00		Ref.
1 condition	1.03	.78-1.38	.825	.95	.69-1.32	.770
2 or more conditions	1.16	.84-1.59	.370	.93	.64-1.35	.710
Psychiatric medication						
prescribed ^c						
Antidepressants	.76	.6294	.010	.85	.64-1.14	.280
Antipsychotics	2.71	2.17-3.37	<.001	1.75	1.29-2.38	<.001
Benzodiazepines	.86	.67-1.11	.250	.76	.55-1.05	.102
Mood stabilizers	1.73	1.37-2.18	<.001	1.51	1.11-2.06	.009
Non-benzodiazepine						
hypnotics	.65	.38-1.10	.106	.64	.37-1.13	.124

^a Results from binary logistic regression analyses. OR stands for odds ratio, AOR for adjusted odds ratio and CI for confidence interval. Analyses were weighted by the clinician's Medicaid caseload, as well as the number of psychiatrists treating Medicaid patients in each state.

^b Patients with each diagnosis were compared with all other patients not carrying that diagnosis. For example, patients with a diagnosis of schizophrenia were compared with all patients without a diagnosis of schizophrenia.

^c Patients prescribed each type of medication were compared to all other patients not prescribed that type of medication.