

Appendix - Table 1. Medicaid Sample and Characteristics of Patients and Their Index Admissions by State

	Connecticut		Illinois		Indiana		Minnesota		Missouri		North Carolina		New York		Vermont		West Virginia		Wisconsin	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Medicaid Sample^a (%)																				
Excluded –managed care		30.1		72.6		80.0		71.6		48.7		75.3		70.6		72.5		59.8		70.2
Excluded – dual eligible		18.7		12.4		14.4		18.3		16.7		17.8		14.8		19.0		19.8		19.4
Included		51.2		15.0		5.6		10.1		34.6		6.9		14.6		8.5		20.4		10.4
Characteristic																				
Total patients	1,599	100.0	7,605	100.0	1,212	100.0	1,050	100.0	2,236	100.0	3,636	100.0	10,889	100.0	690	100.0	795	100.0	727	100.0
Sex																				
Male	789	49.3	3822	50.3	752	62.0	520	49.5	1280	57.2	1661	45.7	7253	66.6	267	38.7	480	60.4	290	39.9
Female	810	50.7	3783	49.7	460	38.0	530	50.5	956	42.8	1975	54.3	3636	33.4	423	61.3	315	39.6	437	60.1
Race/ethnicity																				
White	840	52.5	2419	31.8	884	72.9	570	54.3	1598	71.5	1924	52.9	3210	29.5	638	92.5	750	94.3	288	39.6
Black	392	24.5	4348	57.2	291	24.0	275	26.2	579	25.9	1456	40.0	4506	41.4	8	1.2	45	5.7	39	5.4
Hispanic	353	22.1	512	6.7	28	2.3	26	2.5	2	0.1	40	1.1	2757	25.3	4	0.6	0	-	11	1.5
Other	14	0.9	33	0.4	3	0.2	169	16.1	6	0.3	132	3.6	199	1.8	1	0.1	0	-	33	4.5
Unknown	0	-	293	3.9	6	0.5	10	1.0	51	2.3	84	2.3	217	2.0	39	5.7	0	-	356	49.0
Age																				
18-39	569	35.6	2525	33.2	304	25.1	358	34.1	864	38.6	1459	40.1	3094	28.4	426	61.7	266	33.5	309	42.5
40-59	940	58.8	4622	60.8	814	67.2	606	57.7	1291	57.7	1948	53.6	7207	66.2	240	34.8	477	60.0	382	52.5
60-64	90	5.6	458	6.0	94	7.8	86	8.2	81	3.6	229	6.3	588	5.4	24	3.5	52	6.5	36	5.0
Comorbidities																				
Mental disorder	784	49.0	4040	53.1	639	52.7	686	65.3	1284	57.4	2037	56.0	4787	44.0	269	39.0	470	59.1	442	60.8
Physical	914	57.2	5235	68.8	962	79.4	784	74.7	1160	51.9	2671	73.5	7398	67.9	236	34.2	615	77.4	544	74.8
Basis of Medicaid eligibility																				
Disability	1171	73.2	5595	73.6	1182	97.5	961	91.5	2060	92.1	2519	69.3	5368	49.3	169	24.5	755	95.0	496	68.2
Other	428	26.8	2,010	26.4	30	2.5	89	8.5	176	7.9	1,117	30.7	5,521	50.7	521	75.5	40	5.0	231	31.8

Substance use diagnosis at index																				
Alcohol only	356	22.3	1467	19.3	318	26.2	261	24.9	768	34.3	743	20.4	1862	17.1	236	34.2	234	29.4	182	25.0
Any opiate	565	35.3	2274	29.9	150	12.4	117	11.1	280	12.5	461	12.7	3894	35.8	239	34.6	160	20.1	160	22.0
Prior behavioral health services ^b																				
Medication-assisted treatment	273	17.1	253	3.3	23	1.9	65	6.2	76	3.4	135	3.7	435	4.0	158	22.9	32	4.0	97	13.3
Inpatient	141	8.8	1291	17.0	83	6.8	70	6.7	319	14.3	168	4.6	1790	16.4	39	5.7	49	6.2	50	6.9
Outpatient	411	25.7	2006	26.4	334	27.6	304	29.0	438	19.6	673	18.5	3142	28.9	242	35.1	189	23.8	143	19.7

^a Percent of state Medicaid population covered by managed care plans or dually eligible for Medicare and Medicaid. (Source: Centers for Medicare & Medicaid Services (n.d.). "Medicaid Analytic eXtract (MAX) General Information." <https://www.cms.gov/research-statistics-data-and-systems/computer-data-and-systems/medicaiddatasourcesgeninfo/maxgeneralinformation.html>)

^b Services that were received within 90 days before the index admission.

Source: 2008 Medicaid Analytic eXtract (MAX)

Appendix - Table 2. Characteristics of Behavioral Health Follow-Up Services Within 14 Days of Discharge and Inpatient Admissions Within 90 Days of Discharge, by State

Characteristic	Connecticut		Illinois		Indiana		Minnesota		Missouri		North Carolina		New York		Vermont		West Virginia		Wisconsin	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total patients	1,599	100.0	7,605	100.0	1,212	100.0	1,050	100.0	2,236	100.0	3,636	100.0	10,889	100.0	690	100.0	795	100.0	727	100.0
Follow-up services 14 days postdischarge																				
RES	33	2.1	--	--	--	--	42	4.0	--	--	--	--	--	--	201	29.1	--	--	--	--
IOP	125	7.8	--	--	63	5.2	38	3.6	132	5.9	--	--	--	--	14	2.0	--	--	--	--
OP (excludes IOP) No RES, IOP or OP service	246	15.4	2101	27.6	258	21.3	182	17.3	439	19.6	602	16.6	2668	24.5	131	19.0	146	18.4	156	21.5
Follow-up MAT 14 days postdischarge	1,195	74.7	5,504	72.4	891	73.5	788	75.0	1,665	74.5	3,034	83.4	8,221	75.5	344	49.9	649	81.6	571	78.5
Time to first follow- up service (RES, IOP, OP or MAT) ^a	233	14.6	243	3.2	133	11.0	66	6.3	85	3.8	153	4.2	1901	17.5	181	26.2	50	6.3	110	15.1
0 day	81	5.1	583	7.7	95	7.8	101	9.6	193	8.6	115	3.2	584	5.4	76	11.0	25	3.1	91	12.5
1 day	75	4.7	449	5.9	46	3.8	31	3.0	68	3.0	110	3.0	549	5.0	156	22.6	29	3.6	41	5.6
2 day	60	3.8	207	2.7	34	2.8	19	1.8	37	1.7	53	1.5	503	4.6	38	5.5	14	1.8	16	2.2
3 day	61	3.8	128	1.7	19	1.6	22	2.1	37	1.7	58	1.6	430	3.9	25	3.6	15	1.9	7	1.0
4 day	59	3.7	155	2.0	24	2.0	16	1.5	23	1.0	45	1.2	444	4.1	36	5.2	18	2.3	9	1.2
5 day	53	3.3	110	1.4	14	1.2	16	1.5	31	1.4	48	1.3	380	3.5	12	1.7	12	1.5	6	0.8
6 day	54	3.4	107	1.4	27	2.2	18	1.7	21	0.9	55	1.5	414	3.8	16	2.3	6	0.8	11	1.5
7 day	24	1.5	83	1.1	23	1.9	8	0.8	35	1.6	50	1.4	143	1.3	15	2.2	10	1.3	9	1.2
8 day	25	1.6	87	1.1	13	1.1	12	1.1	32	1.4	37	1.0	127	1.2	9	1.3	5	0.6	6	0.8
9 day	21	1.3	70	0.9	4	0.3	10	1.0	25	1.1	33	0.9	115	1.1	12	1.7	6	0.8	7	1.0
10 day	20	1.3	70	0.9	10	0.8	12	1.1	26	1.2	21	0.6	118	1.1	7	1.0	8	1.0	4	0.6

11 day	20	1.3	55	0.7	9	0.7	10	1.0	12	0.5	36	1.0	90	0.8	8	1.2	14	1.8	4	0.6
12 day	12	0.8	48	0.6	13	1.1	7	0.7	23	1.0	30	0.8	82	0.8	3	0.4	8	1.0	5	0.7
13 day	14	0.9	63	0.8	8	0.7	8	0.8	23	1.0	22	0.6	88	0.8	4	0.6	10	1.3	8	1.1
14 day	12	0.8	47	0.6	8	0.7	15	1.4	24	1.1	30	0.8	73	0.7	6	0.9	5	0.6	10	1.4
No RES, IOP, OP or MAT service	1008	63.0	5343	70.3	865	71.4	745	71.0	1626	72.7	2893	79.6	6749	62.0	267	38.7	610	76.7	493	67.8
Inpatient admission 90 days postdischarge																				
Any	748	46.8	4164	54.8	485	40.0	395	37.6	915	40.9	1265	34.8	5910	54.3	292	42.3	289	36.4	239	32.9
Behavioral health	525	32.8	2518	33.1	180	14.9	176	16.8	548	24.5	491	13.5	3997	36.7	238	34.5	135	17.0	110	15.1
Time to behavioral health inpatient admission																				
< 7 days	308	19.3	948	12.5	42	3.5	44	4.2	138	6.2	208	5.7	1828	16.8	188	27.2	41	5.2	19	2.6
7-14 days	45	2.8	358	4.7	17	1.4	27	2.6	78	3.5	50	1.4	480	4.4	8	1.2	17	2.1	23	3.2
15-30 days	50	3.1	477	6.3	37	3.1	25	2.4	114	5.1	79	2.2	580	5.3	16	2.3	23	2.9	28	3.9
31-60 days	80	5.0	472	6.2	50	4.1	35	3.3	132	5.9	81	2.2	671	6.2	14	2.0	28	3.5	26	3.6
61-90 days	42	2.6	263	3.5	34	2.8	45	4.3	86	3.8	73	2.0	438	4.0	12	1.7	26	3.3	14	1.9
No inpatient admission	1,074	67.2	5,087	66.9	1,032	85.1	874	83.2	1,688	75.5	3,145	86.5	6,892	63.3	452	65.5	660	83.0	617	84.9

Abbreviations: IOP, intensive outpatient; MAT, medication-assisted treatment; OP, outpatient; RES, residential

Two dashes (--) indicate that the services was not included in the available data for that state.

^a For the few individuals who received more than one of the IOP, OP, or RES follow-up services (excluding MAT), an episode approach was used where only the most intensive service was coded.

Source: 2008 Medicaid Analytic eXtract (MAX)