



Total Admits > 250/year <sup>d</sup>	4543	38.89	3315	44.18	1228	29.39	0.68	0.409	1.50
High Number of Specialized Services <sup>e</sup>	5158	44.15	3334	44.44	1824	43.65	0.65	0.422	1.02
Provides Language Services	8121	69.52	5186	69.12	2935	70.23	2.13	0.145	0.98
Located in Ten States with Highest LEP Pop. <sup>f</sup>	3340	28.59	2101	28.00	1239	29.65	6.46	0.011	0.94

<sup>a</sup>Source: National Mental Health Services Survey, 2018. "Missing data" refers to facilities with a missing response to any of the variables.

<sup>b</sup>For categorical variables facility type and ownership, the reference group is the combination of all other responses. For all other variables, the reference group was the absence or opposite of that variable.

<sup>c</sup>Some facilities received multiple sources of funding.

<sup>d</sup>For inpatient facilities, this variable refers to the number of patient admissions in the past year. For outpatient facilities, this variable refers to the number of initiations of a course of treatment in the past year.

<sup>e</sup>Facilities were considered to have a high number of services if they had more than the median (14) number of specialized services such as supportive housing, legal assistance, smoking cessation, etc. See supplement for more details.

<sup>f</sup>Source: American Community Survey 2014-2018. See supplement for more details.

Supplemental Table: Likelihood that Mental Health Facilities Offered Services in a Non-English Language, based on Facility Characteristic<sup>a</sup>

	Any Language Services		No Language Services				
	N = 5186 (69.1%)		N = 2317 (30.9%)				
Characteristic	N	%	N	%	Chi-square	p	RR <sup>b</sup>
<b>Facility Type</b>							
Hospital	799	15.41	153	6.60	111.24	<0.001	2.33
Other	9	0.17	2	0.09	0.34	0.558	2.01
CMHC	1480	28.54	343	14.80	163.50	<0.001	1.93
Outpatient	2109	40.67	907	39.15	1.48	0.224	1.04
Multi-setting	166	3.20	105	4.53	7.77	0.005	0.71
VA	106	2.04	93	4.01	23.31	<0.001	0.51
Residential	434	8.37	586	25.29	389.00	<0.001	0.33
Partial Hospitalization	83	1.60	128	5.52	88.79	<0.001	0.29
<b>Funding<sup>c</sup></b>							
Pro-bono	3018	58.20	892	38.50	248.19	<0.001	1.51
Sliding Scale	3285	63.34	1052	45.40	210.59	<0.001	1.40
County/Local Funding	3121	60.18	1090	47.04	111.72	<0.001	1.28
State Funding	4449	85.79	1753	75.66	113.96	<0.001	1.13
Private Insurance	4321	83.32	1743	75.23	67.16	<0.001	1.11
Self-pay	4493	86.64	1850	79.84	56.01	<0.001	1.09
Federal Funding	5071	97.78	2153	92.92	104.33	<0.001	1.05
Other	47	0.91	20	0.86	0.00	0.960	1.05
No Gov Funding	41	0.79	81	3.50	71.59	<0.001	0.23
<b>Ownership</b>							
Public	1045	20.15	275	11.87	75.19	<0.001	1.70
Private Non-profit	3411	65.77	1431	61.76	11.09	0.001	1.06
Private For-profit	730	14.08	611	26.37	164.07	<0.001	0.53
<b>Age Groups Treated</b>							
Children (<13 years)	3312	63.86	1266	54.64	56.90	<0.001	1.17
Adolescents (13-17 years)	3521	67.89	1467	63.31	14.87	<0.001	1.07
Young Adults (18-25 years)	4685	90.34	1851	79.89	154.89	<0.001	1.13
Adults (26-64 years)	4430	85.42	1774	76.56	87.16	<0.001	1.12
Seniors (65 years)	4235	81.66	1686	72.77	75.63	<0.001	1.12
<b>Other Characteristics</b>							
Total Admits > 250/year <sup>e</sup>	2655	51.20	660	28.49	334.01	<0.001	1.80

Located in Top Ten States with Highest LEP Pop. <sup>f</sup>	1640	31.62	461	19.90	108.66	<0.001	1.59
High Number of Specialized Services <sup>g</sup>	2573	49.61	761	32.84	181.74	<0.001	1.51

<sup>a</sup>Source: National Mental Health Services Survey, 2018.

<sup>b</sup>For categorical variables facility type and ownership, the reference group is the combination of all other responses. For all other variables, the reference group was the absence or opposite of that variable.

<sup>d</sup>Some facilities received multiple sources of funding.

<sup>e</sup>For inpatient facilities, this variable refers to the number of patient admissions in the past year. For outpatient facilities, this variable refers to the number of initiations of a course of treatment in the past year.

<sup>f</sup>Source: American Community Survey 2014-2018. See supplement for more details.

<sup>g</sup>Facilities were considered to have a high number of services if they had more than the median (14) number of specialized services such as supportive housing, legal assistance, smoking cessation, etc. See supplement for more details.

Supplemental Table: Likelihood that Mental Healthcare Facilities Offered Services in a Non-English Language, based on Facility Characteristic — Multivariate Logistic Regression<sup>a,b</sup>

Characteristic	Estimate	Standard Error	Wald Z-score	Pr > Z	Adjusted Odds Ratio	95% CI LL	95% CI UL
<b>Facility Type</b>							
Residential	-0.9281	0.0854	-10.8708	<0.001	0.3953	0.3344	0.4673
Partial Hospitalization	-1.0430	0.1582	-6.5919	<0.001	0.3524	0.2584	0.4805
VA	-1.2491	0.1881	-6.6420	<0.001	0.2868	0.1984	0.4146
CMHC	0.5431	0.0829	6.5493	<0.001	1.7213	1.4631	2.0250
Hospital	0.7034	0.1061	6.6304	<0.001	2.0207	1.6413	2.4877
<b>Funding<sup>c</sup></b>							
No Gov Funding	-1.0716	0.2173	-4.9311	<0.001	0.3424	0.2237	0.5243
Pro-bono	0.4308	0.0615	7.0000	<0.001	1.5385	1.3637	1.7358
<b>Ownership</b>							
Private For-profit	-0.5918	0.0789	-7.4967	<0.001	0.5533	0.4740	0.6459
Public	0.4239	0.1007	4.2090	<0.001	1.5280	1.2542	1.8614
<b>Other Characteristics</b>							
Located in Top Ten States with Highest LEP Pop. <sup>d</sup>	0.7667	0.2496	3.0721	0.002	2.1527	1.3199	3.5110
Total Admits > 250/year <sup>e</sup>	0.5964	0.0634	9.4125	<0.001	1.8155	1.6035	2.0556
High Number of Specialized Services <sup>f</sup>	0.3901	0.0614	6.3559	<0.001	1.4771	1.3097	1.6659

<sup>a</sup>Source: National Mental Health Services Survey, 2018.

<sup>b</sup>The multivariate logistic regression model used the facility's state location as the random intercept. The marginal pseudo R<sup>2</sup> was 0.22.

<sup>c</sup>Some facilities received multiple sources of funding.

<sup>d</sup>Source: American Community Survey 2014-2018. See supplement for more details.

<sup>e</sup>For inpatient facilities, this variable refers to the number of patient admissions in the past year. For outpatient facilities, this variable refers to the number of initiations of a course of treatment in the past year.

<sup>f</sup>Facilities were considered to have a high number of services if they had more than the median (14) number of specialized services such as supportive housing, legal assistance, smoking cessation, etc. See supplement for more details.

Supplemental Table: Likelihood that Mental Healthcare Facility Offered Non-English Language Services through Multilingual Staff vs. On-call Interpreter vs. Both<sup>a</sup>

<b>Multilingual Staff (N=592, 11.4%) vs. On-call Interpreter<sup>b</sup> (N=2,532, 48.8%)</b>							
<b>Characteristic</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Z-score</b>	<b>Pr &gt; Z</b>	<b>Adjusted Odds Ratio</b>	<b>95% CI LL</b>	<b>95% CI UL</b>
<b>Facility Type</b>							
Residential	-0.37	0.20	-1.83	0.067	0.69	0.47	1.03
Partial Hospitalization	-0.90	0.36	-2.47	0.013	0.41	0.20	0.83
VA	-0.73	0.51	-1.42	0.155	0.48	0.18	1.32
CMHC	-0.26	0.16	-1.66	0.097	0.77	0.56	1.05
Hospital	-3.97	0.41	-9.77	<0.001	0.02	0.01	0.04
<b>Funding<sup>c</sup></b>							
No Gov Funding	1.23	0.50	2.48	0.013	3.42	1.29	9.03
Pro-bono	-0.32	0.13	-2.54	0.011	0.73	0.57	0.93
<b>Ownership</b>							
Private For-profit	1.38	0.17	8.07	<0.001	3.99	2.85	5.58
Public	-1.58	0.23	-6.91	<0.001	0.21	0.13	0.32
<b>Other Characteristics</b>							
Located in Top Ten States with Highest LEP Pop. <sup>d</sup>	2.59	0.45	5.78	<0.001	13.31	5.53	32.04
Total Admits > 250/year <sup>e</sup>	-0.09	0.13	-0.72	0.473	0.91	0.71	1.17
High Number of Specialized Services <sup>f</sup>	-0.26	0.13	-2.03	0.043	0.77	0.60	0.99
<b>Multilingual Staff (N=592, 11.4%) vs. Both<sup>e</sup> (N=2,062, 39.8%)</b>							
<b>Characteristic</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Z-score</b>	<b>Pr &gt; Z</b>	<b>Adjusted Odds Ratio</b>	<b>95% CI LL</b>	<b>95% CI UL</b>
<b>Facility Type</b>							
Residential	-0.10	0.18	-0.56	0.579	0.91	0.64	1.28
Partial Hospitalization	0.28	0.40	0.71	0.481	1.32	0.61	2.88
VA	0.93	0.52	1.77	0.076	2.53	0.91	7.09
CMHC	-0.32	0.14	-2.31	0.021	0.73	0.55	0.95
Hospital	-2.63	0.37	-7.02	<0.001	0.07	0.03	0.15
<b>Funding</b>							
No Gov Funding	1.54	0.45	3.38	0.001	4.66	1.91	11.37
Pro-bono	-0.50	0.11	-4.51	<0.001	0.61	0.49	0.75
<b>Ownership</b>							
Private For-profit	0.64	0.15	4.33	<0.001	1.89	1.42	2.52
Public	-1.25	0.20	-6.13	<0.001	0.29	0.19	0.43

<b>Other Characteristics</b>							
Located in Top Ten States with Highest LEP Pop.	0.54	0.25	2.19	0.029	1.72	1.06	2.80
Total Admits > 250/year	-0.56	0.11	-5.19	<0.001	0.57	0.46	0.70
High Number of Specialized Services	-0.70	0.11	-6.27	<0.001	0.50	0.40	0.62
<b>On-call Interpreter (N=2,532, 48.8%) vs. Both<sup>h</sup> (N=2,062, 39.8%)</b>							
<b>Characteristic</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Z-score</b>	<b>Pr &gt; Z</b>	<b>Adjusted Odds Ratio</b>	<b>95% CI LL</b>	<b>95% CI UL</b>
<b>Facility Type</b>							
Residential	0.57	0.14	3.99	<0.001	1.77	1.34	2.34
Partial Hospitalization	1.27	0.32	3.95	<0.001	3.58	1.90	6.73
VA	1.64	0.30	5.42	<0.001	5.16	2.85	9.35
CMHC	0.09	0.09	0.98	0.326	1.10	0.91	1.32
Hospital	0.83	0.11	7.71	<0.001	2.29	1.85	2.82
<b>Funding</b>							
No Gov Funding	0.22	0.52	0.43	0.669	1.25	0.45	3.44
Pro-bono	-0.15	0.08	-1.93	0.054	0.86	0.74	1.00
<b>Ownership</b>							
Private For-profit	-0.37	0.12	-3.13	0.002	0.69	0.55	0.87
Public	0.05	0.10	0.52	0.604	1.05	0.87	1.28
<b>Other Characteristics</b>							
Located in Top Ten States with Highest LEP Pop.	-1.95	0.33	-5.82	<0.001	0.14	0.07	0.28
Total Admits > 250/year	-0.48	0.08	-6.34	<0.001	0.62	0.54	0.72
High Number of Specialized Services	-0.41	0.07	-5.48	<0.001	0.67	0.58	0.77

<sup>a</sup>Source: National Mental Health Services Survey, 2018.

<sup>b</sup>The multivariate logistic regression model used the facility's state location as the random intercept. The marginal pseudo R<sup>2</sup> was 0.46.

<sup>c</sup>Some facilities received multiple sources of funding.

<sup>d</sup>Source: American Community Survey 2014-2018. See supplement for more details.

<sup>e</sup>For inpatient facilities, this variable refers to the number of patient admissions in the past year. For outpatient facilities, this variable refers to the number of initiations of a course of treatment in the past year.

<sup>f</sup>Facilities were considered to have a high number of services if they had more than the median (14) number of specialized services such as supportive housing, legal assistance, smoking cessation, etc. See supplement for more details.

<sup>g</sup>The model's marginal pseudo R<sup>2</sup> was 0.33.

<sup>h</sup>The model's marginal pseudo R<sup>2</sup> was 0.20.

Supplemental Table: Frequency of Languages Spoken by Multilingual Staff<sup>a</sup> at U.S. Mental Health Facilities

Language spoken by staff	NMHSS facilities (n = 11682)	
	N	%
Spanish	3879	33.2
French	305	2.61
Russian	290	2.48
Any other language not listed	269	2.3
Any Chinese language	265	2.27
Creole	256	2.19
Arabic	231	1.98
Tagalog	220	1.88
Hindi	219	1.87
Farsi	187	1.6
Vietnamese	184	1.58
Portuguese	176	1.51
Korean	164	1.4
Hebrew	132	1.13
German	126	1.08
Polish	109	0.93
Italian	103	0.88
Hmong	88	0.75
Japanese	84	0.72
Greek	54	0.46
Navajo	27	0.23
Other American Indian or Alaska Native language	14	0.12
Hopi	12	0.1
Ojibwa	11	0.09
Yupik	11	0.09
Lakota	10	0.09

<sup>a</sup>The NMHSS does not include data on the frequency of languages offered by on-call interpreter services, only data on languages offered by multilingual staff.



Supplemental Table. Specialized Services Offered by U.S Mental Health Facilities from the NMHSS-2018

<b>Service Offered</b>	<b>No. of Facilities</b>	<b>Percent of Facilities</b>
Individual psychotherapy	6887	91.79
Cognitive behavioral therapy	6771	90.24
Group therapy	6481	86.38
Psychotropic medication	6124	81.62
Trauma therapy	5720	76.24
Couples/family therapy	5396	71.92
Case management services	5152	68.67
Family psychoeducation	4890	65.17
Behavior modification	4795	63.91
Suicide prevention services	4366	58.19
Integrated dual disorders treatment	4170	55.58
Dialectical behavior therapy	4137	55.14
Screening for tobacco use	3861	51.46
Crisis intervention team that handles acute mental health issues at this facility and/or off-site	3659	48.77
Court-ordered outpatient treatment	3556	47.39
Activity therapy	3251	43.33
Psychosocial rehabilitation services	3244	43.24
Smoking/tobacco cessation counseling	2913	38.82
Telemedicine/telehealth therapy	2394	31.91
Psychiatric emergency walk-in services	2293	30.56
Education services	2259	30.11
Diet and exercise counseling	2221	29.60
Illness management and recovery (IMR) services	2040	27.19
Consumer-run (peer support) services	1922	25.62
Nicotine replacement therapy	1824	24.31
Intensive case management services	1819	24.24
Integrated primary care services	1718	22.90
Non-nicotine smoking/tobacco cessation medications (by prescription)	1653	22.03
Housing services	1499	19.98
Chronic disease/illness management services	1350	17.99
Supported employment services	1335	17.79
Vocational rehabilitation services	1184	15.78
Supported housing programs	1154	15.38
Assertive community treatment (ACT)	1031	13.74
Therapeutic foster care	383	5.10

Legal advocacy	354	4.72
Other mental health treatment approach	289	3.85
Electroconvulsive therapy	268	3.57

In our main analysis, we calculated and examined effects of the “high number of specialized services” variable for the sake of parsimony. Instead of using each support service offered as an individual predictor of language service provision, we summed up the total number of services available at each facility. The median of all 7503 facilities was 14 services offered. Facilities that offered more than the median number of services were designated as “high” number of services, which was a significant predictor of language service provision.

Supplemental Table: Limited English Households Percentage by State from the American Community Survey 2014-2018

<b>State</b>	<b>Total Households</b>	<b>Limited English Households</b>	<b>Percentage of Households with Limited English</b>
California	12965435	1179753	9.10%
New York	7316537	593391	8.11%
Texas	9553046	753508	7.89%
New Jersey	3213362	226180	7.04%
Florida	7621760	524246	6.88%
Nevada	1075930	66263	6.16%
Hawaii	456782	27640	6.05%
Massachusetts	2601914	152975	5.88%
Rhode Island	410885	23316	5.67%
New Mexico	775651	41207	5.31%
Connecticut	1367374	71137	5.20%
Illinois	4830038	218048	4.51%
Arizona	2524300	107223	4.25%
Washington	2800423	106515	3.80%
District of Columbia	281322	9951	3.54%
Maryland	2192518	69718	3.18%
Georgia	3709488	106906	2.88%
Colorado	2113387	60209	2.85%
Virginia	3128415	83239	2.66%
Nebraska	754063	19979	2.65%
Oregon	1591835	41346	2.60%
Kansas	1124549	28347	2.52%
Pennsylvania	5025132	121855	2.42%
Minnesota	2167801	52023	2.40%
North Carolina	3918597	92549	2.36%
Utah	957619	22404	2.34%
Delaware	357765	8239	2.30%
Oklahoma	1474620	30995	2.10%
Alaska	253462	5294	2.09%
Idaho	618331	12305	1.99%
Louisiana	1736021	33362	1.92%
Iowa	1256855	23282	1.85%
Michigan	3909509	68056	1.74%
Indiana	2553818	43424	1.70%

Arkansas	1152175	19040	1.65%
Wisconsin	2343129	36502	1.56%
Tennessee	2567061	39123	1.52%
South Carolina	1894711	27892	1.47%
New Hampshire	528078	7624	1.44%
Ohio	4654075	64889	1.39%
South Dakota	341565	4630	1.36%
Kentucky	1728681	22119	1.28%
Alabama	1860269	22067	1.19%
Wyoming	230630	2695	1.17%
North Dakota	314903	3657	1.16%
Missouri	2396271	27175	1.13%
Maine	556955	5455	0.98%
Mississippi	1105576	8937	0.81%
Vermont	259589	1790	0.69%
Montana	423240	1953	0.46%
West Virginia	734676	2647	0.36%

All data was sourced from the 2014-2018 American Community Survey 5-year estimate. In the main analyses, one of the predictors of language service provision examined was the facility being located in the ten states with the highest LEP percentages (CA, NY, TX, NJ, FL, NV, HI, MA, RI, and NM).