

Table S1. Sample characteristics of patients eligible for the PHQ-2 and a test of proportions: eligible v. screened patients in 8 primary care clinics of a Chicago academic health center, November 2016 – December 2017 (Cohen's  $h \geq 0.20$ ).

Characteristic	PHQ-2 Eligible (N = 25369)			PHQ-2 Screened (N = 20053)			Cohen's h	P- value*
	n	%	95% CI	n	%	95% CI		
Gender								0.21
Female	15966	62.94	62.34 - 63.53	12535	62.51	61.83 - 63.18	0.01	
Male	9403	37.06	36.47 - 37.66	7518	37.49	36.82 - 38.17	0.01	
Race								0.53
American Indian	111	0.44	0.36 - 0.53	75	0.37	0.30 - 0.47	0.01	
Asian	965	3.80	3.57 - 4.05	780	3.89	3.63 - 4.17	0.00	
Black	9017	35.54	34.95 - 36.14	7083	35.32	34.66 - 35.99	0.00	
Pacific Islander	45	0.18	0.13 - 0.24	30	0.15	0.10 - 0.22	0.01	
Other*	3663	14.44	14.01 - 14.88	2864	14.28	13.80 - 14.78	0.00	
White	11238	44.30	43.69 - 44.91	8944	44.60	43.91 - 45.29	0.01	
Unknown/Refuse	330	1.30	1.17 - 1.45	277	1.38	1.23 - 1.56	0.01	
Ethnicity								0.07
Hisp/Latinx	4893	19.29	18.80 - 19.78	3754	18.72	18.18 - 19.27	0.01	
Non-Hisp/Latinx	20268	79.89	79.39 - 80.38	16119	80.38	79.82 - 80.93	0.01	
Unspecified	208	0.82	0.71 - 0.94	180	0.90	0.77 - 1.04	0.01	
Age								<0.01
12-17	2450	9.66	9.30 - 10.03	1879	9.37	8.97 - 9.78	0.01	
18-25	2462	9.70	9.34 - 10.08	2032	10.13	9.72 - 10.56	0.01	
26-35	4856	19.14	18.66 - 19.63	4040	20.15	19.59 - 20.71	0.03	
36-45	3529	13.91	13.49 - 14.34	2841	14.17	13.69 - 14.66	0.01	
46-55	3462	13.65	13.22 - 14.08	2747	13.70	13.23 - 14.18	0.00	
56-65	3778	14.89	14.46 - 15.34	2909	14.51	14.02 - 15.00	0.01	
66-75	2907	11.46	11.07 - 11.86	2187	10.91	10.48 - 11.35	0.02	
≥76	1925	7.59	7.27 - 7.92	1418	7.07	6.72 - 7.44	0.02	

\* $p < 0.05$ , chi-square

Table S2. Test of proportions: patients eligible v. screened for the PHQ-9 in 8 primary care clinics of a Chicago academic health center, November 2016 – December 2017 (Cohen's  $h \geq 0.20$ ).

Characteristic	PHQ-9 Eligible (N = 1588)			PHQ-9 Screened (N = 1042)			Cohen's h	P- value*
	n	%	95% CI	n	%	95% CI		
Gender								0.62
Female	1118	70.40	68.08 - 72.63	741	71.11	68.24 - 73.83	0.02	
Male	470	29.60	27.37 - 31.92	301	28.89	26.17 - 31.76	0.02	
Race								0.28
American Indian	13	0.82	0.46 - 1.44	6	0.58	0.23 - 1.32	0.03	
Asian	32	2.02	1.40 - 2.87	17	1.63	0.98 - 2.66	0.03	
Black	691	43.51	41.06 - 46.00	449	43.09	40.07 - 46.17	0.01	
Pacific Islander	2	0.13	0.02 - 0.51	1	0.10	0.01 - 0.62	0.01	
Other*	264	16.62	14.84 - 18.57	202	19.39	17.05 - 21.95	0.07	
White	577	36.34	33.97 - 38.76	360	34.55	31.68 - 37.54	0.04	
Unknown/Refuse	9	0.57	0.28 - 1.11	7	0.67	0.29 - 1.44	0.01	
Ethnicity								0.58
Hisp/Latinx	387	24.37	22.29 - 26.57	267	25.62	23.02 - 28.41	0.03	
Non-Hisp/Latinx	1195	75.25	73.04 - 77.34	772	74.09	71.29 - 76.70	0.03	
Unspecified	6	0.38	0.15 - 0.86	3	0.29	0.07 - 0.91	0.02	
Age								<0.01
12-17	196	12.34	10.79 - 14.09	203	19.48	17.15 - 22.05	0.20	
18-25	174	10.96	9.48 - 12.62	149	14.30	12.26 - 16.61	0.10	
26-35	270	17.00	15.20 - 18.96	188	18.04	15.87 - 20.54	0.03	
36-45	218	13.73	12.09 - 15.54	133	12.76	10.83 - 14.98	0.03	
46-55	251	15.81	14.06 - 17.71	128	12.28	10.38 - 14.47	0.10	
56-65	221	13.92	12.27 - 15.74	111	10.65	8.88 - 12.72	0.10	
66-75	152	9.57	8.19 - 11.15	84	8.06	6.51 - 9.92	0.05	
≥76	106	6.68	5.52 - 8.04	46	4.41	3.28 - 5.89	0.10	

\* $p < 0.05$ , chi-square

Table S3. Patients referred to Collaborative Care by risk category and per treatment pathway, November 2016 – December 2017, at 10 Chicago primary care clinics.

PHQ-9 Score Risk Category	Treatment Pathway(s), n and as %										Treated vs. Referred			
	Community Mental Health*		Psychotropic Medication*		Anti- Depressant Meds*		CBT*		CBT & Meds*		Total Treated Per Risk Category		Total Referrals Per Risk Category	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
No PHQ-9	14	11.2	22	7.6	18	7.2	3	9.1	1	6.7	34	9.19	73	11.44
< 10	5	4.0	7	2.4	7	2.8	2	6.1	1	6.7	13	3.51	34	5.33
10-14	47	37.6	93	32.2	81	32.4	15	45.5	7	46.7	127	34.32	249	39.03
15-19	40	32.0	105	36.3	89	35.6	8	24.2	4	26.7	126	34.05	189	29.62
20-27	19	15.2	62	21.5	55	22.0	5	15.2	2	13.3	70	18.92	93	14.58
TOTAL	125		289		250		33		15		370		638	

\*Pathways are not mutually exclusive; psychotropic medication includes anti-depressant medication.