Supplementary Technical Appendix for

Brief Report: Comparative Effectiveness of Two Models of Depression Services Quality Improvement in Health and Community Sectors

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1. Enrollment

The study settings were South Los Angeles and Hollywood-Metro. Participant sampling (program and client recruitment) and randomization are described in prior publications (1, 2). Within enrolled programs, 4649 clients were screened for eligibility, 4440 (96%) agreed to screening, 1322 (30%) were eligible, and 1246 (94% of eligible) consented. In our previous publications (1, 3), we used nonresponse weighting to address for non-enrollment among eligible clients. The enrollment weight was intended to make the enrolled sample (n=1246) representative of people who were eligible to the study. We created enrollment weights based on propensity weighting adjustment, by fitting logistic regression models to predict the enrollment weight for each participant. Five versions of the weight were created corresponding to five imputed screener data, because imputed predictors from the screener data were used in fitting logistic regressions. Common predictors of age, community, and sector of screening program were used in all models. See Supplementary Materials in previous publications (1, 2).

2. Telephone survey

Participants were invited to participant telephone surveys at baseline, 6, 12, and 36 months conducted by RAND survey staff who were blinded to intervention. Table S1 presents survey response status at each time point. Cumulatively, there were 2, 3, 9, 33 participants who were deceased at the baseline, 6-, 12-, and 36-month follow-ups. Excluded deceased cases, the completion rates relative to all initial enrollees are 79% for the baseline survey (n=981), 61% for the 6-month survey (n=759), 59% for the 12-month survey (n=733), and 49% for the 36-month survey (n= 600). Figure 1 provides the consort chart.

				Social-o	communi	ty	Healt	hcare	
	Overa	11		Screeni	ng Sector	r	Screen	ning Se	ector
	Total	RS	CEP	Total	RS	CEP	Total	RS	CEP
Participants consented	1246	606	640	381	183	198	865	423	442
Baseline survey 4/27/2010-1/2/2011									
Attempted for baseline interview	1246	606	640	381	183	198	865	423	442
Baseline completed	981	492	489	293	146	147	688	346	342
No baseline (36 Refused, 227 inaccessible, 2 deceased)	265	114	151	88	37	51	177	77	100
6 month follow-up survey 11/2/2010-8/11/2011									
Attempted for 6 months interview ^a	1093	540	553	327	161	166	766	379	387
6 months completed	759	380	379	236	118	118	523	262	261
No 6 month interview (12 refused, 1 deceased, 321									
inaccessible)	334	160	174	91	43	48	243	117	126
12 months follow-up survey 5/10/2011-3/12/2012									
Attempted for 12 months interview ^b	974	480	494	292	143	149	682	337	345
12 months completed	733	364	369	239	118	121	494	246	248
No 12 month interview (6 deceased, 7 refused, 228									
inaccessible)	241	116	125	53	25	28	188	91	97
36 months follow-up survey 1/14/2014-10/14/2014									
Attempted for 36 months interview ^c	1004	496	508	299	148	151	705	348	357
36 months completed	600	293	307	196	94	102	404	199	205
No 36 months interview (24 deceased, 10 refused,									
370 inaccessible)	404	203	201	103	54	49	301	149	152

Table S1. Telephone Survey Response Status by Screening Sector among Enrolled

 $^{a}N=153$ were not approached for 6 months telephone survey because the baseline survey status was in one of the following categories: ill or incarceration, unable to contact, or deceased.

^b N=272 were not approached for 12 months telephone survey because the previous survey status was in one of the following categories: had no data on baseline and 6 months survey, ill or incarceration, unable to contact, or deceased.

 $^{\circ}N=242$ were not approached for 36 months telephone survey because the previous survey status was in one of the following categories: had no data on any previous surveys (baseline, 6-, or 12-month), final refusal, or deceased.

Table S2 shows the distribution of unit response patterns over 36 months. Among enrolled participants (N=1248), 1019 had at least one data point at baseline, 6, 12, or 36 months while 227 had no any data across waves. We define our analytic sample to be participants who completed 1 or more surveys at baseline, 6, 12, or 36 months and alive at follow-up, resulted in analytic sample size of N=1018, 1013, 980 for 6, 12, and 36 months respectively. To control for potential nonresponse bias, we used a combination of weighting method and unit imputation to extrapolate data analyses to enrolled participants.





Shaded areas indicated available data

3. Propensity weighting adjustment

To control for potential nonresponse bias, we used nonresponse weighting to address missing data for subjects who completed neither baseline nor any follow-up assessment. We used a propensity weighting adjustment, by fitting logistic regression (4, 5) to address missing data for the 18% (227/1246) of participants who completed neither baseline nor any follow-up assessment. The reciprocal of the predicted probability was then used to account for attrition. For each of the 5 item-level imputation datasets, we fitted the logistic regression models separately for the two intervention arms. Common predictors were used in all models: age, gender, ethnicity, living situation, income, US born, community and type of programs. The final weights are the product of the two adjustment factors for enrollment and nonresponse. See Supplementary Materials in previous publications (1, 3).

4. Imputation

4.1. Multiple Imputation for Item-level Missing Data

Most variables had item-level missingness rates of less than 5% except for baseline income and MINI variables. We used an extended hot deck multiple imputation technique to impute missing values for item-level nonresponse (6). With imputations stratified by intervention arms, 5 alternative imputed datasets were produced for screener, baseline, 6 month, 12 month, and 36 months follow-ups, and multiple imputation inferences were used in all analysis (7, 8). See Supplementary Materials in previous publications (1, 3).

4.2. Unit-Level Multiple Imputation

We used a hot deck multiple imputation procedure based on an approximate Bayesian bootstrap method for unit-level missing data (9, 10). This model assumes that both missingness and dropout arise from mechanisms that are missing at random (MAR) in the sense defined by Rubin (7). Our imputation techniques attempted to

include information related to the missing values whenever possible. We first modeled the propensity of response at a given time point (coded 1 if response and 0 if nonresponse). In Step 2, we stratified cases based on the quintiles of the propensity scores and used the approximate Bayesian bootstrap to select donors. In practice these procedures were applied in sequence for the baseline, 6-month, 12-month, and 36-month data, with imputations stratified by two intervention arms. We started with imputing baseline. For each of the 5 item-level imputed screener datasets, we imputed a unit-level imputation baseline dataset. Limited to the analytic sample of 1018, we then used baseline variables as predictors for modeling 6, 12, and 36 months follow-up data and produced unit-level imputation datasets. In modeling the logistic regression of predicting response propensities, we started with a large set of independent variables. The baseline model included the predictors: age, gender, ethnicity, income, living situation, US born, community, and type of screening program. The 6-month models included participants characteristics assessed at screener (age, gender, ethnicity, health insurance, and type of screening program), and baseline clinic and service variables (multiple chronic conditions, alcohol abuse or use of illicit drugs, any depression care), and 12-month models included additional variables: community, PHQ-8 assesses at screener, mental wellness, homeless status at baseline. The 36-month models included age, gender, ethnicity, employment status, ≥ 3 chronic conditions, homeless, 12-month alcohol abuse or use of illicit drugs, no place to stay for at least two nights in the past 6 months, type of screening program, and community with additional stratum variable sector (social-community screening sector vs healthcare Screening Sector) in Step 2. Values for participants who were deceased were not imputed.

5. Sensitivity Analyses

To evaluate whether our findings are sensitive to the design-based approach using multiply imputed data in our primary analyses (Method-1), we conducted sensitivity analyses for 18 study outcome variables measuring clinical outcomes and depression care assessed at three follow-up time points using unweighted raw data without unit imputation. The full table for the primary analysis using the approach presented in the main text of the Brief Report is shown in Table S3.

5.1. Unadjusted estimates

Method-2 is unadjusted analysis based on an available-case analysis that deleted all nonresponse cases. We used Pearson's chi-squared tests for binary variables and two sample *t*-test for continuous variables for overall sample and stratified by screening sector (community or health). The results of unadjusted analyses are presented in Table S4.

Compared to the primary analysis (Method-1), the unadjusted analysis based on available-case data (Method-2) produced similar intervention effects on the primary outcomes and community-prioritized outcomes except for 6-month behavioral health hospital nights for social community clients which Method-2 has borderline significance (p=.057). For client service utilization variables, Method-2 yielded more statistically significant findings than Method-1.

5.2. Longitudinal analyses

Method-3 is a longitudinal analysis using all waves of data (baseline, 6 months, 12 months, 36 months) without unit imputation (but including item imputation to permit consistent sample sizes). We adjusted the same set of baseline covariates as in the primary analysis (age, education, race/ethnicity, 12-month depressive disorder, and community). We specified a spline model, with a linear segment between baseline and the first follow-up for initial improvement, and another linear segment for the subsequent follow-ups; the 2 linear segments are specified to join at the first follow-up. In analyzing continuously scaled PCS-12 as the dependent variable, we used a 3-level, mixed-effect regression model by using SAS proc mixed. To account for the intraclass correlation due to the multilevel structure, we specified random effects at the program level, including random intercepts at program level and a spatial covariance structure at the client level to account for the unequal spacing of waves (11, 12). We utilized a generalized estimating equation (GEE) framework (13) with logistic regression models for binary outcomes and Poisson models for count data using SAS proc genmod due to

unstable estimates for program-specific random effects with SAS proc glimmix, specifying exchangeable correlation at the program level. From the estimated spline model, we developed a contrast involving a linear combination of coefficients to test an intervention effect at each end point (baseline, 6 months, 12 months, and 36 months) and a difference-in-difference defined as between intervention groups in change from baseline to 6 months, 12 months, and 36 months (i.e. estimated interaction of intervention status by time at each time point) within each sector and tested interaction of intervention by sector at each time point. The results of intervention effects on outcomes and service utilization are presented in Table S5.

Sensitivity analyses using the longitudinal model (Method-3) confirm that all interactions noted in Method-1 remain significant, except for 6-month behavioral health hospital nights which has borderline significance (p=.08). Three additional interactions are significant in the longitudinal analysis (visits to primary care providers increased in CEP compared to RS for social-community clients (rather than health clients), any social services for depression increased in CEP compared to RS in healthcare clients but decreased in socialcommunity clients; percent of use of any antidepressant increased under CEP over RS in social-community clients but decreased in healthcare clients). For intervention effects within community clients, significant intervention effect is confirmed by testing intervention effects in change from baseline for higher use of antidepressants and visits to primary care at 36 month under CEP and fewer behavioral health hospital nights at 6 months, and this effect on hospital nights also emerges as significant at 12 and 36 months. In addition, the tests of intervention effects at a specific follow-up time point confirm significant increases under CEP in use of probable appropriate depression treatment at 36-months. For healthcare clients, testing the intervention effects in change from baseline confirm improved MHQL (p=.012) and mental wellness (p=.012) at 6 months. For PHRQL, CEP has significant improvement than RS at 36 months (with p<.05) but not in change from baseline. In addition, the tests for intervention effects in change from baseline suggest reduced mental health specialty outpatient visits received advice for medication and in use of antidepressant medication at 6 and 12 months; with end-status analyses but not in change from baseline showed significant increases under RS compared to CEP in appropriate treatment at 36 months (OR=.63, 95% CI=.4-0.1, p=.048).

6. Intervention Components

The study compared two implementation models, both of which encouraged but did not require providers or clients to use particular toolkits or services for depression QI strategies (e.g., clinical assessment, psychotropic medications and/or cognitive behavioral therapy for depression, skill building for case managers and community health workers, and patient education and engagement materials). The interventions differed in ways of adapting resources and implementing training for depression services QI, based on toolkits from prior studies and available to participating programs in hardcopy, flash drives and a website (http://www.communitypartnersincare.org/community-engagement-and-planning/).

RS used a technical assistance approach to provide support to individual programs for depression QI, using a "train-the-trainer" model. Programs within agencies were encouraged to consider which toolkit materials were relevant to their program. Representatives from each RS program were offered training on depression QI strategies via a series of 12 phone or on-line webinars offered over a two-month period in each community, provided by a team of psychiatrists, nurse care manager, CBT trainer, QI expert, support staff and an engagement specialist to encourage participation. Representatives were encouraged to share toolkits and orient their providers/staff. In addition, for each RS primary-care site, a physician offered to make one site visit to review medication management and clinical assessment. For components requiring additional supervision, such as Cognitive Behavioral Therapy, referrals were made to local programs. QI toolkits and trainings were provided free.

CEP supported each community in developing a multi-sector "network" from participating programs to collaborate in developing a written plan for training, and implementation and monitoring of the depression QI

strategies, emphasizing collaboration across sectors in tasks such as referrals and case management. Program liaisons attended meetings twice a month during the 4-month planning period to adapt toolkits to communities and document written plans, supported by a CEP workbook on participatory principles, study intervention experts and \$15K per coalition to use for innovations in toolkit adaptations and trainings. Subsequently, liaisons met monthly for a year to oversee implementation (i.e., conferences, telephone and webinar supervision for CBT and case-management), to review progress and recommend modifications, and to develop and implement innovations. Innovations included review of alternative medicine therapies in medication management trainings, provider self-care activities to improve capacity to help consumers, "resilience classes" taught by lay persons for psychoeducation on CBT principles, and in the last several months, piloting a "Village Clinic" offering case management and resiliency classes in selected CEP sites.

			Social-community Screening Sector 1ate CEP Estimate CEP vs RS													
	RS	Estimate	CEF	P Estimate		CEP vs	RS		RS 1	Estimate	CEF	• Estimate		CEP vs l	RS	Interaction
	%	95%CI	%	95%CI	OR	95%CI	р	9	%	95%CI	%	95%CI	OR	95%CI	р	р
Primary outcomes																
MCS-12≤40																
6-mo follow-up	49.5	39.7-59.4	45.3	36.9-53.9	.8	.5-1.4	.511	5	52.4	46.9-57.9	43.4	38.4-48.4	.7	.59	.015	.502
12-mo follow-up	55.5	46.8-63.8	42.4	32.8-52.6	.6	.3-1.0	.045	4	18.3	41.5-55.2	45.9	38.7-53.2	.9	.7-1.2	.530	.131
36-mo follow-up	36.5	24.5-50.3	40.0	30.0-50.9	1.2	.5-2.6	.692	4	40.7	32.1-49.9	47.2	36.1-58.5	1.3	.6-2.7	.389	.798
PHQ-8≥10																
6-mo follow-up	65.4	53.5-75.6	63.1	53.0-72.2	.9	.4-1.9	.766	6	57.6	60.7-73.8	60.4	52.7-67.6	.7	.4-1.2	.156	.545
12-mo follow-up	59.6	47.6-70.5	58.1	45.4-69.8	.9	.4-2.0	.859	6	52.9	57.0-68.4	62.0	54.4-69.0	1.0	.7-1.4	.830	.950
36-mo follow-up	64.6	49.3-77.5	57.6	48.0-66.7	.7	.4-1.5	.363	6	6.2	58.0-73.6	69.3	62.5-75.3	1.2	.7-1.9	.553	.225
Community-																
Prioritized outcomes																
Mental wellness																
6-mo follow-up	37.3	25.6-50.7	45.7	36.8-54.9	1.5	.7-3.0	.307	3	32.3	25.9-39.3	45.8	38.6-53.1	1.9	1.0-3.3	.039	.618
12-mo follow-up	46.9	36.6-57.5	44.6	33.6-56.1	.9	.5-1.8	.768	4	17.5	39.6-55.5	50.8	43.6-58.0	1.2	.7-1.8	.534	.538
36-mo follow-up	42.9	28.2-58.9	47.5	32.7-62.6	1.2	.4-3.6	.679	5	50.5	39.4-61.7	43.5	36.7-50.7	.7	.5-1.2	.207	.224
Homeless or ≥ 2 risk																
factors for																
homelessness																
6-mo follow-up	42.0	31.3-53.4	25.2	16.3-36.5	.4	.29	.018	3	38.8	31.2-47.0	31.5	24.8-38.9	.7	.4-1.1	.125	.179
12-mo follow-up	30.2	22.1-39.7	33.1	22.8-45.3	1.2	.5-2.4	.682	3	32.5	26.0-39.8	35.0	28.1-42.6	1.1	.8-1.7	.540	.948
36-mo follow-up	40.3	30.0-51.6	33.7	20.5-49.8	.7	.3-1.8	.451	3	33.9	26.1-42.6	35.9	28.6-43.9	1.1	.7-1.8	.701	.460
					Between-								Between-			
					group								group			
PCS-12	Mean		Mean		difference			Ν	Mean		Mean		difference			
6-mo follow-up	40.1	38.7-41.5	40.9	39.6-42.2	.8	8-2.4	.315	3	39.6	38.9-40.4	40.1	39.1-41.1	.5	8-1.7	.440	.740
12-mo follow-up	40.1	38.8-41.4	40.1	38.8-41.3	.0	-1.6-1.6	.992	3	39.6	38.5-40.6	40.4	39.3-41.5	.8	6-2.2	.248	.447
36-mo follow-up	39.1	37.9-40.3	39.2	38.2-40.2	.1	-1.5-1.7	.882	3	38.6	37.6-39.5	40.2	39.3-41.2	1.6	.2-3.0	.025	.192
No. of behavioral																
health hospital nights	Mean		Mean		IRR			Ν	Mean		Mean		IRR			
6-mo follow-up	1.1	.6-2.0	.3	.18	.3	.1-1.0	.044		.9	.4-1.9	1.3	.4-4.3	1.5	.4-5.3	.497	.048
12-mo follow-up	.3	.17	.4	.1-1.1	1.1	.3-3.8	.916		.3	.14	.4	.28	1.6	.7-3.9	.273	.580
36-mo follow-up	1.4	4-4.1	.3	.0-2.1	.2	0-1.6	126	1	.0	1-6.2	.2	1-4	2	0-2.0	174	.915

TABLE S3. Client Primary and Community-Prioritized Outcomes by Intervention Status from Intervention-by-Sector Interaction Model^a

See Table 1 for variables definitions; RS=Resources for Services or individual program technical assistance; CEP=Community Engagement and Planning; data were multiply imputed (N=1018 at 6 months, 1013 at 12 months, 980 at 36 months).

^aIntervention-by-Sector interaction models used multiply imputed data, weighted for eligible sample for enrollment; linear regression models for continuous variables (presented as between-group difference), logistic regression models for binary variables (presented as odds ratio, OR) or Poisson regression models for count variables (presented as incidence rate ratios, IRR), interacted of intervention condition by screening sector adjusted for baseline status of the dependent variable, age, education, race/ethnicity, 12-month depressive disorder, and community and accounted for the design effect of the cluster randomization

	Social-community Screening Sector						Healthcare Screening Sector								
	RS 1	Estimate	CEP	Estimate		CEP	vs RS	RS	Estimate	CEF	• Estimate		CEP	vs RS	Interaction
	Mean	95%CI	Mean	95%CI	IRR	95%CI	р	Mean	95%CI	Mean	95%CI	IRR	95%CI	р	р
Health Services															
No. of visits to a PCP															
6-mo follow-up	4.0	2.7-5.8	3.9	2.9-5.2	1.0	.6-1.6	.944	4.5	3.1-6.4	3.9	3.3-4.6	.9	.6-1.3	.484	.709
12-mo follow-up	3.0	2.3-3.9	3.7	2.7-5.1	1.2	.8-1.9	.338	3.2	2.3-4.4	3.5	3.0-4.2	1.1	.8-1.6	.580	.671
36-mo follow-up	2.4	2.0-2.9	4.5	3.1-6.4	1.9	1.3-2.8	.003	4.5	3.0-6.7	4.0	3.2-4.9	.9	.6-1.4	.578	.035
No. of MH outpatient visits															
received advice for medication															
6-mo follow-up	2.9	.8-9.6	3.0	1.8-5.0	1.1	.2-5.2	.870	7.2	4.8-10.7	2.7	2.1-3.5	.4	.26	<.001	.100
12-mo follow-up	1.5	.7-3.0	1.8	.9-3.5	1.2	.4-3.2	.752	3.3	2.2-4.9	3.3	2.3-4.6	1.0	.6-1.7	.992	.777
36-mo follow-up	1.5	.8-2.5	3.2	1.6-6.1	2.1	.9-5.1	.081	3.7	2.1-6.4	3.9	.8-16.4	1.0	.4-2.6	.956	.243
No. of MH outpatient visits															
received counseling															
6-mo follow-up	6.4	2.7-14.6	5.1	3.3-7.8	.8	.3-2.5	.684	9.4	6.5-13.4	5.9	4.5-7.8	.6	.4-1.0	.060	.617
12-mo follow-up	2.3	1.4-3.8	2.8	1.7-4.6	1.2	.6-2.6	.621	4.8	3.4-6.7	3.8	2.8-5.1	.8	.5-1.3	.329	.289
36-mo follow-up	2.4	1.3-4.4	4.8	2.6-8.6	2.0	.9-4.5	.090	5.0	2.5-9.5	5.6	2.4-12.1	1.1	.6-2.1	.725	.293
	%		%		OR			%		%		OR			
Any ER or urgent care visits															
6-mo follow-up	41.5	34.7-48.5	40.7	31.5-50.5	1.0	.6-1.7	.895	40.1	33.4-47.1	39.5	32.9-46.5	1.0	.6-1.6	.907	.980
12-mo follow-up	33.4	24.7-43.4	36.2	27.6-45.8	1.1	.6-2.1	.675	35.7	30.7-40.9	32.8	25.3-41.2	.9	.6-1.2	.414	.451
36-mo follow-up	42.7	32.6-53.4	36.7	26.8-47.6	.8	.5-1.3	.294	40.1	34.4-46.0	40.5	32.6-49.0	1.0	.6-1.6	.930	.361
Any visit in healthcare sector															
6-mo follow-up	86.6	80.5-91.1	84.5	75.5-90.8	.8	.4-1.8	.646	90.9	86.6-94.0	89.2	84.0-92.9	.8	.4-1.6	.533	.950
12-mo follow-up	80.2	70.4-87.3	84.4	77.6-89.4	1.4	.7-2.7	.375	83.5	78.6-87.5	84.5	78.6-89.0	1.1	.7-1.8	.770	.592
36-mo follow-up	75.3	67.4-81.9	85.8	76.0-92.0	2.0	.9-4.5	.082	87.7	79.5-93.0	83.9	73.1-91.1	.7	.3-1.6	.402	.025
Community Services															
Any social services for															
depression															
6-mo follow-up	19.0	14.0-25.4	13.7	8.8-20.6	.7	.3-1.3	.203	17.0	12.4-22.9	19.0	14.5-24.5	1.2	.7-1.9	.578	.126
12-mo follow-up	12.9	8.2-19.7	8.8	3.9-17.9	.6	.2-1.9	.376	9.5	5.8-14.9	12.7	9.2-17.2	1.4	.7-2.8	.315	.133
36-mo follow-up	18.8	11.0-29.9	9.3	3.8-20.3	.4	.1-1.3	.122	10.5	7.0-15.5	21.0	13.3-31.2	2.3	1.1-4.8	.030	.034
Any community sector visit for															
depression															
6-mo follow-up	28.2	21.4-36.1	29.4	22.3-37.7	1.1	.6-1.8	.813	29.8	24.4-35.8	31.9	25.1-39.6	1.1	.7-1.7	.633	.892
12-mo follow-up	20.8	15.3-27.5	21.8	14.1-31.8	1.1	.5-2.2	.859	20.4	16.1-25.5	24.1	19.5-29.3	1.2	.8-1.9	.285	.640
36-mo follow-up	31.0	22.1-41.5	25.4	17.1-36.0	.8	.4-1.4	.337	27.3	21.9-33.4	39.8	32.2-47.9	1.8	1.2-2.8	.009	.036
Community and/or															
Healthcare service															
No. of days attended self-help															
or family support groups for															
MH problem	Mean		Mean		IRR			Mean		Mean		IRR			

TABLE S3. Client Secondary Outcomes by Intervention Status from Intervention-by-Sector Interaction Model^a

		So	cial-co	nmunity Sc	reenin	g Sector									
	RS	Estimate	CEP	Estimate		CEP	vs RS	RS	Estimate	CEP	Estimate		СЕР	vs RS	Interaction
	Mean	95%CI	Mean	95%CI	IRR	95%CI	р	Mean	95%CI	Mean	95%CI	IRR	95%CI	р	р
6-mo follow-up	2.6	1.1-6.2	4.3	2.0-9.0	1.6	.5-5.1	.395	6.4	3.5-11.2	4.4	2.8-6.9	.7	.4-1.3	.262	.180
12-mo follow-up	2.6	.8-7.8	6.5	3.0-14.0	2.6	.7-10.0	.169	8.8	6.1-12.6	5.0	2.8-8.9	.6	.3-1.0	.060	.046
36-mo follow-up	2.1	1.0-4.3	6.4	3.5-11.4	3.1	1.2-8.1	.024	7.9	5.1-12.1	5.3	2.8-9.7	.7	.3-1.6	.301	.033
No. of outpatient contacts for															
depression all sectors															
6-mo follow-up	17.2	9.4-30.9	21.2	14.5-30.8	1.2	.6-2.6	.541	24.9	17.8-34.7	22.2	16.7-29.4	.9	.5-1.5	.628	.350
12-mo follow-up	9.8	5.6-16.9	17.0	10.5-27.5	1.7	.8-3.7	.147	21.9	17.0-28.2	17.2	12.2-24.3	.8	.5-1.1	.190	.047
36-mo follow-up	10.7	6.9-16.5	17.2	10.9-26.9	1.6	.8-3.0	.144	25.8	19.7-33.6	21.3	13.5-33.2	.8	.6-1.2	.305	.054
Treatment															
Use of any antidepressant	%		%		OR			%		%		OR			
6-mo follow-up	31.4	24.4-39.2	30.6	21.0-42.2	1.0	.5-2.0	.894	44.0	34.7-53.7	35.5	28.3-43.4	.6	.4-1.2	.131	.300
12-mo follow-up	28.4	19.6-39.2	30.7	22.0-41.0	1.1	.5-2.5	.743	39.3	32.0-47.0	29.1	24.3-34.4	.6	.49	.016	.143
36-mo follow-up	14.2	9.2-21.2	33.1	24.7-42.6	3.2	1.6-6.4	.002	34.5	27.4-42.3	24.4	15.8-35.3	.6	.3-1.2	.135	.011
Use of any antipsychotic															
6-mo follow-up	19.6	13.7-27.1	21.7	14.0-31.7	1.2	.5-2.8	.710	26.3	20.7-32.7	25.1	19.8-31.3	.9	.5–1.6	.751	.597
12-mo follow-up	21.0	12.9-32.1	21.5	14.7-30.2	1.0	.4-2.5	.928	27.1	21.2-33.9	25.1	19.3–31.9	.9	.5-1.5	.623	.745
36-mo follow-up	10.4	4.9-20.2	29.4	18.3–43.3	4.0	1.8–9.0	.001	26.2	20.0-33.5	20.8	14.4-29.1	.7	.5–1.1	.151	<.001
Probable appropriate treatment ^b															
6-mo follow-up	74.1	65.7-81.0	75.5	67.2-82.3	1.1	.6-2.1	.802	77.9	69.6-84.5	79.2	74.1-83.6	1.1	.7-1.8	.727	.991
12-mo follow-up	70.6	57.1-81.3	73.6	63.0-82.0	1.2	.5-2.5	.693	76.6	71.7-80.9	72.8	64.8-79.6	.8	.5-1.2	.327	.427
36-mo follow-up	60.5	43.9-75.2	76.9	65.7-85.4	2.2	1.1-4.5	.033	72.8	65.1-79.4	65.5	57.4-72.9	.7	.4-1.2	.169	.031

TABLE S3. Client Secondary Outcomes by Intervention Status from Intervention-by-Sector Interaction Model^a

RS=Resources for Services or individual program technical assistance; CEP=Community Engagement and Planning; data were multiply imputed (N=1018 at 6 months, 1013 at 12 months, 980 at 36 months)

^aIntervention-by-Sector interaction models used multiply imputed data, weighted for eligible sample for enrollment; logistic regression models for binary variables (presented as odds ratio, OR) or Poisson regression models for count variables (presented as incidence rate ratios, IRR), interacted of intervention condition by screening sector adjusted for baseline status of the dependent variable, age, education, race/ethnicity, 12-month depressive disorder, and community and accounted for the design effect of the cluster randomization

^bProbable appropriate depression treatment: Not depressed (PHQ8<10) or depression treatment (antidepressant ≥ 2 mo. or ≥ 4 MH or PCP depression visits)

				Social-communit	y Screening Sector	r		Healthcare S	creening Sector	
		% of			• 8				8	
	Ν	missing	Ν	RS	CEP	р	Ν	RS	CEP	р
Primary outcomes										
$MCS12 \le 40$				no./total (%)	no./total (%)			no./total (%)	no./total (%)	
6-mo follow-up	755	.5	236	58/118 (49.2%)	52/118 (44.1%)	.434	519	140/261 (53.6%)	114/258 (44.2%)	.031
12-mo follow-up	717	2.2	233	62/117 (53.0%)	42/116 (36.2%)	.010	484	119/239 (49.8%)	118/245 (48.2%)	.720
36-mo follow-up	588	2.0	191	36/93 (38.7%)	38/98 (38.8%)	.993	397	83/195 (42.6%)	93/202 (46.0%)	.486
$PHQ8 \ge 10$										
6-mo follow-up	758	.1	235	77/117 (65.8%)	73/118 (61.9%)	.529	523	177/262 (67.6%)	162/261 (62.1%)	.189
12-mo follow-up	729	.5	238	71/118 (60.2%)	68/120 (56.7%)	.584	491	159/244 (65.2%)	156/247 (63.2%)	.643
36-mo follow-up	596	.7	192	62/94 (66.0%)	58/98 (59.2%)	.332	404	133/199 (66.8%)	143/205 (69.8%)	.528
Community-prioritized										
(secondary)										
Mental wellness										
6-mo follow-up	758	.1	236	45/118 (38.1%)	52/118 (44.1%)	.354	522	86/261 (33.0%)	121/261 (46.4%)	.002
12-mo follow-up	732	.1	239	54/118 (45.8%)	55/121 (45.5%)	.962	493	110/246 (44.7%)	121/247 (49.0%)	.342
36-mo follow-up	599	.2	195	38/94 (40.4%)	43/101 (42.6%)	.761	404	94/199 (47.2%)	90/205 (43.9%)	.501
homeless or ≥ 2 risk factors for										
homelessness										
6-mo follow-up	757	.3	236	53/118 (44.9%)	27/118 (22.9%)	.000	521	97/261 (37.2%)	82/260 (31.5%)	.176
12-mo follow-up	726	1.0	236	39/115 (33.9%)	38/121 (31.4%)	.681	490	75/246 (30.5%)	85/244 (34.8%)	.305
36-mo follow-up	599	.2	195	38/94 (40.4%)	29/101 (28.7%)	.085	404	65/199 (32.7%)	74/205 (36.1%)	.468
PCS-12				Mean \pm SD	Mean \pm SD			Mean ± SD	Mean \pm SD	
6-mo follow-up	755	.5	236	40.0 ± 7.3	40.3 ± 7.5	.792	519	39.7 ± 7.3	40.3 ± 6.9	.347
12-mo follow-up	717	2.2	233	39.9 ± 7.1	39.1 ± 7.2	.372	484	39.6 ± 7.1	40.7 ± 6.7	.077
36-mo follow-up	588	2.0	191	38.4 ± 7.6	38.4 ± 7.1	.970	397	38.5 ± 7.1	40.1 ± 7.3	.032
# behavioral health hospital nights										
6-mo follow-up	759	0	236	1.1 ± 4.4	$.3 \pm 1.7$.057	523	$.7 \pm 4.2$	1.2 ± 12.4	.561
12-mo follow-up	730	.4	238	$.3 \pm 1.3$	$.3 \pm 2.0$.791	492	$.3 \pm 1.6$	$.4 \pm 2.9$.384
36-mo follow-up	597	.5	194	1.0 ± 6.9	$.1 \pm 1.0$.208	403	1.1 ± 13.0	$.3 \pm 1.2$.360
Healthcare Sector										
# visits to a PCP										
6-mo follow-up	758	.1	236	3.9 ± 7.3	4.3 ± 6.0	.641	522	4.0 ± 8.2	3.9 ± 7.0	.868
12-mo follow-up	729	.5	239	3.2 ± 4.4	4.0 ± 5.3	.206	490	3.4 ± 6.3	3.4 ± 5.5	.976
36-mo follow-up	598	.3	194	2.7 ± 3.9	4.8 ± 7.2	.015	404	5.0 ± 11.0	3.5 ± 5.9	.085
# MH outpatient visits received										
advice for medication										
6-mo follow-up	758	.1	236	1.5 ± 3.0	2.5 ± 4.6	.064	522	7.2 ± 23.9	3.1 ± 6.8	.008
12-mo follow-up	725	1.1	236	1.3 ± 3.6	1.8 ± 4.4	.397	489	3.6 ± 10.8	3.7 ± 9.5	.928
36-mo follow-up	597	.5	194	1.4 ± 4.1	2.9 ± 6.6	.063	403	3.8 ± 11.6	3.1 ± 13.6	.536
# MH outpatient visits received										
counseling										
6-mo follow-up	758	.1	236	4.4 ± 15.5	4.7 ± 11.9	.847	522	9.7 ± 25.8	6.3 ± 11.5	.051
12-mo follow-up	726	1.0	236	1.8 ± 4.6	2.9 ± 7.9	.179	490	5.5 ± 12.5	4.1 ± 9.8	.174
36-mo follow-up	564	6.0	185	1.9 ± 5.5	4.5 ± 9.8	.026	379	4.8 ± 13.8	4.1 ± 15.0	.641

Table S4. Unadjusted Estimates^a

Table S4. Unadjusted Estimates^a

				Social-communit	y Screening Sector	•		Healthcare S	creening Sector	
		% of								
	N	missing	N	RS	CEP	р	N	RS	CEP	р
Any ER or urgent care visits				no./total (%)	no./total (%)			no./total (%)	no./total (%)	
6-mo follow-up	759	0	236	52/118 (44.1%)	49/118 (41.5%)	.693	523	100/262 (38.2%)	102/261 (39.1%)	.830
12-mo follow-up	730	.4	238	40/117 (34.2%)	47/121 (38.8%)	.456	492	89/246 (36.2%)	78/246 (31.7%)	.295
36-mo follow-up	597	.5	194	41/94 (43.6%)	37/100 (37.0%)	.348	403	82/199 (41.2%)	80/204 (39.2%)	.684
Any visit in healthcare sector										
6-mo follow-up	758	.1	236	99/118 (83.9%)	102/118 (86.4%)	.583	522	238/262 (90.8%)	234/260 (90.0%)	.744
12-mo follow-up	725	1.1	238	92/117 (78.6%)	104/121 (86.0%)	.139	487	205/243 (84.4%)	210/244 (86.1%)	.596
36-mo follow-up	597	.5	194	74/94 (78.7%)	87/100 (87.0%)	.125	403	181/199 (91.0%)	171/204 (83.8%)	.031
Community services										
Any social services for depression										
6-mo follow-up	757	.3	236	23/118 (19.5%)	17/118 (14.4%)	.298	521	37/261 (14.2%)	51/260 (19.6%)	.098
12-mo follow-up	728	.7	238	16/117 (13.7%)	10/121 (8.3%)	.181	490	22/246 (8.9%)	28/244 (11.5%)	.354
36-mo follow-up	595	.8	193	16/94 (17.0%)	9/99 (9.1%)	.101	402	23/198 (11.6%)	40/204 (19.6%)	.028
Any community sector visit for										
depression										
6-mo follow-up	759	0	236	33/118 (28.0%)	35/118 (29.7%)	.774	523	72/262 (27.5%)	82/261 (31.4%)	.323
12-mo follow-up	726	1.0	236	25/116 (21.6%)	26/120 (21.7%)	.983	490	50/246 (20.3%)	54/244 (22.1%)	.625
36-mo follow-up	592	1.3	192	28/93 (30.1%)	25/99 (25.3%)	.452	400	54/197 (27.4%)	80/203 (39.4%)	.011
Community and/or Healthcare										
service										
# days self-help visit for mental										
health										
6-mo follow-up	759	0	236	1.3 ± 4.7	3.9 ± 14.4	.065	523	6.6 ± 23.9	4.4 ± 16.4	.210
12-mo follow-up	730	.4	238	1.4 ± 11.1	6.1 ± 22.3	.044	492	10.7 ± 29.3	5.6 ± 18.9	.022
36-mo follow-up	598	.3	194	2.5 ± 9.7	6.9 ± 19.2	.048	404	8.5 ± 21.2	5.2 ± 13.1	.060
# outpatient contacts for depression				Mean \pm SD	Mean \pm SD			Mean \pm SD	Mean \pm SD	
all sectors										
6-mo follow-up	759	0	236	12.1 ± 31.1	21.3 ± 43.6	.066	523	25.1 ± 52.0	21.8 ± 44.1	.436
12-mo follow-up	719	1.9	234	7.1 ± 23.9	17.4 ± 37.4	.013	485	25.3 ± 49.3	18.3 ± 41.8	.093
36-mo follow-up	588	2.0	191	10.9 ± 23.4	17.3 ± 32.2	.123	397	25.6 ± 53.0	19.3 ± 40.8	.185
Treatment										
Use of any antidepressant										
6-mo follow-up	757	.3	235	29/118 (24.6%)	38/117 (32.5%)	.180	522	124/262 (47.3%)	97/260 (37.3%)	.021
12-mo follow-up	730	.4	239	26/118 (22.0%)	40/121 (33.1%)	.057	491	104/246 (42.3%)	71/245 (29.0%)	.002
36-mo follow-up	600	0	196	14/94 (14.9%)	35/102 (34.3%)	.002	404	77/199 (38.7%)	53/205 (25.9%)	.006
Use of any antipsychotic				(,				(,	,	
6-mo follow-up	757	.3	235	17/118 (14.4%)	25/117 (21.4%)	.164	522	72/262 (27.5%)	74/260 (28.5%)	.803
12-mo follow-up	730	.4	239	17/118 (14.4%)	25/121 (20.7%)	.204	491	69/246 (28.0%)	68/245 (27.8%)	.942
36-mo follow-up	600	0	196	9/94 (9.6%)	28/102 (27.5%)	.001	404	56/199 (28.1%)	46/205(22.4%)	.187
Appropriate treatment	000	Ŭ	170	<i>y</i> / <i>y</i> · (<i>y</i> · c/c)	20,102 (2110 /0)	.001		20,199 (20,170)		1107
6-mo follow-up	754	7	235	82/117 (70.1%)	91/118 (77-1%)	221	519	210/262 (80.2%)	209/257 (81.3%)	735
12-mo follow-up	727	.,	237	79/117 (67 5%)	90/120 (75.0%)	203	490	191/244 (78 3%)	181/246 (73.6%)	.224
36-mo follow-up	598	.0	194	56/94 (59.6%)	79/100 (79.0%)	.003	404	150/199 (75.4%)	131/205 (63.9%)	.012

Table S4. Unadjusted Estimates^a

			Social-com	munity Screening Se	ector		Healt	hcare Screening Sector	
	% of								
N	missing	Ν	RS	CEP	р	Ν	RS	CEP	р

^aunadjusted analysis with Chi-square test for a binary variable and t-test for a continuously scaled variable, using available data without imputation and weighting adjustment

	j~	Social-co	mmuni	ity Screening	Sector		Healthcare Screening Sector						
	CEP vs RS	at specific time		CFP vs RS i	n change from	haseline	eline CEP vs RS at specific time CEP vs RS in change from baseline Inte						
	Test	95%CI	p	Test	95%CI	n	Test	95%CI	n	Test	95%CI	n	n
Primary outcomes	1050	757601	P	1000	757601	P	1050	<i>937</i> 001	P	1050	<i>)0/</i> 001	P	P
MCS12 < 40	OR			OR			OR			OR			
Baseline	63	38-1.05	076	OR			1.18	87-1.61	296	OR			044
6 mo follow up	.05	.30-1.05 /1 1 16	166	1.00	59 2 01	777	60	53 80	.270	58	38 80	012	097
12 mo follow up	.09	52 1 08	.100	1.09	67 2 07	576	.09	73 1 00	.004	.50	53 1 08	128	.90
36 mo follow up	.15	40 1 31	.110	1.10	62 2 50	510	1 16	83 1 62	305	.70	64 1 40	027	.405
$DUO_8 > 10$.0 OP	.49-1.31	.382	1.27 OP	.02-2.39	.319	1.10 OP	.03-1.02	.395	.90 OP	.04-1.49	.921	.239
$PRQ0 \ge 10$	1.24	21 9 24	755	UK			UK 1.42	51 2 05	405	UK			052
Baseline	1.34	.21-8.54	./55	C 0	07 6 46	720	1.45	.51-3.95	.495	52	10 1 55	245	.955
6-mo follow-up	.91	.45-1.85	./9/	.68	.07-6.46	./38	./6	.52-1.1	.147	.53	.18-1.55	.245	.656
12-mo follow-up	.81	.46-1.45	.483	.61	.07-5.08	.647	.93	.66-1.31	.68/	.65	.22-1.98	.451	.697
36-mo follow-up	.73	.41-1.29	.28	.54	.07-4.14	.557	1.15	.72-1.85	.561	.81	.24-2.67	.725	.241
Community-prioritized													
(secondary)													
Mental wellness	OR			OR			OR			OR			
Baseline	1.03	.64-1.66	.902				1.01	.7-1.44	.969				.941
6-mo follow-up	1.24	.65-2.35	.513	1.2	.64-2.27	.57	1.8	1.28-2.53	<.001	1.79	1.14-2.82	.012	.314
12-mo follow-up	1.1	.76-1.61	.61	1.07	.73-1.58	.732	1.24	.92-1.68	.16	1.23	.8-1.9	.342	.635
36-mo follow-up	.98	.58-1.67	.946	.95	.55-1.66	.865	.86	.55-1.32	.484	.85	.5-1.46	.555	.7
homeless or ≥ 2 risk factors for													
homelessness	OR			OR			OR			OR			
Baseline	.5	.25-1.01	.055				.91	.63-1.31	.61				.143
6-mo follow-up	.56	.28-1.12	.103	1.11	.67-1.83	.682	.76	.53-1.1	.15	.84	.63-1.11	.223	.451
12-mo follow-up	.73	.44-1.23	.238	1.45	.9-2.35	.127	.92	.63-1.34	.655	1.01	.7-1.45	.962	.491
36-mo follow-up	96	54-1.7	888	1.9	95-3.83	071	1.1	64-1.9	72	1.21	68-2.16	509	73
	Between-			Difference-			Between-			Difference			
	group			in-			group			-in-			
PCS-12(+)	difference			difference			difference			difference			
Baseline	- 41	-2 43-1 62	694	unterence			45	- 96-1 85	531	difference			496
6-mo follow-up	41	-2.43-1.02	706	81	-1.08-2.7	398	. 4 5 51	- 98-2 01	5	07	-1 2-1 33	919	937
12 mo follow up	.41	16179	01/	5	1 24 2 24	574	1.05	10 2 20		.07	56 1 76	300	371
36 mo follow up	.09	-1.0-1.79	836	.5	2 10 2 56	870	1.05	07.3.1	.090	.0	50-1.70	163	17
# behavioral health heapital	22	-2.31-1.67	.850	.10	-2.19-2.30	.079	1.39	.07-3.1	.04	1.14	40-2.74	.105	.17
# Denavioral nearth nospital	IDD			IDD			IDD			IDD			
Des alima		1.00 6.49	021	IKK				24 1 42	216	IKK			021
Baseline	2.00	1.09-6.48	.031	15	04 54	004	.09	.34-1.42	.310	2.1	72 12 25	100	.021
6-mo follow-up	.39	.11-1.46	.163	.15	.0454	.004	2.16	.54-8.61	.276	3.1	./3-13.25	.126	.08
12-mo tollow-up	.51	.1186	.024	.12	.0433	<.001	./	.28-1.75	.44	1.0	.36-2.81	.997	.25
36-mo follow-up	.25	.06-1.03	.055	.09	.024	.002	.22	.03-1.56	.131	.32	.04-2.39	.269	.935
Healthcare Sector													
# visits to a PCP	IRR			IRR			IRR			IRR			
Baseline	1.06	.77-1.47	.708				1.04	.8-1.36	.771				.917
6-mo follow-up	1.08	.71-1.63	.72	1.01	.73-1.4	.936	1.01	.74-1.37	.951	.97	.67-1.4	.872	.802
12-mo follow-up	1.4	1.08-1.81	.012	1.31	.99-1.74	.061	.85	.65-1.12	.258	.82	.62-1.09	.179	.01
36-mo follow-up	1.81	1.25-2.62	.002	1.7	1.05-2.75	.03	.72	.47-1.11	.142	.7	.46-1.04	.078	.002

TABLE S5. Longitudinal Analyses for Alternative Modeling of Intervention Effects on Outcomes and Utilizations^a

	<u></u> j	Social-co	ommuni	ty Scree	ning Sector			Hea	lthcare S	creening	Sector		
	CEP vs R	S at specific tim	e	CEP vs	RS in change from	baseline	CEP vs	RS at specific tin	ne	CEP vs	RS in change fro	om baseline	e Interaction
	Test	95%CI	р	Test	95%CI	р	Test	95%CI	р	Test	95%CI	р	р
# MH outpatient visits received													
advice for medication	IRR			IRR			IRR			IRR			
Baseline	1.85	.93-3.68	.081				1.05	.67-1.62	.843				.172
6-mo follow-up	1.47	.69-3.14	.314	.8	.56-1.13	.208	.48	.3173	<.001	.46	.368	<.001	.011
12-mo follow-up	1.62	.86-3.05	.135	.88	.59-1.3	.511	.69	.45-1.08	.107	.66	.4599	.044	.032
36-mo follow-up	1.78	.85-3.73	.128	.96	.47-1.96	.917	1.01	.47-2.17	.97	.97	.47-2.01	.936	.3
# MH outpatient visits received													
counseling	IRR			IRR			IRR			IRR			
Baseline	1.83	.85-3.95	.124				1	.63-1.59	.994				.189
6-mo follow-up	1.09	.4-2.99	.862	.6	.31-1.14	.116	.65	.42-1.02	.061	.65	.4692	.015	.358
12-mo follow-up	1.67	.83-3.37	.149	.91	.6-1.4	.678	.79	.51-1.22	.281	.79	.52-1.2	.259	.072
36-mo follow-up	2.56	1.16-5.68	.021	1.4	.64-3.07	.4	.95	.47-1.9	.882	.95	.46-1.97	.884	.064
Any ER or urgent care visits	OR			OR			OR			OR			
Baseline	.85	.5-1.46	.564				1.04	.74-1.47	.821				.539
6-mo follow-up	1.02	.64-1.63	.932	1.19	.75-1.91	.459	.99	.72-1.35	.931	.95	.67-1.33	.758	.907
12-mo follow-up	.92	.61-1.39	.699	1.08	.68-1.72	.751	.93	.73-1.18	.545	.89	.64-1.24	.496	.976
36-mo follow-up	.83	.49-1.42	.499	.97	.53-1.8	.933	.87	.62-1.24	.45	.84	.53-1.32	.448	.884
Any visit in healthcare sector	OR			OR			OR			OR			
Baseline	1.31	.62-2.74	.48				1.07	.48-2.37	.87				.72
6-mo follow-up	1.22	.58-2.58	.603	.93	.54-1.63	.808	1.34	.75-2.39	.326	1.25	.66-2.39	.496	.848
12-mo follow-up	1.38	.77-2.49	.283	1.06	.63-1.77	.833	1.1	.7-1.71	.688	1.02	.51-2.05	.945	.536
36-mo follow-up	1.56	.82-2.98	.176	1.2	.59-2.44	.622	.9	.52-1.54	.694	.84	.35-2.03	.697	.196
Community Services													
Any social services for													
depression	OR			OR			OR			OR			
Baseline	.57	.32-1.05	.071				1.31	.92-1.85	.133				.022
6-mo follow-up	.64	.31-1.3	.219	1.11	.61-2.04	.729	1.4	.83-2.36	.206	1.07	.58-1.97	.823	.081
12-mo follow-up	.49	.24-1	.05	.86	.48-1.55	.608	1.56	.99-2.46	.057	1.19	.72-1.98	.498	.009
36-mo follow-up	.38	.1499	.048	.66	.28-1.58	.349	1.73	.85-3.54	.133	1.32	.65-2.71	.441	.019
Any community sector visit for													
depression	OR			OR			OR			OR			
Baseline	.67	.35-1.26	.211				1.3	.92-1.83	.131				.069
6-mo follow-up	1	.56-1.78	.997	1.5	.8-2.82	.205	1.05	.71-1.56	.801	.81	.53-1.24	.33	.89
12-mo follow-up	.79	.51-1.22	.28	1.18	.69-2	.54	1.26	.9-1.75	.175	.96	.65-1.43	.859	.1
36-mo follow-up	.62	.34-1.12	.11	.93	.47-1.83	.823	1.5	.92-2.45	.105	1.15	.66-2.01	.617	.031
Community and/or Healthcare													
service													
# days self-help visit for MH	IRR			IRR			IRR			IRR			
Baseline	1.83	.47-7.14	.382				.86	.41-1.78	.68				.335
6-mo follow-up	3.03	1-9.17	.049	1.65	.51-5.38	.402	.69	.38-1.25	.218	.8	.37-1.76	.586	.021
12-mo follow-up	2.7	1.21-6.03	.015	1.47	.41-5.31	.554	.67	.43-1.03	.068	.78	.38-1.59	.487	.003
36-mo follow-up	2.4	.9-6.44	.081	1.31	.25-7	.751	.64	.38-1.08	.094	.75	.34-1.67	.479	.02
# outpatient contacts for													
depression all sectors	IRR			IRR			IRR			IRR			

TABLE S5. Longitudinal Analyses for Alternative Modeling of Intervention Effects on Outcomes and Utilizations^a

		Social-co	mmuni	ty Screen	ing Sector								
	CEP vs R	RS at specific time	e	CEP vs	RS in change from	baseline	CEP vs	RS at specific tin	ne	CEP vs	RS in change fro	m baseline	Interaction
	Test	95%CI	р	Test	95%CI	р	Test	95%CI	р	Test	95%CI	р	р
Baseline	1.13	.56-2.31	.733				.89	.62-1.27	.508				.547
6-mo follow-up	1.81	.78-4.17	.164	1.6	.87-2.93	.128	.86	.58-1.27	.453	.97	.68-1.39	.88	.114
12-mo follow-up	1.65	.88-3.11	.118	1.46	.9-2.37	.123	.79	.56-1.12	.19	.89	.63-1.28	.536	.045
36-mo follow-up	1.51	.76-3.01	.24	1.34	.67-2.66	.41	.73	.47-1.12	.149	.82	.51-1.31	.409	.078
Treatment													
Use of any antidepressant	OR			OR			OR			OR			
Baseline	1.2	.61-2.39	.595				1.11	.7-1.76	.649				.852
6-mo follow-up	1.01	.47-2.17	.97	.84	.49-1.47	.544	.74	.46-1.18	.204	.66	.4989	.007	.488
12-mo follow-up	1.48	.79-2.77	.225	1.23	.79-1.9	.356	.64	.4-1.03	.066	.58	.4476	<.001	.04
36-mo follow-up	2.15	1.13-4.1	.02	1.79	1.06-3.02	.03	.56	.3298	.041	.5	.3573	<.001	.002
Use of any antipsychotic	OR			OR			OR			OR			
Baseline	1.35	.54-3.38	.521				1.13	.6-2.12	.697				.753
6-mo follow-up	.88	.36-2.16	.775	.65	.4397	.035	1.08	.6-1.94	.802	.95	.67-1.36	.787	.701
12-mo follow-up	1.36	.61-3.03	.448	1.01	.58-1.74	.978	.88	.48-1.64	.69	.78	.52-1.16	.222	.395
36-mo follow-up	2.11	.85-5.29	.109	1.56	.63-3.87	.332	.72	.35-1.49	.377	.64	.37-1.1	.106	.074
Appropriate treatment	OR			OR			OR			OR			
Baseline	1.07	.6-1.92	.807				1.12	.66-1.92	.673				.915
6-mo follow-up	1.01	.55-1.83	.983	.94	.44-1.98	.863	1.14	.72-1.82	.572	1.02	.68-1.53	.929	.738
12-mo follow-up	1.36	.83-2.23	.222	1.27	.64-2.49	.494	.85	.59-1.22	.379	.76	.49-1.18	.22	.128
36-mo follow-up	1.84	1.01-3.34	.045	1.71	.8-3.66	.165	.63	.4-1	.048	.56	.3-1.05	.073	.005

TABLE S5. Longitudinal Analyses for Alternative Modeling of Intervention Effects on Outcomes and Utilizations^a

^aLongitudinal analyses used item level multiply imputed data (N=980 at baseline, 759 at 6 months, 733 at 12 months, and 600 at 36 months). A generalized estimating equation logistic regression model was used for a binary variable (presented as odds ratio) and generalized estimating equation Poisson regression model was used for a count variable (presented as incidence rate ratios), interacted of intervention condition by screening sector adjusted for age, race/ethnicity, 12-month depressive disorder, and community.

Figure. Study flow diagram



Five programs (2 in the RS group and 3 in the CEP group) had no clients with data for outcome analysis. CEP= community engagement and planning; RS = resources for services.

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