

Supplementary Appendices for

Comorbid Depression and Substance Abuse in Safety-net Clients in Los Angeles: A Community Participatory Assessment

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1. Summary of the sensitivity analyses

Appendix A. Individuals screened from substance abuse agencies with individuals screened from other sectors with or without recent substance abuse history, defined as substance abuse/dependence by MINI or in residential treatment in the last six months (Tables A1-A3):

Depressed clients varied significantly different across all three groups in age. Individuals screened from substance abuse sectors had similar PCS-12, were equally likely to misuse drugs or visit primary care, and were less likely to have a 12-month depressive disorder or to have an alcohol use disorder as those screened from other sectors with substance abuse history. Those screened from other sectors with substance abuse history were equally likely to be uninsured, visit mental health with similar frequencies, as those without substance abuse history. All other findings were similar.

Appendix B. Individuals screened from substance abuse agencies with individuals screened from health care agencies (primary care and mental health clinics) with or without a recent substance abuse history, defined as substance abuse/dependence by MINI or receiving substance abuse services in the prior 6 months from an outpatient substance abuse agency self-help group or residential treatment program (Tables B1-B3):

Those screened from other sectors with substance abuse history visited mental health with similar frequencies, were more likely to have a depression-related visit to religious places, and equally likely to visit faith-based sectors or have a depression-related visit to parks or community services, as those without substance abuse history. All other findings were similar.

Appendix C. Individuals screened from substance abuse agencies with individuals screened from social community agencies (social services, faith-based agencies, parks, and community centers) with or without a recent substance abuse history, defined as substance abuse/dependence by MINI or receiving substance abuse services in the prior 6 months from an outpatient substance abuse agency self-help group or residential treatment program (Tables C1-C3):

Depressed clients varied significantly different across all three groups in age but were similar in race/ethnicity. Individuals screened from substance abuse sectors were less likely to be employed, equally likely to misuse drugs, equally likely to visit primary care and mental health and social services agencies, and equally likely to receive medication or counseling from mental health specialty and have a depression-related visit to parks or community centers. Those screened from other sectors with substance abuse history were equally likely to be uninsured or

have anxiety disorder, smoked similar number of cigarettes, rated general health similarly but had lower MCS-12, visited mental health with similar frequencies, more likely to visit emergency rooms for any reason, and equally likely to visit social services or religious places, visit mental health and primary care with similar frequencies, and have depression-related visits to primary care as those without substance abuse history. All other findings were similar.

Appendix A. Substance abuse status version 2

Analyses used the second version of substance abuse status, comparing individuals screened from substance abuse agencies with individuals screened from other sectors with or without a recent substance abuse history defined as substance abuse or substance dependence by MINI or in residential treatment in the last six months.

Table A1. Demographic characteristics of clients screened with depressive symptoms, by substance abuse status (version 2)

Characteristic	Overall (N=957)		Clients from substance abuse agencies (N=217)		Clients from other sectors with substance abuse history (N=208)		Clients from other sectors without substance abuse history (N=532)		P [†]
	No.	Weighted Mean, %	No.	Weighted Mean, %	No.	Weighted Mean, %	No.	Weighted Mean, %	
Age (M±SD)		45.8 ± 12.8		42.5 ± 12.0		45.5 ± 11.7		47.2 ± 13.2	.049
Female	560	57	101	46	95	44	364	66	<.001
Married or living with partner	216	23	49	23	27	12	140	26	.011
Race/Ethnicity									.001
Hispanic	386	41	67	32	62	30	257	49	
Black or African American	456	46	126	57	119	55	211	38	
Non-Hispanic white	83	9	16	8	22	12	45	9	
Other (API/Native/other)	32	4	8	4	5	3	19	4	
Less than high school	423	44	88	40	73	35	262	49	.005
Born US	680	70	189	87	176	85	315	58	<.001
Income under poverty level	706	74	162	75	156	75	388	73	ns

Note. Data were multiply imputed at item level and percentage and means were weighted for eligible sample for enrollment and survey response. Percentages may not add up to 100% due to rounding.

[†]The statistics were based on Wald Chi-square test for comparing differences across three categories account for clustering (clients within programs). There was 2 degree of freedom for all of the characteristics listed with the exception of race/ethnicity, which had 6 degrees of freedom.

Table A2. Social and clinical needs of clients with depressive symptoms, by substance abuse status (version 2) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies (n=217)		(b) Clients from other sectors with substance abuse history (n=208)		(c) Clients from other sectors without substance abuse history (n=532)		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
<i>Social needs</i>								
Has health insurance, %	34.6	22.0 - 47.2	43.3	33.2 - 53.3	51.1	44.0 - 58.2	ns	ns
Homeless, %	9.0	3.7 - 14.2	28.2	16.5 - 39.9	17.5	10.1 - 24.8	.002	.009
Currently employed, %	10.1	5.8 - 14.4	15.2	9.1 - 21.4	25.7	20.6 - 30.8	ns	.002
Arrested or on probation at any time past 6 mo., %	42.4	33.5 - 51.2	21.7	13.5 - 29.9	8.5	5.4 - 11.7	.002	<.001
Evicted or had your house foreclosed past 6 mo., %	21.2	13.9 - 28.5	12.9	6.9 - 18.9	13.4	10.0 - 16.8	ns	ns
Witnessed someone being beaten, abused, or killed past 6 mo., %	19.3	13.1 - 25.4	19.5	14.1 - 24.9	12.7	9.2 - 16.2	ns	.032
Lost custody of any children in the past 6 mo., %	9.1	4.6 - 13.6	4.7	.6 - 8.7	1.8	.7 - 2.8	ns	ns
<i>Clinical characteristics</i>								
PHQ-8 score, mean	15.2	14.6 - 15.9	15.5	14.9 - 16.2	14.9	14.4 - 15.4	ns	ns
Number of chronic conditions (from list of 18), mean	3.1	2.6 - 3.6	3.3	2.9 - 3.7	3.5	3.2 - 3.9	ns	ns
# cigarettes smoked per day last 7 days, mean	6.9	5.3 - 8.5	6.4	5.1 - 7.7	3.8	2.8 - 4.9	ns	<.001
<i>Quality of life and Function scores</i>								
General health, mean	3.4	3.2 - 3.6	3.4	3.3 - 3.6	3.7	3.6 - 3.8	ns	<.001
PCS-12, mean	40.4	39.4 - 41.4	39.2	38.1 - 40.3	38.8	38.1 - 39.6	ns	ns
MCS-12, mean	39.0	38.1 - 39.9	38.6	37.8 - 39.5	39.5	38.8 - 40.3	ns	ns
<i>Probable mental health diagnosis</i>								
Current major depressive episode or dysthymia [‡] , %	53.6	45.3 - 61.8	62.7	56.7 - 68.8	47.5	41.5 - 53.5	ns	<.001
12-month depressive disorder [‡] , %	64.5	57.4 - 71.6	74.2	67.8 - 80.7	56.7	50.6 - 62.9	.049	<.001
Lifetime psychosis or mania [#] , %	54.4	46.6 - 62.3	52.6	44.1 - 61.0	31.1	23.5 - 38.8	ns	<.001
Any current or recent anxiety disorder ^{†‡} , %	55.5	50.0 - 61.1	59.2	50.7 - 67.8	40.1	33.8 - 46.4	ns	<.001
<i>Probable substance abuse diagnosis</i>								
Misused any drugs in past 12 mo. [‡] , %	66.7	59.3 - 74.2	67.2	58.4 - 76.0	9.5	6.4 - 12.6	ns	<.001

Table A2. Social and clinical needs of clients with depressive symptoms, by substance abuse status (version 2) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies (n=217)		(b) Clients from other sectors with substance abuse history (n=208)		(c) Clients from other sectors without substance abuse history (n=532)		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
AUDIT-C score (alcohol screen for hazardous drinkers), mean	2.4	1.9 - 2.9	2.7	2.2 - 3.2	1.1	.9 - 1.4	ns	<.001
Hazardous drinker or alcohol use disorder [§] , %	29.4	24.3 - 34.5	39.9	31.1 - 48.7	14.6	10.9 - 18.3	.036	<.001

Note: adjusted analyses used multiply imputed data and weighted for eligible sample for enrollment and survey response; logistic regression models for binary variables or linear regression models for continuous variables adjusted for age and sex and accounted for clustering (clients within programs).

[†]Panic attacks, Post-Traumatic Stress Disorder, Social Anxiety Disorder. [‡]Based on Mini International Neuropsychiatric Interview. [§]Based on a positive AUDIT-C score, male AUDIT-C \geq 4, female \geq 3. [#]derived from MINI and from baseline client interview.

Table A3. Past six-month utilization of health services (emergency room, hospitalization, mental health, primary care, substance abuse, social services, faith-based, parks and community centers) among clients with depressive symptoms, by substance abuse status (version 2) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies		(b) Clients from other sectors with substance abuse history		(c) Clients from other sectors without substance abuse history		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
<i>Emergency room visits</i>								
Any emergency room visits for any health problems in the past 6 mo., %	59.1	50.4 - 67.8	53.8	46.9 - 60.8	47.0	41.6 - 52.4	ns	ns
# of emergency room visits for any health problems in the past 6 mo., among visited (N=488), mean	3.7	2.8 - 4.7	3.5	2.7 - 4.4	3.2	2.8 - 3.6	ns	ns
Any emergency room visits for alcohol, drug, or mental/emotional problem in the past 6 mo., %	35.8	28.9 - 42.6	36.7	29.7 - 43.8	19.8	15.5 - 24.1	ns	<.001
# of emergency room visits for alcohol, drug, or mental/emotional problems, among visited (N=259), mean	3.1	2.4 - 3.7	3.0	2.3 - 3.7	2.8	2.2 - 3.3	ns	ns
<i>Hospitalizations and length of stay for alcohol, drug, or mental/emotional problem</i>								
Any overnight stay in hospital for alcohol, drug, or mental/emotional problem in the past 6 mo., %	20.8	13.8 - 27.9	23.9	18.0 - 29.8	7.6	5.1 - 10.2	ns	<.001
# of nights stay for alcohol, drug, or mental/emotional problem past 6 mo, among visited (N=134), mean	10.6	3.0 - 18.3	9.5	6.3 - 12.7	10.1	6.1 - 14.2	ns	ns
<i>Mental Health Specialty Visit</i>								
Any mental health specialty in the past 6 mo., %	56.3	49.2 - 63.5	71.5	62.4 - 80.6	52.4	43.2 - 61.6	.014	<.001
# of mental health outpatient visits, among visited (N=554), mean	16.5	11.3 - 21.7	13.6	10.5 - 16.7	11.7	9.6 - 13.9	ns	ns
Any medication or counseling for emotional or mental health problem in the past 6 mo., %	55.3	48.3 - 62.3	68.9	59.2 - 78.7	47.9	39.0 - 56.9	.032	<.001
<i>Primary care visit</i>								
Any primary care visit for any problem in the past 6 mo., %	58.6	48.2 - 69.0	70.0	61.7 - 78.2	73.6	69.6 - 77.6	ns	ns
# of visits to primary care provider in the past 6 mo., among visited (N=659), mean	7.2	3.6 - 10.8	6.9	5.6 - 8.2	5.2	4.6 - 5.8	ns	.017

Table A3. Past six-month utilization of health services (emergency room, hospitalization, mental health, primary care, substance abuse, social services, faith-based, parks and community centers) among clients with depressive symptoms, by substance abuse status (version 2) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies		(b) Clients from other sectors with substance abuse history		(c) Clients from other sectors without substance abuse history		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
Any primary care visits that included a service for depression, among visited (N=659), %	59.5	49.7 - 69.2	69.8	61.6 - 78.0	57.2	50.0 - 64.5	ns	.02
<i>Social services agency visit</i>								
Any social services visit in the past 6 mo., %	53.0	47.1 - 58.9	67.0	58.3 - 75.8	50.7	44.5 - 56.8	.014	<.001
Any visits to social services agency that included a service for depression, among visited (N=522), %	47.3	36.3 - 58.3	62.8	55.4 - 70.3	47.6	40.2 - 55.0	.023	.009
<i>Faith-based visit (e.g., church, temple)</i>								
Any faith-based visit in the past 6 mo., %	54.9	43.7 - 66.1	53.8	45.8 - 61.8	63.3	58.9 - 67.7	ns	.038
Any visits to religious places that included a service for depression in the past 6 mo., among visited (N=568), %	46.2	34.8 - 57.5	42.1	30.8 - 53.4	34.8	28.7 - 40.8	ns	ns
<i>Parks and community center (including senior centers) visits</i>								
Any parks or community center visit in the past 6 mo., %	48.3	43.7 - 53.0	46.4	38.5 - 54.2	48.1	43.1 - 53.2	ns	ns
Any visits to parks or community centers that included a service for depression, among visited (N=462), %	11.7	7.4 - 16.0	24.8	15.7 - 34.0	13.9	9.1 - 18.8	.005	.028

Note: adjusted analyses used multiply imputed data and weighted for eligible sample for enrollment and survey response; logistic regression models for binary variables or log-linear regression models for count variables adjusted for age and sex and accounted for clustering (clients within programs).

Appendix B. Stratified analysis of substance abuse history version 1 - data limited to clients screened from substance abuse or health care agencies

Analyses used substance abuse status version 1, compared individuals screened from substance abuse agencies with individuals screened from health care agencies (primary care and mental health clinics) with or without a recent substance abuse history defined as substance abuse or substance dependence by MINI or receiving substance abuse services in the prior 6 months from an outpatient substance abuse agency self-help group or residential treatment program.

Table B1. Demographic characteristics of clients screened with depressive symptoms, by substance abuse status (version 1)

Characteristic	Overall (N=671)		Clients from substance abuse agencies (N=217)		Clients from health care agencies with substance abuse history (N=170)		Clients from health care agencies without substance abuse history (N=284)		P [†]
	No.	Weighted Mean, %	No.	Weighted Mean, %	No.	Weighted Mean, %	No.	Weighted Mean, %	
Age (M±SD)		44.3 ± 12.1		42.5 ± 12.0		43.8 ± 10.4		45.8 ± 12.8	ns
Female	374	54	101	46	73	41	200	68	<.001
Married or living with a partner	160	24	49	23	24	14	87	30	.015
Race/Ethnicity									<.001
Hispanic	292	44	67	32	56	33	169	61	
Black or African American	312	45	126	57	92	52	94	32	
Non-Hispanic white	43	7	16	8	15	10	12	5	
Other (API/Native/other)	24	4	8	4	7	5	9	3	
Less than high school	321	48	88	40	74	43	158	56	.004
Born US	475	70	189	87	143	84	143	49	<.001
Income under poverty level	504	75	162	75	131	77	210	74	ns

Note. Data were multiply imputed at item level and percentage and means were weighted for eligible sample for enrollment and survey response. Percentages may not add up to 100% due to rounding.

[†]The statistics were based on Wald Chi-square test for comparing differences across three categories account for clustering (clients within programs). There was 2 degree of freedom for all of the characteristics listed with the exception of race/ethnicity, which had 6 degrees of freedom.

Table B2. Social and clinical needs of clients with depressive symptoms, by substance abuse status (version 1) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies (n=217)		(b) Clients from health care agencies with substance abuse history (n=170)		(c) Clients from health care agencies without substance abuse history (n=284)		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
<i>Social needs</i>								
Has health insurance, %	33.4	20.7 - 46.0	40.2	29.4 - 51.0	51.7	42.6 - 60.8	ns	.008
Homeless, %	9.2	3.8 - 14.6	25.1	12.3 - 38.0	16.7	8.2 - 25.2	.012	ns
Currently employed, %	10.0	5.7 - 14.3	12.4	6.1 - 18.7	26.8	20.1 - 33.6	ns	<.001
Arrested or on probation at any time past 6 mo., %	43.5	34.6 - 52.4	20.0	10.3 - 29.7	6.3	2.5 - 10.1	.002	.009
Evicted or had your house foreclosed past 6 mo., %	21.7	14.2 - 29.1	13.7	7.0 - 20.4	14.0	8.9 - 19.0	ns	ns
Witnessed someone being beaten, abused, or killed past 6 mo., %	19.8	13.5 - 26.2	21.5	14.8 - 28.2	11.9	7.0 - 16.8	ns	.033
Lost custody of any children in the past 6 mo., %	9.5	4.8 - 14.2	4.4	-.2 - 9.0	2.3	.7 - 4.0	ns	ns
<i>Clinical characteristics</i>								
PHQ-8 score, mean	15.2	14.6 - 15.9	15.6	14.8 - 16.3	15.0	14.4 - 15.7	ns	ns
Number of chronic conditions (from list of 18), mean	3.1	2.5 - 3.6	3.4	3.0 - 3.9	3.4	2.8 - 3.9	ns	ns
# cigarettes smoked per day last 7 days, mean	7.0	5.4 - 8.6	6.7	5.2 - 8.3	2.6	1.5 - 3.8	ns	<.001
<i>Quality of life and Function scores</i>								
General health, mean	3.4	3.2 - 3.6	3.5	3.4 - 3.6	3.8	3.6 - 3.9	ns	.002
PCS-12, mean	40.5	39.5 - 41.5	38.7	37.4 - 40.0	39.0	37.9 - 40.1	.017	ns
MCS-12, mean	38.9	38.0 - 39.9	39.0	38.1 - 39.9	39.1	38.0 - 40.2	ns	ns
<i>Probable mental health diagnosis</i>								
Current major depressive episode or dysthymia [†] , %	54.9	46.9 - 62.9	64.1	56.7 - 71.5	46.3	38.0 - 54.6	ns	<.001
12-month depressive disorder [†] , %	65.7	58.9 - 72.5	73.9	65.8 - 82.0	57.6	49.3 - 66.0	ns	<.001
Lifetime psychosis or mania [#] , %	55.0	47.0 - 63.1	55.6	46.3 - 64.9	27.9	17.1 - 38.8	ns	<.001
Any current or recent anxiety disorder ^{††} , %	56.2	50.7 - 61.8	62.5	52.0 - 73.0	40.4	32.8 - 47.9	ns	<.001
<i>Probable substance abuse diagnosis</i>								
Misused any drugs in past 12 mo. [‡] , %	67.7	60.4 - 75.1	53.7	44.9 - 62.4	10.9	6.3 - 15.5	.019	<.001

Table B2. Social and clinical needs of clients with depressive symptoms, by substance abuse status (version 1) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies (n=217)		(b) Clients from health care agencies with substance abuse history (n=170)		(c) Clients from health care agencies without substance abuse history (n=284)		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
AUDIT-C score (alcohol screen for hazardous drinkers), mean	2.4	2.0 - 2.9	2.2	1.6 - 2.7	1.2	.8 - 1.5	ns	.006
Hazardous drinker or alcohol use disorder [§] , %	30.0	24.9 - 35.2	32.3	23.7 - 41.0	14.8	9.6 - 20.0	ns	.002

Note: adjusted analyses used multiply imputed data and weighted for eligible sample for enrollment and survey response; logistic regression models for binary variables or linear regression models for continuous variables adjusted for age and sex and accounted for clustering (clients within programs).

[†]Panic attacks, Post-Traumatic Stress Disorder, Social Anxiety Disorder. [‡]Based on Mini International Neuropsychiatric Interview. [§]Based on a positive AUDIT-C score, male AUDIT-C \geq 4, female \geq 3. [#]derived from MINI and from baseline client interview.

Table B3. Past six-month utilization of health services (emergency room, hospitalization, mental health, primary care, substance abuse, social services, faith-based, parks and community centers) among clients with depressive symptoms, by substance abuse status (version 1) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies		(b) Clients from health care agencies with substance abuse history		(c) Clients from health care agencies without substance abuse history		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
<i>Emergency room visits</i>								
Any emergency room visits for any health problems in the past 6 mo., %	59.5	51.0 - 68.1	51.1	43.8 - 58.3	47.7	40.0 - 55.3	ns	ns
# of emergency room visits for any health problems in the past 6 mo., among visited (N=349), mean	3.8	2.9 - 4.7	3.4	2.4 - 4.5	3.3	2.6 - 4.1	ns	ns
Any emergency room visits for alcohol, drug, or mental/emotional problem in the past 6 mo., %	36.3	29.5 - 43.1	35.4	27.6 - 43.2	20.0	14.0 - 26.1	ns	<.001
# of emergency room visits for alcohol, drug, or mental/emotional problems, among visited (N=193), mean	3.1	2.4 - 3.7	2.9	2.1 - 3.6	3.0	2.0 - 4.0	ns	ns
<i>Hospitalizations and length of stay for alcohol, drug, or mental/emotional problem</i>								
Any overnight stay in hospital for alcohol, drug, or mental/emotional problem in the past 6 mo., %	20.8	13.9 - 27.7	20.2	14.7 - 25.6	6.7	3.7 - 9.8	ns	<.001
# of nights stay for alcohol, drug, or mental/emotional problem past 6 mo., among visited (N=98), mean	10.7	3.2 - 18.2	10.4	6.7 - 14.2	12.1	4.7 - 19.4	ns	ns
<i>Mental Health Specialty Visit</i>								
Any mental health specialty in the past 6 mo., %	57.2	50.3 - 64.2	75.6	65.2 - 86.1	54.7	42.1 - 67.4	.009	.001
# of mental health outpatient visits, among visited (N=412), mean	16.8	11.4 - 22.1	14.8	11.0 - 18.6	11.6	9.5 - 13.7	ns	ns
Any medication or counseling for emotional or mental health problem in the past 6 mo., %	56.2	49.4 - 63.1	72.0	60.7 - 83.3	50.6	38.1 - 63.0	.03	.001
<i>Primary care visit</i>								
Any primary care visit for any problem in the past 6 mo., %	57.8	47.4 - 68.3	74.3	64.1 - 84.5	73.4	68.0 - 78.9	.028	ns
# of visits to primary care provider in the past 6 mo., among visited (N=457), mean	7.3	3.7 - 11.0	7.8	6.5 - 9.0	4.8	4.1 - 5.5	ns	<.001

Table B3. Past six-month utilization of health services (emergency room, hospitalization, mental health, primary care, substance abuse, social services, faith-based, parks and community centers) among clients with depressive symptoms, by substance abuse status (version 1) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies		(b) Clients from health care agencies with substance abuse history		(c) Clients from health care agencies without substance abuse history		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
Any primary care visits that included a service for depression, among visited (N=457), %	59.2	50.1 - 68.4	70.7	62.6 - 78.7	56.2	44.8 - 67.6	ns	.03
<i>Social services agency visit</i>								
Any social services visit in the past 6 mo., %	53.6	47.8 - 59.4	66.1	55.8 - 76.4	44.9	37.5 - 52.3	.046	<.001
Any visits to social services agency that included a service for depression, among visited (N=355), %	48.2	37.6 - 58.8	62.1	55.0 - 69.3	45.3	35.5 - 55.2	.035	.008
<i>Faith-based visit (e.g., church, temple)</i>								
Any faith-based visit in the past 6 mo., %	54.6	43.2 - 66.0	54.5	46.8 - 62.2	63.5	57.9 - 69.1	ns	ns
Any visits to religious places that included a service for depression in the past 6 mo., among visited (N=390), %	47.2	35.9 - 58.5	45.7	34.2 - 57.1	31.0	23.5 - 38.5	ns	.022
<i>Parks and community center (including senior centers) visits</i>								
Any parks or community center visit in the past 6 mo., %	48.5	44.0 - 53.0	45.0	36.0 - 54.1	41.6	34.8 - 48.4	ns	ns
Any visits to parks or community centers that included a service for depression, among visited (N=305), %	12.1	7.9 - 16.3	25.4	14.6 - 36.1	18.2	10.0 - 26.4	.01	ns

Note: adjusted analyses used multiply imputed data and weighted for eligible sample for enrollment and survey response; logistic regression models for binary variables or log-linear regression models for count variables adjusted for age and sex and accounted for clustering (clients within programs).

Appendix C. Stratified analysis of substance abuse history version 1 - data limited to clients screened from substance abuse or social community agencies

Analyses used substance abuse status version one, compared individuals screened from substance abuse agencies with individuals screened from social community agencies (social services, faith-based agencies, parks, and community centers) with or without a recent substance abuse history defined as substance abuse or substance dependence by MINI or receiving substance abuse services in the prior 6 months from an outpatient substance abuse agency self-help group or residential treatment program.

Table C1. Demographic characteristics of clients screened with depressive symptoms, by substance abuse status (version 1)

Characteristic	Overall (N=503)		Clients from substance abuse agencies (N=217)		Clients from social community agencies with substance abuse history (N=99)		Clients from social community agencies without substance abuse history (N=187)		P [†]
	No.	Weighted Mean, %	No.	Weighted Mean, %	No.	Weighted Mean, %	No.	Weighted Mean, %	
Age (M±SD)		46.5 ± 13.4		42.5 ± 12.0		49.4 ± 11.9		49.3 ± 14.4	.03
Female	287	56	101	46	50	50	136	71	<.001
Married or living with a partner	105	21	49	23	9	8	47	25	.003
Race/Ethnicity									ns
Hispanic	161	33	67	32	22	22	72	40	
Black or African American	270	52	126	57	59	57	85	43	
Non-Hispanic white	56	12	16	8	16	18	24	14	
Other (API/Native/other)	16	4	8	4	2	3	6	4	
Less than high school	191	38	88	40	26	27	77	41	.004
Born US	394	78	189	87	86	88	119	62	<.001
Income under poverty level	365	72	162	75	76	76	127	67	ns

Note. Data were multiply imputed at item level and percentage and means were weighted for eligible sample for enrollment and survey response. Percentages may not add up to 100% due to rounding.

[†]The statistics were based on Wald Chi-square test for comparing differences across three categories account for clustering (clients within programs). There was 2 degree of freedom for all of the characteristics listed with the exception of race/ethnicity, which had 6 degrees of freedom.

Table C2. Social and clinical needs of clients with depressive symptoms, by substance abuse status (version 1) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies (n=217)		(b) Clients from social community agencies with substance abuse history (n=99)		(c) Clients from social community agencies without substance abuse history (n=187)		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
<i>Social needs</i>								
Has health insurance, %	36.0	23.0 - 49.0	44.1	31.1 - 57.1	52.0	40.6 - 63.4	ns	ns
Homeless, %	9.4	3.9 - 14.9	34.3	12.9 - 55.8	15.3	2.5 - 28.1	.008	.021
Currently employed, %	9.9	5.7 - 14.0	19.5	9.7 - 29.3	29.7	21.4 - 37.9	.046	.049
Arrested or on probation at any time past 6 mo., %	43.0	33.8 - 52.1	24.8	14.7 - 34.8	8.0	1.9 - 14.1	.013	.003
Evicted or had your house foreclosed past 6 mo., %	21.8	14.2 - 29.4	16.0	6.2 - 25.9	10.0	4.1 - 15.9	ns	ns
Witnessed someone being beaten, abused, or killed past 6 mo., %	19.7	13.5 - 26.0	20.6	13.3 - 27.8	9.5	4.2 - 14.8	ns	.006
Lost custody of any children in the past 6 mo., %	8.9	4.4 - 13.4	4.2	-1.0 - 9.4	.9	-.3 - 2.1	ns	ns
<i>Clinical characteristics</i>								
PHQ-8 score, mean	15.1	14.5 - 15.8	15.3	14.3 - 16.2	14.7	13.9 - 15.5	ns	ns
Number of chronic conditions (from list of 18), mean	3.1	2.5 - 3.7	3.4	2.8 - 4.0	3.6	3.1 - 4.0	ns	ns
# cigarettes smoked per day last 7 days, mean	6.9	5.3 - 8.5	6.6	4.9 - 8.4	4.4	2.8 - 6.0	ns	ns
<i>Quality of life and Function scores</i>								
General health, mean	3.4	3.2 - 3.6	3.4	3.2 - 3.7	3.7	3.5 - 3.9	ns	ns
PCS-12, mean	40.5	39.4 - 41.5	38.8	37.8 - 39.9	39.5	38.4 - 40.7	.044	ns
MCS-12, mean	39.0	38.1 - 39.9	38.2	36.8 - 39.6	40.4	39.3 - 41.5	ns	.003
<i>Probable mental health diagnosis</i>								
Current major depressive episode or dysthymia [†] , %	52.7	44.3 - 61.1	62.2	52.3 - 72.2	44.6	37.4 - 51.9	ns	.005
12-month depressive disorder [†] , %	63.7	56.4 - 71.0	74.6	65.6 - 83.6	50.9	43.5 - 58.3	ns	<.001
Lifetime psychosis or mania [#] , %	54.6	46.4 - 62.8	50.3	37.9 - 62.7	27.3	19.1 - 35.4	ns	.001
Any current or recent anxiety disorder ^{††} , %	54.9	49.3 - 60.5	48.1	34.9 - 61.3	35.8	27.7 - 43.9	ns	ns
<i>Probable substance abuse diagnosis</i>								
Misused any drugs in past 12 mo. [‡] , %	66.5	59.1 - 74.0	55.3	45.8 - 64.9	8.1	3.5 - 12.6	ns	<.001

Table C2. Social and clinical needs of clients with depressive symptoms, by substance abuse status (version 1) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies (n=217)		(b) Clients from social community agencies with substance abuse history (n=99)		(c) Clients from social community agencies without substance abuse history (n=187)		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
AUDIT-C score (alcohol screen for hazardous drinkers), mean	2.5	2.0 - 2.9	2.3	1.7 - 2.9	1.3	1.0 - 1.6	ns	.002
Hazardous drinker or alcohol use disorder [§] , %	30.0	24.6 - 35.4	34.6	24.1 - 45.1	16.8	10.6 - 23.1	ns	.003

Note: adjusted analyses used multiply imputed data and weighted for eligible sample for enrollment and survey response; logistic regression models for binary variables or linear regression models for continuous variables adjusted for age and sex and accounted for clustering (clients within programs).

[†]Panic attacks, Post-Traumatic Stress Disorder, Social Anxiety Disorder. [‡]Based on Mini International Neuropsychiatric Interview. [§]Based on a positive AUDIT-C score, male AUDIT-C \geq 4, female \geq 3. [#]derived from MINI and from baseline client interview.

Table C3. Past six-month utilization of health services (emergency room, hospitalization, mental health, primary care, substance abuse, social services, faith-based, parks and community centers) among clients with depressive symptoms, by substance abuse status (version 1) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies		(b) Clients from social community agencies with substance abuse history		(c) Clients from social community agencies without substance abuse history		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
<i>Emergency room visits</i>								
Any emergency room visits for any health problems in the past 6 mo., %	59.1	50.5 - 67.6	61.5	50.6 - 72.5	41.7	32.3 - 51.1	ns	.01
# of emergency room visits for any health problems in the past 6 mo., among visited (N=266), mean	3.8	2.9 - 4.7	3.3	2.7 - 3.8	3.0	2.6 - 3.5	ns	ns
Any emergency room visits for alcohol, drug, or mental/emotional problem in the past 6 mo., %	35.5	28.3 - 42.6	36.6	27.0 - 46.2	15.2	9.2 - 21.2	ns	<.001
# of emergency room visits for alcohol, drug, or mental/emotional problems, among visited (N=142), mean	3.1	2.4 - 3.7	2.9	2.2 - 3.6	2.3	1.8 - 2.8	ns	ns
<i>Hospitalizations and length of stay for alcohol, drug, or mental/emotional problem</i>								
Any overnight stay in hospital for alcohol, drug, or mental/emotional problem in the past 6 mo., %	21.7	14.0 - 29.4	23.6	14.7 - 32.5	6.7	2.4 - 10.9	ns	<.001
# of nights stay for alcohol, drug, or mental/emotional problem past 6 mo, among visited (N=80), mean	11.0	2.4 - 19.7	7.6	5.3 - 9.8	7.1	2.6 - 11.5	ns	ns
<i>Mental Health Specialty Visit</i>								
Any mental health specialty in the past 6 mo., %	56.4	48.8 - 64.1	69.8	56.5 - 83.2	39.4	27.8 - 51.1	ns	<.001
# of mental health outpatient visits, among visited (N=266), mean	16.3	11.0 - 21.5	12.8	9.0 - 16.5	9.8	7.4 - 12.2	ns	ns
Any medication or counseling for emotional or mental health problem in the past 6 mo., %	55.2	47.7 - 62.7	66.1	53.1 - 79.1	35.6	24.8 - 46.4	ns	<.001
<i>Primary care visit</i>								
Any primary care visit for any problem in the past 6 mo., %	58.3	47.4 - 69.3	67.3	58.7 - 75.8	69.7	62.9 - 76.4	ns	ns
# of visits to primary care provider in the past 6 mo., among visited (N=321), mean	7.3	3.4 - 11.1	5.3	3.7 - 6.9	5.2	4.1 - 6.3	ns	ns

Table C3. Past six-month utilization of health services (emergency room, hospitalization, mental health, primary care, substance abuse, social services, faith-based, parks and community centers) among clients with depressive symptoms, by substance abuse status (version 1) adjusted for age and sex

Variables	Adjusted Estimates						Test	
	(a) Clients from substance abuse agencies		(b) Clients from social community agencies with substance abuse history		(c) Clients from social community agencies without substance abuse history		(b) vs. (a)	(c) vs. (b)
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	P	P
Any primary care visits that included a service for depression, among visited (N=321), %	60.6	50.5 - 70.7	65.2	53.7 - 76.7	54.3	44.4 - 64.2	ns	ns
<i>Social services agency visit</i>								
Any social services visit in the past 6 mo., %	52.9	46.9 - 59.0	67.0	55.5 - 78.6	55.6	46.3 - 64.9	ns	ns
Any visits to social services agency that included a service for depression, among visited (N=285), %	47.0	35.7 - 58.2	65.2	52.5 - 78.0	43.7	31.5 - 55.9	.04	.021
<i>Faith-based visit (e.g., church, temple)</i>								
Any faith-based visit in the past 6 mo., %	53.6	42.7 - 64.5	55.2	46.2 - 64.2	65.7	57.4 - 74.1	ns	ns
Any visits to religious places that included a service for depression in the past 6 mo., among visited (N=297), %	43.9	32.5 - 55.3	40.4	28.4 - 52.4	37.7	27.6 - 47.8	ns	ns
<i>Parks and community center (including senior centers) visits</i>								
Any parks or community center visit in the past 6 mo., %	48.0	43.1 - 52.8	58.0	48.7 - 67.3	54.9	46.0 - 63.7	ns	ns
Any visits to parks or community centers that included a service for depression, among visited (N=265), %	12.2	7.6 - 16.9	19.4	7.9 - 31.0	7.1	2.9 - 11.3	ns	.031

Note: adjusted analyses used multiply imputed data and weighted for eligible sample for enrollment and survey response; logistic regression models for binary variables or log-linear regression models for count variables adjusted for age and sex and accounted for clustering (clients within programs).

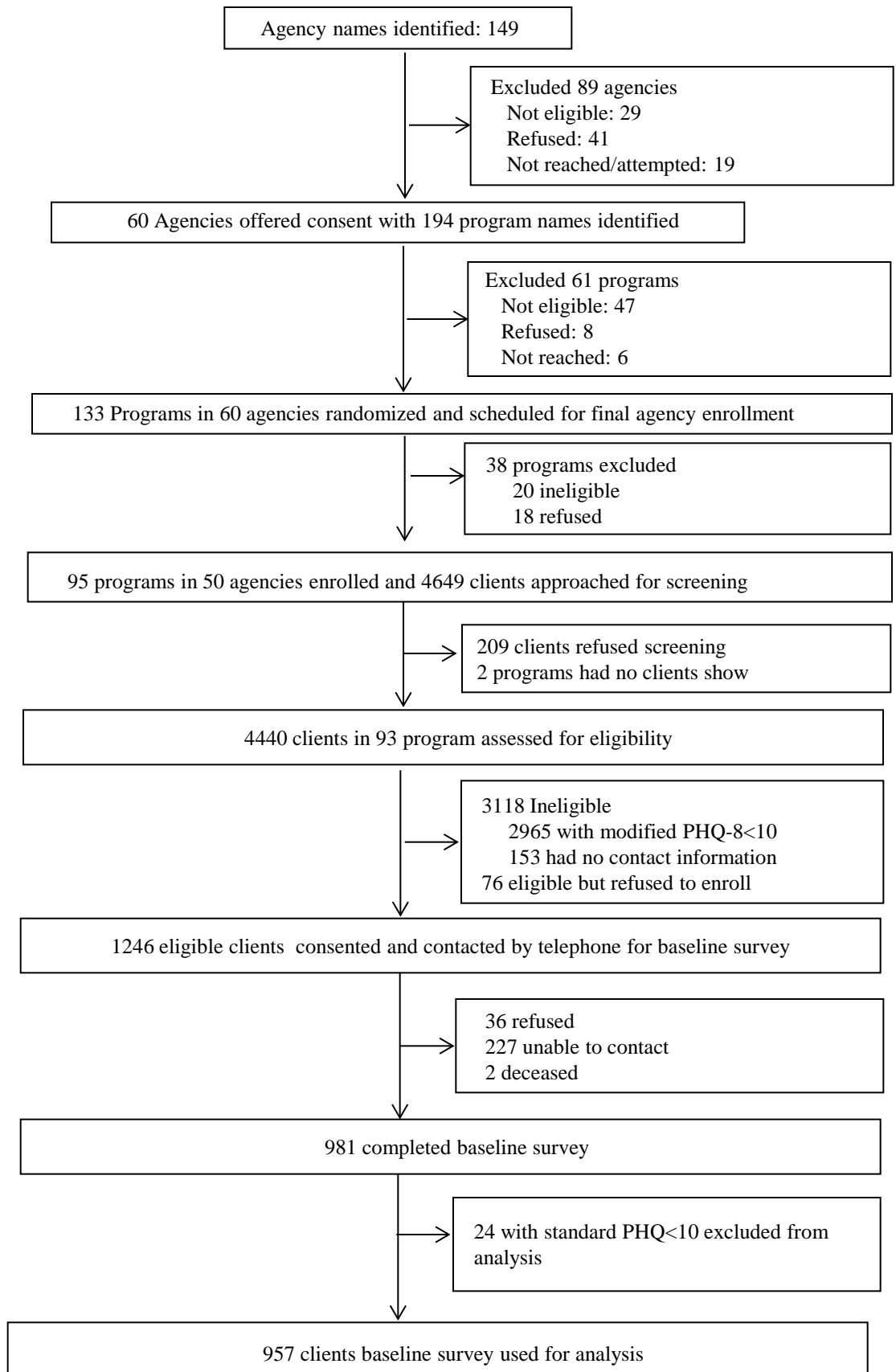


Figure. Trial profile