Supplementary Technical Appendix for

The Effects of Collaborative Care Training on Case Managers' Perceived Depression-Related Services Delivery

1. CPIC Training participation

Attendance at trainings was assessed by names on sign-in logs or self-reported in-house trainings on the follow-up survey in which a respondent was asked:

Have you specifically received any of the following types of <u>training through the CPIC</u> study <u>in the last 6 months</u> (including in-person Workshops, online Webinars, conference calls, or one-on-one consultations)?

Please check what kind of <u>CPIC training</u> you received <u>in the last 6 months</u>:

(check all that apply)

CPIC <u>Cognitive Behavior Therapy (CBT)</u> training

CPIC <u>Case Management/Outreach</u> training

CPIC <u>Medication Management</u> training

Other CPIC training (please list): ____

As shown in Table S1, the observed agreement between the logs of participation and self-report was 75% ((33+55)/117). Of survey respondents (N=109), the estimated kappa coefficient =.60, 95% CI=(.45, .75) indicating a moderate agreement.

Table S1. Distribution of training participation based on sign-in logs or self-report

Self-report in-house trainings	On sign-in log	Overall (N=117)	RS (N=59)	CEP (N=58)
Yes	Yes	33	4	29
Yes	No	10	9	1
No	Yes	11	1	10
No	No	55	40	15
Missing data	Yes	3	1	2
Missing data	No	5	4	1

A sensitivity analysis using alternative definitions produced similar results on training participation (Table S2).

Table S2. Percentage of training participation based on sign-in logs or self-report at one-year follow-up

Variables	Total N	Unadjusted estimates[a]							Adjusted analysis[b]		
		RS			CEP				CEP vs RS		
		Total N	N	%	Total N	N	%	p	OR	95%CI	p
Training participation based on sing-in logs	117	59	6	10	58	41	71	<.001	29.9	8.7 to 103.4	<.001
Training participation, self-reported	109	54	13	24	55	30	55	.001	4.0	1.4 to 11.3	.01
Training participation, sign-in log or self-reported	112	55	15	27	57	42	74	<.001	7.8	2.9 to 20.9	<.001

[a] Raw data without weighting or imputation. The total N reflects the number of respondents at one-year follow-up
[b] Adjusted analyses used multiply imputed data (N=117). Data were weighted for eligible sample for enrollment; logistic regression models adjusted for sector (healthcare versus social-community), and provider type (licensed versus unlicensed) and accounted for the design effect of the cluster randomization

2. Bivariate Correlations among Measurements

Bivariate correlations among the main study variables at baseline assessment are presented in Table S3. Within the domain of care practices, depression care techniques were positively associated with depression case management. Four variables within the domain of depression knowledge and attitudes were not significantly associated. Across domains, perception of depression skill was positively associated with both depression care techniques and depression case management; personal depression stigma was positively associated with depression case management; community services provision was associated with number of system barriers.

Table S3. Bivariate correlations

Care practices		1	2	3	4	5	6	7
1	Depression care techniques	-						
2	Depression case management	.83**	-					
3	Community services provision	.002	-.06	-				
Depression knowledge and attitudes								
4	Perceived depression knowledge	-.17	-.09	.05	-			
5	Perception of depression skill	.53**	.60**	-.02	-.12	-		
6	Personal depression stigma	.17	.21*	.06	-.09	.19	-	
7	N of system barriers	.098	.04	-.39*	.02	.02	.23	-

p<.05, ** p<.01, No asterisk = non-significant

Figure: Provider Participation Profile

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                    ┌─────────────────────────────────────────┐
                    │  Agencies assessed for eligibility (149) │
                    └─────────────────────────────────────────┘
                                     │
                                     │──────►┌─────────────────────────────────────────────┐
                                     │       │ 89 agencies excluded:                       │
                                     │       │   Ineligible (29), refused (41), not reached (19) │
                                     ▼       └─────────────────────────────────────────────┘
       ┌──────────────────────────────────────────────────────────────────┐
       │  60 agencies offered consent, 194 Programs assessed for eligibility │
       └──────────────────────────────────────────────────────────────────┘
                                     │
                                     │──────►┌─────────────────────────────────────────────┐
                                     │       │ 61 programs excluded:                       │
                                     │       │   Ineligible (47), refused (8), not reached (6) │
                                     ▼       └─────────────────────────────────────────────┘
       ┌──────────────────────────────────────────────────────────────────┐
       │ 133 programs in 60 agencies randomized and scheduled for final agency enrollment │
       └──────────────────────────────────────────────────────────────────┘
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65 programs allocated to RS control

19 programs did not participate:
Ineligible (9), refused (10)

46 programs enrolled in study

41 Programs eligible for provider survey

193 providers approached for baseline

30 providers did not complete baseline:
refused (20), left agencies (9), dead (1)

163 providers in 40 programs completed baseline survey

191 providers approached for 12-mo follow-up: 182 in baseline contact list, 9 new comers

79 providers had no surveys: refused (25), left agency (52), dead (1), on med leave (1)

112 providers in 35 programs completed or partially completed at 12-mo follow-up

59 case managers in 27 programs in analysis

68 Programs allocated to CEP intervention

19 programs did not participate:
Ineligible (11), refused (8)

49 Programs enrolled/received intervention

43 Programs eligible for provider survey

200 providers approached for baseline

37 providers did not complete baseline:
refused (24), left agencies (13)

163 providers in 37 programs completed baseline survey

201 providers approached for 12-mo follow-up: 184 in baseline contact list, 17 new comers

76 providers had no surveys: refused (35), left agency (40), on med leave (1)

125 providers in 40 programs completed or partially completed at 12-mo follow-up

58 case managers in 25 programs in analysis