

Supplementary Table S1. Comparison of Older Adults With vs. Without Any Caregiver-Provider Communication

		No caregiver talk to providers (1025 older adults, 1763 caregivers)				Have caregiver talk to providers (1414 older adults, 1910 caregivers)				
		N	% (weighted)	Mean (weighted)	SE (weighted)	N	% (weighted)	Mean (weighted)	SE (weighted)	Comparisons
Age	79 or younger	407	39.75%			576	58.72%			Pearson chi2(2) = 43.3930 Pr = 0.000
	80-89	402	39.25%			554	30.37%			
	90 or older	215	21.00%			284	10.91%			
Sex (female)		697	68.01%			889	57.76%			Pearson chi2(1) = 4.7806 Pr = 0.029
Race and ethnicity	Non-Hispanic White	524	51.16%			728	70.52%			Pearson chi2(3) = 15.6037 Pr = 0.001
	Non-Hispanic Black	262	25.58%			346	11.88%			
	Hispanic	193	18.87%			279	12.47%			
	Other	45	4.39%			61	5.13%			
Marital status (married)		429	41.82%			603	52.95%			Pearson chi2(1) = 9.1867 Pr = 0.002
Annual household income	< 30K USD	395	38.51%			577	32.92%			Pearson chi2(2) = 11.4019 Pr = 0.003
	30-70K USD	381	37.20%			432	33.17%			
	> 70K USD	249	24.29%			404	33.91%			
Self-rated health (good or better)		590	57.58%			703	50.63%			Pearson chi2(1) = 13.0459 Pr = 0.000
Number of functional limitations [range: 0-12]				5.01	0.11			6.24	0.12	t = 9.64, Pr = 0.000
Dementia status (yes)		120	11.73%			377	22.34%			Pearson chi2(1) = 72.7972 Pr = 0.000
Unmet care needs	0	649	63.27%			728	50.52%			Pearson chi2(2) = 31.3387 Pr = 0.000
	1	204	19.91%			347	23.53%			
	2 or more	172	16.82%			339	25.95%			

Supplementary Table S2. Caregiver–provider communication within care networks by network size.

		How many caregiver talk to provider				% caregivers talked to providers
Caregiver network size	Total	1	2	3	4	
1	877	877				100
2	408	226	182			72.3
3	96	37	46	13		58.3
4	27	8	11	6	2	51.9
5	6	3	1	2		36.7

Supplementary Table S3. Ordinal logistic regression interaction models of caregiver–provider communication quality and unmet care needs among older adults

Variable	Category	Model 1: X Income	Model 2: X Relationship type	Model 3: X Caregiving hours
Caregiver–provider communication quality	Continuous (3–12)	0.88 (0.83, 0.94)***	1.01 (0.93, 1.09)	0.88 (0.81, 0.96)**
Income (ref: < \$30K)	\$30–70K	0.47 (0.14, 1.54)	—	—
	> \$70K	0.19 (0.04, 0.97)*	—	—
Interaction: Communication × Income	\$30–70K	1.17 (1.01, 1.35)*	—	—
	> \$70K	1.24 (1.04, 1.48)*	—	—
Caregiver relationship (ref: Spouse)	Adult child	—	2.01 (0.74, 5.46)	—
	Other	—	4.35 (1.01, 18.81)*	—
Interaction: Communication × Relationship	Adult child	—	0.90 (0.82, 0.99)*	—
	Other	—	0.85 (0.72, 0.99)*	—
Caregiving hours (ref: <20 hrs/mo)	20–40 hrs	—	—	0.35 (0.11, 1.05)
	>40 hrs	—	—	0.81 (0.31, 2.13)
Interaction: Communication × Hours	20–40 hrs	—	—	1.15 (1.02, 1.31)*
	>40 hrs	—	—	1.03 (0.93, 1.15)
Older adult age (ref ≤79):	80–89	0.71 (0.54, 0.94)*	0.70 (0.53, 0.93)*	0.70 (0.53, 0.93)*
	90+	0.62 (0.43, 0.90)*	0.63 (0.43, 0.91)*	0.62 (0.42, 0.90)*
Female (vs. male)		1.31 (1.01, 1.71)*	1.30 (1.00, 1.69)*	1.30 (1.00, 1.69)*
Race and ethnicity (ref: Non-Hispanic White)	Non-Hispanic Black	0.76 (0.57, 1.01)	0.74 (0.55, 0.98)*	0.74 (0.55, 0.98)*
	Hispanic	1.11 (0.80, 1.55)	1.09 (0.79, 1.52)	1.08 (0.78, 1.50)
	Other	0.81 (0.50, 1.34)	0.80 (0.49, 1.31)	0.81 (0.49, 1.33)
Self-rated health (good or better)		0.70 (0.56, 0.89)**	0.71 (0.56, 0.89)**	0.71 (0.56, 0.89)**
Functional limitations		1.46 (1.40, 1.53)***	1.46 (1.40, 1.53)***	1.46 (1.40, 1.53)***
Dementia (yes)		0.82 (0.62, 1.08)	0.81 (0.62, 1.07)	0.79 (0.60, 1.03)
Caregiver age (ref 18–54)	55–64	0.88 (0.65, 1.21)	0.88 (0.65, 1.21)	0.90 (0.66, 1.23)
	65–74	0.81 (0.56, 1.17)	0.80 (0.56, 1.15)	0.82 (0.57, 1.18)
	75+	0.67 (0.42, 1.06)	0.67 (0.42, 1.07)	0.66 (0.41, 1.06)
Caregiver female		0.84 (0.66, 1.08)	0.84 (0.66, 1.08)	0.82 (0.64, 1.05)
Coresident caregiver		0.63 (0.48, 0.83)**	0.64 (0.49, 0.84)**	0.60 (0.45, 0.79)***