Online Appendix

Appendix Table 1: Characteristics of Sample versus overall Survey respondents

	Current sample (N=14,357) N or mean (% or SD)	Survey respondents (N=20,188) N or mean (% or SD)	P-value
Age (y)	58 (10)	56 (10)	0.70
Female sex	7068 (49)	9840 (49)	0.37
Race/ Ethnicity			
African-American	2417 (17)	3420 (17)	0.060
Non-Hispanic White	3202 (22)	4602 (23)	
Latino/a	2632 (18)	3717 (18)	
Asian	3265 (23)	4716 (23)	
Other/Mixed	2841 (20)	3733 (18)	
Limited English Proficiency	1386 (10)	1771 (9)	0.0054
HbA1c%	7.6 (1.6)	7.5 (1.6)	<.0001
Medication Type			
Insulin	3141 (22)	4410 (26)	<0.0001
Secretagogues only	2284 (16)	2618 (15)	
Metformin only	2727 (19)	3087 (18)	
Mixed Oral Meds	6205 (43)	7058 (41)	
Diabetes duration, yrs	10 (8)	10 (8)	0.0309
Perform self-monitoring of blood glucose	6934 (48)	9208 (46)	<0.0001
Problems learning	5847 (52)	7182 (51)	0.7146
Help reading	4266 (38)	5226 (38)	0.6872
Not confident with forms	3266 (29)	3978 (29)	0.5440
Dementia	159 (1)	262 (1)	0.1238
Cerebrovascular disease/ stroke	382 (3)	536 (3)	1.00
Renal function			
GFR >=90	2087 (17)	2810 (16)	0.0810
GFR 60-89	7069 (56)	9814 (56)	
GFR 30-59	3037 (24)	4217 (24)	
GFR 15-29	219 (2)	307 (2)	
GFR<15	135 (1)	244 (1)	
Income			
>$65,000	4673 (38)	6447 (38)	0.5280
$35,000-$65,000	3728 (30)	5190 (30)	
$25,000-$34,999	1472 (12)	2095 (12)	
$15,000-$24,999	1080 (9)	1557 (9)	
<$15,000	1305 (11)	1805 (11)	
Education			
Less than High School	6521 (46)	9040 (46)	0.6544
Some college	3457 (24)	4929 (25)	
College Graduate or more	4151 (29)	5806 (29)	

Appendix Table 1 legend:
Since we intentionally restricted our analysis to those with type 2 diabetes and on medications, we are not trying to generalize beyond patients with those characteristics. The implications of differences between those in the analysis and the full sample are thus not clear, especially since in this large sample some differences are statistically significant but not clinically meaningful (e.g., a difference in the frequency of limited English proficiency (LEP) of 10% in our sample versus 9% of survey participants overall was statistically significant at p=0.005). We did not observe clinically meaningful differences between the group we analyzed and the 20,188 survey respondents; therefore, we consider this potential selection bias to be of minimal concern.

Appendix Table 2: Adjusted models of the health literacy-hypoglycemia relationship

	Unadjusted Odds Ratio (95% CI)	Adjusted* Odds Ratio (95% CI)	Adjusted† Odds Ratio (95% CI)
Problems learning	1.5 (1.3-1.8)	1.4 (1.1-1.7)	1.3 (1.03-1.7)
Need help reading	1.5 (1.3-1.8)	1.3 (1.1-1.6)	1.4 (1.1-1.8)
Not confident with forms	1.5 (1.3-1.8)	1.3 (1.1-1.6)	1.4 (1.1-1.8)

*Adjusted for age, gender, race/ethnicity, English proficiency, medication type, diabetes duration, HbA1c, glomerular filtration rate, income, dementia, history of stroke.
†Adjusted for age, gender, race/ethnicity, English proficiency, medication type, diabetes duration, HbA1c, glomerular filtration rate, income, dementia, history of stroke, alcohol use, BMI, neuropathy, and medication adherence.

Appendix Table 2 Legend:
Above, we show the adjusted odds ratios for limited health literacy on hypoglycemia, including the suggested co-variates of medication adherence, alcohol, neuropathy, and BMI. Health literacy remains associated with hypoglycemia, with minimal change in the odds ratios. However, some readers may consider adding these variables over-adjustment, particularly medication adherence, given the potential mediating effects on the association between literacy and hypoglycemia.