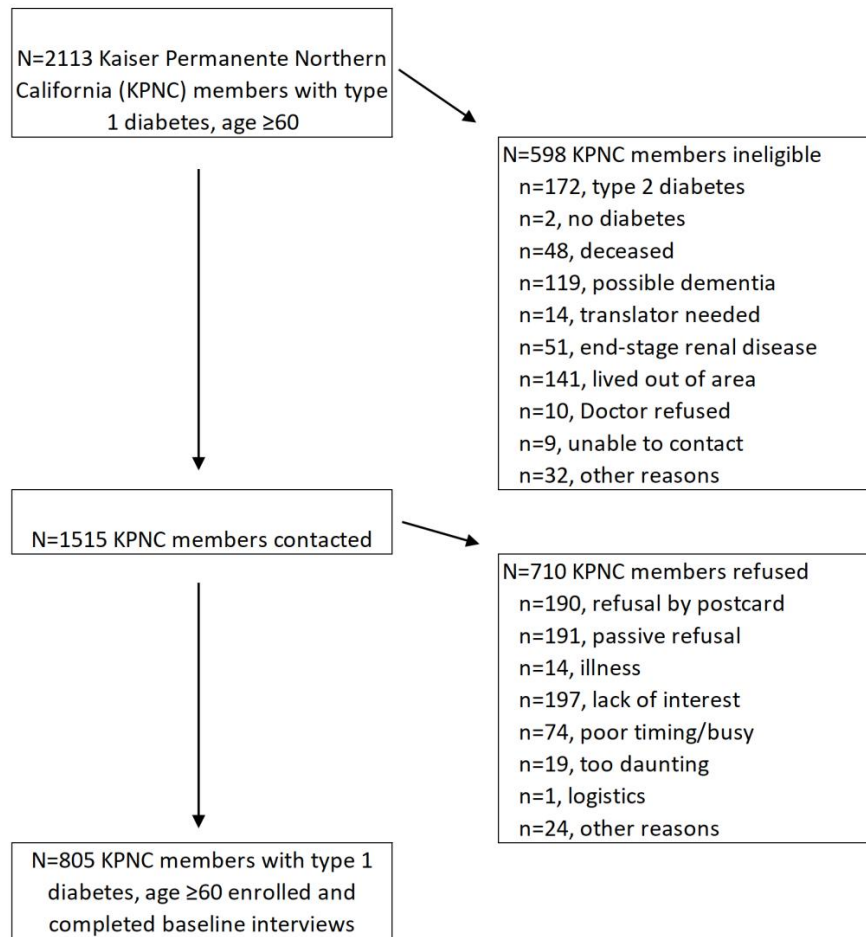


Supplementary Figure 1. Flow chart of study recruitment and enrolment

Supplementary Table 1. Sample characteristics of those who completed and did not

| | Whole group | Missing global cognition |
|-----------------------|-------------|--------------------------|
| n (%) | 1237 | 70 |
| Demographics | | |
| Age (years) Mean (SD) | 67.8 (6.6) | 70.4 (7.2) |
| Race/ethnicity, n (%) | | |
| White | 1052 (85) | 60 (85) |

complete all cognitive tests.

| | | | |
|--|-------------------------|-------------|-------------|
| | Hispanic | 97 (8) | 5 (7) |
| | Asian | 20 (2) | 1 (1) |
| | African American | 21 (2) | 1 (1) |
| | Other | 47 (4) | 3 (4) |
| College degree, n (%) | | 755 (61) | 37 (53%) |
| Annual household income | | | |
| | \$USD 0-59,999 | 364 (29) | 31 (44) |
| | \$USD 60,000-99,000 | 364 (29) | 8 (11) |
| | \$USD 100,000-199,000 | 342 (28) | 19 (27) |
| | >\$USD 200,000 | 89 (7) | 3 (4) |
| General health | | | |
| Every smoked > 100 cigarettes, n (%) | | 538 (43) | 32 (46) |
| How often drink alcohol | | | |
| | Don't drink, n (%) | 322 (26) | 25 (36) |
| | At least monthly, n (%) | 421 (34) | 21 (30) |
| | At least weekly, n (%) | 481 (39) | 21 (30) |
| PSQI, Mean (SD) | | 8.0 (2.7) | 8.6 (3.2) |
| GDS, Mean (SD) | | 2.0 (2.3) | 3.5 (3.7) |
| Subjective memory loss, n (%) | | 720 (58) | 41 (59) |
| No Diabetes, n (%) | | 247 (20) | 11 (16) |
| Type 1 Diabetes, n (%) | | 758 (61) | 43 (61) |
| Type 2 Diabetes, n (%) | | 232 (19) | 16 (23) |
| Diabetes characteristics | | | |
| Mean age at diabetes onset (years)(SD) | | 34.4 (18.4) | 30.9 (16.8) |
| Mean diabetes duration (years) (SD) | | 33.1 (17.8) | 38.8 (16.7) |
| Retinopathy, n (%) | | 341 (28) | 23 (33) |
| Neuropathy, n (%) | | 374 (30) | 30 (43) |
| Nephropathy, n (%) | | 61 (5) | 7 (10) |
| Stroke, n (%) | | 100 (8) | 11 (16) |
| Myocardial infarction, n (%) | | 126 (10) | 10 (14) |
| Severe hypoglycemia n (%) | | 376 (30) | 26 (37) |
| Diabetic ketoacidosis, n (%) | | 213 (17) | 16 (23) |

Supplementary Table 2. Raw mean cognitive function factor scores by sex and diabetes status

| | | Women | Men |
|-------------------------------|------------------------|-------------------|---------------|
| | | Factor Score | Factor Score |
| | | (Mean (SD)) | (Mean (SD)) |
| Type 1 diabetes, n (%) | n | 409 (51) | 396 (49) |
| | Global score | 758 0.14 (0.51) | -0.09 (0.50) |
| | Language | 743 0.04 (0.69) | -0.02 (0.67) |
| | Executive | 745 0.05 (0.77) | -0.09 (0.76) |
| | Verbal episodic memory | 0.33 (0.84) | -0.36 (0.90) |
| | Visual episodic memory | 370 0.14 (0.77) | 0.13 (0.76) |
| | Attention | 377 0.16 (0.64) | -0.11 (0.82) |
| Type 2 diabetes, n (%) | | 125 (50.4) | 123 (49.6) |
| | Global score | 118 0.06 (0.48) | -0.07 (0.50) |
| | Language | 117 0.08 (0.73) | 0.02 (0.67) |
| | Executive | 117 0.13 (0.70) | 0.07 (0.63) |
| | Verbal episodic memory | 110 0.37 (0.81) | -0.15 (0.87) |
| | Visual episodic memory | 116 -0.26 (0.60) | -0.22 (0.64) |
| | Attention | 117 0.0002 (0.78) | -0.07 (0.84) |
| No Diabetes, n (%) | | 127 | 120 |
| | Global score | 247 0.22 (0.53) | -0.005 (0.52) |
| | Language | 244 0.22 (0.73) | 0.11 (0.68) |
| | Executive | 246 0.35 (0.75) | 0.19 (0.68) |
| | Verbal episodic memory | 237 0.48 (0.78) | -0.31 (0.89) |
| | Visual episodic memory | 242 -0.02 (0.72) | -0.05 (0.80) |
| | Attention | 246 0.12 (0.72) | 0.01 (0.73) |

