## Author Table 1

Comparison of Intercept and Slope Estimates for Models with Covariates

| Scale | Covariates | Intercept |  | Slope |  | Quadratic |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\gamma_{00}$ : Mean | $\mathrm{u}_{0}$ :Variance | $\gamma_{10}$ : Mean | $\mathrm{u}_{1}$ :Variance | $\gamma_{20}$ : Mean |
| CES-D |  |  |  |  |  |  |
| Model 1 | Age, Age ${ }^{2}$ | 5.78 (.11)** | 13.93** | . 52 (.07)** | 3.18** | . 43 (.03)** |
| Model 2 | Demographics | 5.87 (.17)** | 13.90** | . 66 (.10)** | 3.14** | . 43 (.04)** |
| Model 3 | Medication | 5.59 (.17)** | 13.44** | . 68 (.10)** | 3.08** | . 45 (.04)** |
| Model 4 | Disease burden ${ }^{1}$ | 5.94 (.20)** | 14.77** | -. 05 (.30) | 5.19** | . 80 (.16)** |
| Model 5 | ADLs ${ }^{1}$ | 5.03 (.30)** | 10.34** | . 24 (.43) | 5.78** | . 58 (.18)** |
| Model 6 | IADLs ${ }^{1}$ | 5.17 (.30)** | 10.34** | . 15 (.42) | 5.82* | . 62 (.17)** |
| Model 7 <br> Model 8 | Death | 5.22 (.20)** | 13.54** | . 35 (.12)** | 3.18** | . 37 (.05)** |
|  | Disease burden and death | 5.12 (.22)** | 13.74** | . 21 (.14) | 2.99** | . 35 (.04)** |
| Model 9 | $>5$ years from death | 5.84 (.16)** | 13.80** | . 49 (.10)** | 3.00** | . 38 (.03)** |
| Depressed Affect |  |  |  |  |  |  |
| Model 1 | Age, Age ${ }^{2}$ | 1.13 (.04)** | 1.32** | . 05 (.02)* | . 50 ** | . 15 (.01)** |
| Model 2 | Demographics | 1.02 (.06)** | 1.31** | . 11 (.04)** | .50** | . 15 (.01)** |
| Model 3 | Medication | 1.01 (.06)** | 1.29** | . 11 (.04)** | . $47 * *$ | . 14 (.02)** |
| Model 4 | Disease burden ${ }^{1}$ | . 97 (.07)** | 1.28** | . 12 (.11) | .65** | . 16 (.06)** |
| Model 5 | ADLs ${ }^{1}$ | . 91 (.11)** | . $74 * *$ | . 10 (.16) | .76* | . 13 (.06)* |
| Model 6 | IADLs ${ }^{1}$ | . 93 (.11)** | .75* | . 07 (.15) | .77* | . 15 (.06)** |
| Model 7 | Death | . 98 (.07)** | 1.30** | . 04 (.05) | .50** | . 13 (.02)** |
| Model 8 | Disease burden and death | . 95 (.08)** | 1.33** | . 01 (.05) | .51** | . 13 (.01)** |
| Model 9 | $>5$ years from death | 1.02 (.06)** | 1.31** | . 08 (.04)* | .48** | . 13 (.01)** |

## Supplementary Table Continued

| Somatic |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model 1 | Age, $\mathrm{Age}^{2}$ | 2.89 (.05)** | 2.99** | . 39 (.03)** | .43** | . 20 (.01)** |
| Model 2 | Demographics | 2.75 (.08)** | 2.98** | . 44 (.04)** | .43** | . 21 (.02)** |
| Model 3 | Medication | 2.73 (.08)** | 2.91** | . 44 (.04)** | .43** | . 21 (.02)** |
| Model 4 | Disease burden ${ }^{1}$ | 2.63 (.09)** | 2.92** | . 27 (.14) | .81** | . 31 (.08)** |
| Model 5 | ADLs ${ }^{1}$ | 2.87 (.15)** | 2.75** | . 04 (.21) | . 74 | . 30 (.09)** |
| Model 6 | IADLs ${ }^{1}$ | 2.95 (.15)** | 2.74 ** | . 01 (.20) | . 78 | . 32 (.08)** |
| Model 7 | Death | 2.76 (.09)** | 2.99** | . 33 (.05)** | .43** | . 17 (.02)** |
| Model 8 | Disease burden and death | 2.64 (.10)** | 2.95** | . 27 (.06)** | .39** | . 16 (.01)** |
| Model 9 | $>5$ years from death | 2.76 (.08)** | 2.96** | . 37 (.04)** | . $44^{* *}$ | . 18 (.01)** |
| Interpersonal |  |  |  |  |  |  |
| Model 1 | Age, Age ${ }^{2}$ | . 17 (.01)** | .05** | -. 01 (.01) | .02** | . 02 (.00)** |
| Model 2 | Demographics | . 17 (.01)** | .05** | . 00 (.01) | .02** | . 02 (.00)** |
| Model 3 | Medication | . 17 (.01)** | .04** | . 00 (.01) | .02** | . 02 (.00)** |
| Model 4 | Disease burden ${ }^{1}$ | . 16 (.02)** | .05** | . 00 (.03) | .03** | . 03 (.02) |
| Model 5 | ADLs ${ }^{1}$ | . 22 (.03)** | . 05 | . 03 (.04) | . 00 | -. 01 (.02) |
| Model 6 | IADLs ${ }^{1}$ | . 23 (.04)** | . 06 | . 03 (.04) | . 00 | -. 02 (.02) |
| Model 7 | Death | . 17 (.02)** | .05** | -. 02 (.01) | .02** | . 02 (.00)** |
| Model 8 | Disease burden and death | . 16 (.02)** | .05** | -. 02 (.01) | .15** | . 02 (.00) |
| Model 9 | $>5$ years from death | . 17 (.01)** | .05** | -. 01 (.00) | .02** | . 02 (.00)** |

[^0]education, the dummy-coded death variable, and disease burden ( $n=2,239,9,702$ visits). Model 9 includes age, age squared, sex, ethnicity, and education on assessments five years before death ( $n=2,216,10,175$ visits).
${ }^{1}$ The coefficients for the estimated trajectory are different for these models because they were estimated on a reduced number of participants/visits restricted to participants age 60 and older. Focusing on participants 60 and older, the linear slope was not significant, but the quadratic slope was steeper. Before including disease burden or functional limitations in the model, the coefficients for the total CES-D were 5.81 ( $\mathrm{SE}=.19$ ), $p<.01$, for the intercept, .06 ( $\mathrm{SE}=.27$ ), $n s$, for the linear slope, and .84 ( $\mathrm{SD}=.13$ ), $p<.01$, for the quadratic slope. The coefficients for Depressed Affect were . 94 ( $\mathrm{SE}=.06$ ), $p<.01$, for the intercept, .11 ( $\mathrm{SE}=.10$ ), $n s$, for the linear slope, and .20 ( $\mathrm{SD}=.05$ ), $p<.01$, for the quadratic slope. The coefficients for Somatic Complaints were 2.60 ( $\mathrm{SE}=.08$ ), $p<.01$, for the intercept, .34 ( $\mathrm{SE}=.13$ ), $p<.01$, for the linear slope, and .32 ( $\mathrm{SD}=.06$ ), $p<.01$, for the quadratic slope. The coefficients for Interpersonal Problems were .16 ( $\mathrm{SE}=.02$ ), $p<.01$, for the intercept, .00 ( $\mathrm{SE}=.03$ ), ns, for the linear slope, and .02 ( $\mathrm{SD}=.01$ ), $n s$, for the quadratic slope

## Author Figure 1

Estimated trajectory of the CES-D total scale score (A), depressed affect (B), somatic complaints (C), interpersonal problems (D), and well-being (E) in their original metric, from the hierarchical linear modeling analysis. The trajectory of well-being should be interpreted with caution due to complexities in the relation between well-being and age (see Sutin et al., in press).

S1A.


S1B.


S1C.


S1D.




[^0]:    Note. $N=2320$. Model 1 includes age and age squared ( $n=2,320,10,982$ visits). Model 2 includes age, age squared, sex, ethnicity, and education ( $n=2,320,10,982$ visits). Model 3 includes age, age squared, sex, ethnicity, education, and antidepressant medication use ( $n=2,287,10,442$ visits). Model 4 includes age, age squared, sex, ethnicity, education, and disease burden for participants 60 years and older ( $n=1,482,6,593$ visits). Model 5 includes age, age squared, sex, ethnicity, education, and activities of daily living (ADLs) ( $n=972,2,286$ visits). Model 6 includes age, age squared, sex, ethnicity, education, and instrumental activities of daily living (IADLs) ( $n=972,2,286$ visits). Model 7 includes age, age squared, sex, ethnicity, education, and a dummy-coded variable comparing those who died versus those still living at the time of analysis ( $n=2,320,10,982$ visits). Model 8 includes age, age squared, sex, ethnicity,

