**Supplementary Table S2: Summary of SRS Trajectory Multivariable Model**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Model Details** |  |  |  |  |  |  |
| Sample Size (*N*) | 4624 |  |  |  |  |  |
| -2 Residual Pseudo-Likelihood | 75048.82 |  |  |  |  |  |
| Generalized Chi-Square | 5956.56 |  |  |  |  |  |
| Generalized Chi-Square / DF | 0.43 |  |  |  |  |  |
| **Random Subject Effects** | **Estimate** | **SE** | **LCL** | **UCL** | ***z*-value** | ***p*-value** |
| Variance (Intercept) | 3.189 | 0.200 | 2.831 | 3.621 | 15.93 | < 0.0001 |
| Variance (Slope) | 0.140 | 0.013 | 0.118 | 0.170 | 10.79 | < 0.0001 |
| Covariance (Intercept, Slope) | -0.427 | 0.045 | -0.516 | -0.339 | -9.44 | < 0.0001 |
| **Fixed Effects** | **Estimate** | **SE** | **LCL** | **UCL** | ***t*-valuea** | ***p*-value** |
| Intercept | -3.559 | 1.377 | -6.259 | -0.860 | -2.58 | 0.0098 |
| Time | 2.328 | 1.172 | 0.030 | 4.626 | 1.99 | 0.0471 |
| Time × Time | -0.293 | 0.186 | -0.657 | 0.072 | -1.57 | 0.1156 |
| Sex (Female) | -0.578 | 0.308 | -1.182 | 0.027 | -1.87 | 0.0611 |
| Time × Sex | 0.325 | 0.265 | -0.194 | 0.843 | 1.23 | 0.2201 |
| Time × Time × Sex | -0.047 | 0.042 | -0.130 | 0.035 | -1.12 | 0.2615 |
| Race (Not White) | -1.583 | 0.333 | -2.236 | -0.931 | -4.76 | < 0.0001 |
| Time × Race | 0.904 | 0.288 | 0.340 | 1.467 | 3.14 | 0.0017 |
| Time × Time × Race | -0.135 | 0.046 | -0.225 | -0.045 | -2.95 | 0.0032 |
| Marital (Married) | -0.255 | 0.379 | -0.997 | 0.487 | -0.67 | 0.5008 |
| Time × Marital | 0.272 | 0.325 | -0.366 | 0.909 | 0.83 | 0.4040 |
| Time × Time × Marital | -0.029 | 0.052 | -0.130 | 0.073 | -0.56 | 0.5766 |
| Live (Alone) | 0.562 | 0.383 | -0.190 | 1.313 | 1.47 | 0.1428 |
| Time × Live | -0.002 | 0.332 | -0.652 | 0.649 | 0.00 | 0.9961 |
| Time × Time × Live | 0.002 | 0.053 | -0.102 | 0.105 | 0.03 | 0.9741 |
| Substance (No) | 0.604 | 0.310 | -0.003 | 1.211 | 1.95 | 0.0513 |
| Time × Substance | -0.478 | 0.268 | -1.003 | 0.047 | -1.78 | 0.0743 |
| Time × Time × Substance | 0.075 | 0.043 | -0.008 | 0.159 | 1.77 | 0.0775 |
| Productivity (No) | 0.493 | 0.401 | -0.294 | 1.280 | 1.23 | 0.2196 |
| Time × Productivity | -0.587 | 0.343 | -1.259 | 0.086 | -1.71 | 0.0873 |
| Time × Time × Productivity | 0.085 | 0.054 | -0.021 | 0.192 | 1.57 | 0.1169 |
| Education (> HS) | 1.269 | 0.301 | 0.678 | 1.859 | 4.21 | < 0.0001 |
| Time × Education | -0.504 | 0.260 | -1.013 | 0.006 | -1.94 | 0.0526 |
| Time × Time × Education | 0.076 | 0.041 | -0.005 | 0.157 | 1.84 | 0.0663 |
| Pay (Medicaid/Medicare) | -0.250 | 0.334 | -0.905 | 0.405 | -0.75 | 0.4548 |
| Time × Pay | -0.372 | 0.286 | -0.932 | 0.188 | -1.30 | 0.1930 |
| Time × Time × Pay | 0.061 | 0.045 | -0.028 | 0.150 | 1.35 | 0.1769 |
| CT Compression (No) | 0.220 | 0.288 | -0.344 | 0.784 | 0.76 | 0.4446 |
| Time × CT Compression | -0.106 | 0.248 | -0.592 | 0.379 | -0.43 | 0.6674 |
| Time × Time × CT Compression | 0.013 | 0.039 | -0.065 | 0.090 | 0.32 | 0.7503 |
| CT Punctate (No) | 0.064 | 0.356 | -0.633 | 0.761 | 0.18 | 0.8578 |
| Time × CT Punctate | -0.086 | 0.309 | -0.692 | 0.521 | -0.28 | 0.7815 |
| Time × Time × CT Punctate | 0.014 | 0.049 | -0.083 | 0.111 | 0.28 | 0.7760 |
| CT Intraventricular (No) | -0.209 | 0.334 | -0.864 | 0.446 | -0.63 | 0.5311 |
| Time × CT Intraventricular | 0.226 | 0.286 | -0.335 | 0.787 | 0.79 | 0.4304 |
| Time × Time × CT Intraventricular | -0.025 | 0.045 | -0.114 | 0.064 | -0.55 | 0.5825 |
| Age | 0.018 | 0.009 | 0.000 | 0.036 | 1.97 | 0.0483 |
| Time × Age | -0.021 | 0.008 | -0.037 | -0.006 | -2.73 | 0.0063 |
| Time × Time × Age | 0.002 | 0.001 | -0.001 | 0.004 | 1.54 | 0.1228 |
| LOS | -0.022 | 0.010 | -0.042 | -0.003 | -2.25 | 0.0243 |
| Time × LOS | -0.007 | 0.009 | -0.023 | 0.010 | -0.79 | 0.4271 |
| Time × Time × LOS | 0.002 | 0.001 | -0.001 | 0.004 | 1.29 | 0.1967 |
| FIM Motor | 0.060 | 0.012 | 0.037 | 0.083 | 5.08 | < 0.0001 |
| Time × FIM Motor | -0.027 | 0.010 | -0.047 | -0.008 | -2.73 | 0.0064 |
| Time × Time × FIM Motor | 0.004 | 0.002 | 0.001 | 0.007 | 2.34 | 0.0192 |
| FIM Cognitive | -0.027 | 0.029 | -0.084 | 0.029 | -0.95 | 0.3417 |
| Time × Cognitive | 0.055 | 0.025 | 0.006 | 0.104 | 2.22 | 0.0263 |
| Time × Time × Cognitive | -0.008 | 0.004 | -0.015 | 0.000 | -1.94 | 0.0524 |
| DRS | -0.133 | 0.062 | -0.255 | -0.010 | -2.13 | 0.0333 |
| Time × DRS | 0.039 | 0.053 | -0.064 | 0.142 | 0.75 | 0.4550 |
| Time × Time × DRS | -0.008 | 0.008 | -0.024 | 0.008 | -0.97 | 0.3298 |

a Degrees of freedom (DF) for all *p*-values is 13821

SE = Standard error

LCL, UCL = Lower/Upper confidence limits for parameter estimates

Reference cells for model are Male, White, Not Married, Not Living Alone, No Substance History, HS Education or Less, Not Medicare/Medicaid, No CT Compression, No CT Punctuate, and No CT Intraventricular

Modeling the probability of SRS = Independent