**SUPPLEMENTAL TABLE I.** Descriptive Estimates of Study Variables for U.S. Adults Aged 18-64 Years and Employed U.S. Adults Aged 18-64 Years

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **U.S. Adult Aged 18-64 Yrs. Original Population**  **(n=33,014)** | | **U.S. Adult Aged 18-64 Yrs. Final Analytic Population**  **(n=25,458)** | | **Employed U.S. Adult Aged 18-64 Yrs. Original Population**  **(n=19,553)** | | **Employed U.S. Adult Aged 18-64 Yrs. Final Analytic Population**  **(n=16,096)** | |
|  | **Mean** | **(SE)** | **Mean** | **(SE)** | **Mean** | **(SE)** | **Mean** | **(SE)** |
| Employment b | 0.67 | (.004) | 0.77 | (.004) | --- | --- | --- | --- |
| No. hours worked previous week c | --- | --- | --- | --- | 39.78 | (.130) | 40.20 | (.132) |
| No. of sick days in past 12 months | --- | --- | --- | --- | 3.67 | (.132) | 3.48 | (.125) |
| Personal earnings in past year a, c | --- | --- | --- | --- | 43.07 | (.557) | 46.02 | (.594) |
|  |  |  |  |  |  |  |  |  |
| No. of chronic conditions |  |  |  |  |  |  |  |  |
| 0 | 0.57 | (.004) | 0.57 | (.004) | 0.61 | (.004) | 0.60 | (.005) |
| 1 | 0.25 | (.004) | 0.25 | (.004) | 0.25 | (.004) | 0.26 | (.004) |
| 2-3 | 0.15 | (.003) | 0.15 | (.003) | 0.13 | (.003) | 0.13 | (.003) |
| >4 | 0.03 | (.001) | 0.03 | (.001) | 0.01 | (.001) | 0.01 | (.001) |
|  |  |  |  |  |  |  |  |  |
| No. of yrs. worked for employer c | --- | --- | --- | --- | 7.46 | (.080) | 8.08 | (.086) |
| Employer sector |  |  |  |  |  |  |  |  |
| Private | --- | --- | --- | --- | 0.76 | (.004) | 0.75 | (.004) |
| Government c | --- | --- | --- | --- | 0.15 | (.003) | 0.16 | (.004) |
| Self-employed c | --- | --- | --- | --- | 0.08 | (.003) | 0.09 | (.003) |
| No. of employees at workplace c | --- | --- | --- | --- | 3.65 | (.023) | 3.73 | (.025) |
|  |  |  |  |  |  |  |  |  |
| Aged 45-64 years c | 0.42 | (.004) | 0.42 | (.004) | 0.40 | (.005) | 0.42 | (.005) |
| Male | 0.49 | (.004) | 0.49 | (.004) | 0.53 | (.004) | 0.54 | (.005) |
| No. of children in household | 0.79 | (.009) | 0.79 | (.009) | 0.78 | (.010) | 0.77 | (.011) |
| No. of persons in family | 2.98 | (.016) | 2.98 | (.016) | 2.94 | (.017) | 2.90 | (.018) |
| Race/ethnicity |  |  |  |  |  |  |  |  |
| Hispanic b | 0.16 | (.003) | 0.15 | (.003) | 0.15 | (.004) | 0.14 | (.004) |
| NH white c | 0.65 | (.005) | 0.65 | (.005) | 0.67 | (.005) | 0.69 | (.005) |
| NH black c | 0.12 | (.003) | 0.12 | (.003) | 0.11 | (.003) | 0.10 | (.003) |
| NH Asian | 0.05 | (.002) | 0.05 | (.002) | 0.05 | (.002) | 0.05 | (.002) |
| NH other race | 0.02 | (.001) | 0.02 | (.001) | 0.02 | (.001) | 0.02 | (.001) |
| Martial status |  |  |  |  |  |  |  |  |
| Married/cohabitating c | 0.61 | (.004) | 0.62 | (.004) | 0.63 | (.005) | 0.66 | (.005) |
| Widowed | 0.02 | (.001) | 0.02 | (.001) | 0.01 | (.001) | 0.01 | (.001) |
| Divorced/separated | 0.12 | (.002) | 0.12 | (.002) | 0.11 | (.002) | 0.11 | (.003) |
| Never married c | 0.25 | (.004) | 0.25 | (.004) | 0.24 | (.005) | 0.21 | (.005) |
| Health relative to 12 months earlier |  |  |  |  |  |  |  |  |
| Worse health c | 0.08 | (.002) | 0.08 | (.002) | 0.06 | (.002) | 0.05 | (.002) |
| About the same health b | 0.73 | (.003) | 0.74 | (.004) | 0.75 | (.004) | 0.76 | (.004) |
| Better health | 0.19 | (.003) | 0.19 | (.003) | 0.19 | (.003) | 0.19 | (.004) |
| Education level |  |  |  |  |  |  |  |  |
| Less than high school c | 0.13 | (.003) | 0.13 | (.003) | 0.10 | (.003) | 0.09 | (.003) |
| High school diploma/GED | 0.26 | (.004) | 0.26 | (.004) | 0.24 | (.004) | 0.24 | (.005) |
| Some college | 0.33 | (.004) | 0.33 | (.004) | 0.33 | (.004) | 0.32 | (.005) |
| Bachelor's degree or higher | 0.29 | (.005) | 0.29 | (.005) | 0.33 | (.005) | 0.35 | (.006) |
| Place of residence |  |  |  |  |  |  |  |  |
| Not in metropolitan statistical area | 0.15 | (.008) | 0.15 | (.008) | 0.15 | (.008) | 0.14 | (.008) |
| Small metropolitan statistical area | 0.31 | (.008) | 0.31 | (.008) | 0.31 | (.008) | 0.31 | (.009) |
| Large metropolitan statistical area | 0.54 | (.007) | 0.54 | (.007) | 0.55 | (.007) | 0.55 | (.008) |
| *See footnotes on next page.*  Data: National Health Interview Survey (NHIS), 2011  Notes: Estimates account for the complex sample design of the NHIS and were weighted using the NHIS sample adult weights. n’s are unweighted. SE = standard error; --- = not applicable; NH = non-Hispanic.  a Estimate for the original sample generated using the 2011 NHIS imputed income file *m=1*. Both estimates are gross earnings in thousands of dollars.  b p<.05 when comparing the U.S. adult aged 18-64 years original population to the U.S. adult aged 18-64 years final analytic sample.  c p<.05 when comparing the employed U.S. adult aged 18-64 years original population to the employed U.S. adult aged 18-64 years final analytic sample. | | | | | | | | |

**SUPPLEMENTAL TABLE II.** Pearson Correlations among Hours Worked, Work Days Missed, and Personal Earnings for Employed U.S. Adults Aged 18-64 Years (unweighted n=16,906)

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
| (1) No. hours worked previous week | 1.000 |  |  |
| (2) No. of sick days in past 12 months | -.018\* | 1.000 |  |
| (3) Personal earnings in past year a | .297\*\*\* | -.034\*\*\* | 1.000 |
| Data: National Health Interview Survey (NHIS), 2011  Notes: Estimates were weighted using the NHIS sample adult weights.  a Estimate generated using the 2011 NHIS imputed income file *m=1*, and is gross earnings in thousands of dollars.  \*p<.05; \*\*p<.01; \*\*\*p<.001 | | | |

**SUPPLEMENTAL TABLE III.** Prevalence of Individual Chronic Conditions and Specific Chronic Condition Dyadsa for U.S. Adults Aged 18-64 Years (unweighted n=25,458)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Cancer** | **Hypertension** | **CHD** | **Stroke** | **COPD** | **Current Asthma** | **Diabetes** | **Arthritis** | **Hepatitis** | **Weak/Failing Kidneys** |
|  | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** |
| Cancer | 4.8 (0.16) |  |  |  |  |  |  |  |  |  |
| Hypertension | 1.9 (0.10) | 22.8 (0.35) |  |  |  |  |  |  |  |  |
| CHD | 0.3 (0.04) | 1.8 (0.09) | 2.4 (0.11) |  |  |  |  |  |  |  |
| Stroke | 0.2 (0.03) | 0.9 (0.06) | 0.3 (0.04) | 1.4 (0.08) |  |  |  |  |  |  |
| COPD | 0.5 (0.05) | 2.0 (0.11) | 0.4 (0.05) | 0.2 (0.03) | 4.6 (0.17) |  |  |  |  |  |
| Current asthma | 0.6 (0.06) | 2.6 (0.11) | 0.3 (0.04) | 0.2 (0.03) | 1.7 (0.10) | 8.3 (0.22) |  |  |  |  |
| Diabetes | 0.6 (0.06) | 4.4 (0.16) | 0.8 (0.07) | 0.4 (0.05) | 0.7 (0.06) | 1.0 (0.07) | 6.5 (0.19) |  |  |  |
| Arthritis | 1.8 (0.10) | 8.0 (0.21) | 1.2 (0.08) | 0.7 (0.06) | 2.1 (0.12) | 2.7 (0.12) | 2.6 (0.12) | 17.8 (0.30) |  |  |
| Hepatitis | 0.3 (0.04) | 0.9 (0.07) | 0.2 (0.03) | --- b | 0.3 (0.04) | 0.4 (0.05) | 0.3 (0.04) | 0.9 (0.07) | 2.8 (0.12) |  |
| Weak/failing kidneys | 0.2 (0.03) | 0.8 (0.06) | 0.2 (0.03) | 0.2 (0.03) | 0.3 (0.04) | 0.2 (0.03) | 0.5 (0.05) | 0.6 (0.06) | 0.1 (0.02) | 1.3 (0.08) |
| Data: National Health Interview Survey (NHIS), 2011  Notes: Estimates account for the complex sample design of the NHIS and were weighted using the NHIS sample adult weights. Shaded cells indicate the prevalence of the single chronic condition specified. SE = standard error; CHD = coronary heart disease; COPD = chronic obstructive pulmonary disease.  a Chronic condition dyads are defined as a combination of two (e.g., cancer and hypertension) chronic conditions. Dyads are not mutually exclusive, such that in addition to the chronic conditions identified in a dyad, an adult may also have additional chronic conditions.  b Unweighted n<30, estimate not provided. | | | | | | | | | | |

**SUPPLEMENTAL TABLE IV.** Ordinary Least Squares Regression of Hours Workeda on Individual Chronic Condition, Having Multiple Chronic Conditions (MCC), Specific Condition\*MCC Interaction, and Selected Covariates among Employed U.S. Adults Aged 18-64 Years (unweighted n=16,906)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Model 1** | | | **Model 2** | | | **Model 3** | | |
|  | **β** |  | **(SE)** | **β** |  | **(SE)** | **β** |  | **(SE)** |
|  |  |  |  |  |  |  |  |  |  |
| Cancer | -0.750 |  | (0.663) | -0.734 |  | (0.674) | -0.258 |  | (1.025) |
| MCC |  |  |  | -0.039 |  | (0.367) | 0.039 |  | (0.384) |
| Cancer\*MCC |  |  |  |  |  |  | -0.851 |  | (1.403) |
|  |  |  |  |  |  |  |  |  |  |
| Hypertension | -0.137 |  | (0.290) | -0.101 |  | (0.336) | 0.161 |  | (0.356) |
| MCC |  |  |  | -0.085 |  | (0.419) | 0.542 |  | (0.725) |
| Hypertension\*MCC |  |  |  |  |  |  | -1.070 |  | (0.855) |
|  |  |  |  |  |  |  |  |  |  |
| CHD | -0.394 |  | (1.010) | -0.323 |  | (1.036) | -1.187 |  | (2.340) |
| MCC |  |  |  | -0.114 |  | (0.371) | -0.132 |  | (0.374) |
| CHD\*MCC |  |  |  |  |  |  | 1.013 |  | (2.627) |
|  |  |  |  |  |  |  |  |  |  |
| Stroke | -2.377 |  | (1.389) | -2.344 |  | (1.417) | -3.445 |  | (3.584) |
| MCC |  |  |  | -0.065 |  | (0.368) | -0.082 |  | (0.370) |
| Stroke\*MCC |  |  |  |  |  |  | 1.471 |  | (3.865) |
|  |  |  |  |  |  |  |  |  |  |
| COPD | -0.653 |  | (0.834) | -0.626 |  | (0.847) | -1.428 |  | (1.382) |
| MCC |  |  |  | -0.050 |  | (0.363) | -0.117 |  | (0.366) |
| COPD\*MCC |  |  |  |  |  |  | 1.165 |  | (1.713) |
|  |  |  |  |  |  |  |  |  |  |
| Current asthma | -0.008 |  | (0.483) | 0.048 |  | (0.491) | -1.002 |  | (0.610) |
| MCC |  |  |  | -0.153 |  | (0.367) | -0.525 |  | (0.392) |
| Current asthma\*MCC |  |  |  |  |  |  | 2.409 | \* | (1.024) |
|  |  |  |  |  |  |  |  |  |  |
| Diabetes | -0.240 |  | (0.507) | -0.182 |  | (0.558) | -1.397 |  | (0.850) |
| MCC |  |  |  | -0.097 |  | (0.397) | -0.239 |  | (0.421) |
| Diabetes\*MCC |  |  |  |  |  |  | 1.664 |  | (1.123) |
|  |  |  |  |  |  |  |  |  |  |
| Arthritis | 0.772 | \* | (0.351) | 1.034 | \*\* | (0.403) | 1.200 | \* | (0.505) |
| MCC |  |  |  | -0.613 |  | (0.414) | -0.424 |  | (0.533) |
| Arthritis\*MCC |  |  |  |  |  |  | -0.457 |  | (0.815) |
|  |  |  |  |  |  |  |  |  |  |
| Hepatitis | -0.803 |  | (0.884) | -0.774 |  | (0.881) | -1.510 |  | (1.019) |
| MCC |  |  |  | -0.083 |  | (0.359) | -0.156 |  | (0.362) |
| Hepatitis\*MCC |  |  |  |  |  |  | 1.409 |  | (1.702) |
|  |  |  |  |  |  |  |  |  |  |
| Weak/failing kidneys | 1.191 |  | (1.451) | 1.288 |  | (1.459) | 4.066 |  | (2.490) |
| MCC |  |  |  | -0.183 |  | (0.364) | -0.141 |  | (0.369) |
| Weak/failing kidneys\*MCC |  |  |  |  |  |  | -3.814 |  | (2.981) |
| Data: National Health Interview Survey (NHIS), 2011  Notes: Estimates account for the complex sample design of the NHIS and were weighted using the NHIS sample adult weights. Model 1 included each individual chronic condition, worker/workplace covariates, and demographic covariates, Model 2 further adjusted for having MCC, and Model 3 included an interaction term between having MCC and each individual chronic condition. β = unstandardized coefficient; SE = standard error; MCC = multiple chronic conditions; CHD = coronary heart disease; COPD = chronic obstructive pulmonary disease.  a Number of hours worked during the previous week.  \*p<.05; \*\*p<.01; \*\*\*p<.001 | | | | | | | | | |

**SUPPLEMENTAL TABLE V.** Ordinary Least Squares Regression of Personal Earningsaon Individual Chronic Condition, Having Multiple Chronic Conditions (MCC), Specific Condition\*MCC Interaction, and Selected Covariates among Employed U.S. Adults Aged 18-64 Years (unweighted n=16,906)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Model 1** | | | **Model 2** | | | **Model 3** | | |
|  | **β** |  | **(SE)** | **β** |  | **(SE)** | **β** |  | **(SE)** |
|  |  |  |  |  |  |  |  |  |  |
| Cancer | 2.066 |  | (2.634) | 2.969 |  | (2.732) | 5.015 |  | (4.723) |
| MCC |  |  |  | -2.234 |  | (1.246) | -1.899 |  | (1.286) |
| Cancer\*MCC |  |  |  |  |  |  | -3.655 |  | (5.694) |
|  |  |  |  |  |  |  |  |  |  |
| Hypertension | -1.462 |  | (1.261) | -0.911 |  | (1.428) | -1.082 |  | (1.563) |
| MCC |  |  |  | -1.296 |  | (1.343) | -1.704 |  | (2.128) |
| Hypertension\*MCC |  |  |  |  |  |  | 0.697 |  | (2.746) |
|  |  |  |  |  |  |  |  |  |  |
| CHD | -9.661 | \*\*\* | (2.822) | -9.032 | \*\* | (2.938) | 0.802 |  | (7.977) |
| MCC |  |  |  | -1.008 |  | (1.239) | -0.800 |  | (1.254) |
| CHD\*MCC |  |  |  |  |  |  | -11.530 |  | (8.542) |
|  |  |  |  |  |  |  |  |  |  |
| Stroke | -1.169 |  | (6.054) | -0.242 |  | (6.079) | -11.808 |  | (6.842) |
| MCC |  |  |  | -1.807 |  | (1.190) | -1.981 |  | (1.195) |
| Stroke\*MCC |  |  |  |  |  |  | 15.446 |  | (10.306) |
|  |  |  |  |  |  |  |  |  |  |
| COPD | -2.367 |  | (1.829) | -1.500 |  | (1.973) | 0.082 |  | (3.732) |
| MCC |  |  |  | -1.594 |  | (1.272) | -1.464 |  | (1.320) |
| COPD\*MCC |  |  |  |  |  |  | -2.299 |  | (4.421) |
|  |  |  |  |  |  |  |  |  |  |
| Current asthma | -1.854 |  | (1.380) | -1.289 |  | (1.470) | -1.923 |  | (2.022) |
| MCC |  |  |  | -1.537 |  | (1.265) | -1.762 |  | (1.388) |
| Current asthma\*MCC |  |  |  |  |  |  | 1.454 |  | (2.965) |
|  |  |  |  |  |  |  |  |  |  |
| Diabetes | -3.722 |  | (2.098) | -3.097 |  | (2.159) | -6.973 | \*\* | (2.525) |
| MCC |  |  |  | -1.033 |  | (1.205) | -1.487 |  | (1.301) |
| Diabetes\*MCC |  |  |  |  |  |  | 5.309 |  | (3.989) |
|  |  |  |  |  |  |  |  |  |  |
| Arthritis | -0.223 |  | (1.307) | 0.686 |  | (1.576) | 0.637 |  | (1.823) |
| MCC |  |  |  | -2.127 |  | (1.469) | -2.182 |  | (2.045) |
| Arthritis\*MCC |  |  |  |  |  |  | 0.135 |  | (2.697) |
|  |  |  |  |  |  |  |  |  |  |
| Hepatitis | -0.418 |  | (2.261) | 0.242 |  | (2.268) | 1.166 |  | (3.221) |
| MCC |  |  |  | -1.834 |  | (1.201) | -1.742 |  | (1.237) |
| Hepatitis\*MCC |  |  |  |  |  |  | -1.766 |  | (4.700) |
|  |  |  |  |  |  |  |  |  |  |
| Weak/failing kidneys | -3.398 |  | (2.797) | -2.475 |  | (2.844) | 8.128 |  | (4.567) |
| MCC |  |  |  | -1.737 |  | (1.208) | -1.576 |  | (1.218) |
| Weak/failing kidneys\*MCC |  |  |  |  |  |  | -14.560 | \* | (5.793) |
| Data: National Health Interview Survey (NHIS), 2011  Notes: Estimates account for the complex sample design of the NHIS and were weighted using the NHIS sample adult weights. Model 1 included each individual chronic condition, worker/workplace covariates, and demographic covariates, Model 2 further adjusted for having MCC, and Model 3 included an interaction term between having MCC and each individual chronic condition. β = unstandardized coefficient; SE = standard error; MCC = multiple chronic conditions; CHD = coronary heart disease; COPD = chronic obstructive pulmonary disease.  a Personal earnings in past year; estimates are gross earnings in thousands of dollars.  \*p<.05; \*\*p<.01; \*\*\*p<.001 | | | | | | | | | |