**Supplemental Table 1: Multi-variable regression analyses for all health outcomes with 12 covariates in the model**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Regression Coefficient** | **WEMWBS** | **MAKS** | **ECI Positive Subtotal** | **ECI Negative Subtotal** | **CWS - Wellbeing** | **CWS - Support** | **FQ** | **ED-5D-5L VAS** |
| **Age of Carer** | -0.18 (-0.8 to 0.5) p=0.58 | -0.07 (-0.3 to 0.1) p=0.48 | -0.06 (-0.5 to 0.4) p=0.81 | 1.00 (-1.0 to 3.0) p=0.32 | -0.27 (-1.9 to 1.4) p=0.75 | -0.04 (-0.8 to 0.7) p=0.91 | 0.38 (-0.3 to 1.0) p=0.25 | -0.73 (-2.1 to 0.6) p=0.29 |
| **Age of Carer Squared** | 0.00 (0.0 to 0.0) p=0.82 | 0.00 0.0 to 0.0) p=0.62 | 0.00 (0.0 to 0.0) p=0.99 | -0.01 (0.0 to 0.0) p=0.42 | 0.00 (0.0 to 0.0) p=0.84 | 0.00 (0.0 to 0.0) p=0.73 | 0.00 (0.1 to 0.0) p=0.20 | 0.01 (0.0 to 0.0) p=0.34 |
| **Age of CfP** | **0.29** **(0.1 to 0.5) p=0.002** | 0.00 (0.0 to 0.0) p=0.86 | 0.00 (-0.1 to 0.1) p=0.97 | **-0.54** **(-1.0 to -0.1) p=0.02** | **0.38** **(0.0 to 0.8)** **p=0.04** | -0.14 (-0.3 to 0.0) p=0.10 | -0.10 (-0.2 to 0.1) p=0.19 | 0.14 (-0.3 to 0.5) p=0.48 |
| **Gender** | p=0.30 | p=0.82 | p<0.01 | p=0.49 | p=0.39 | p=0.13 | p=0.76 | p=0.47 |
| Male | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| Female | 1.23 (-1.1 to 3.6) | 0.09 (-0.7 to 0.9) | **6.67** **(3.1 to 10.3)** | 5.44 (-9.9 to 20.8) | -3.23 (-10.5 to 4.1) | 2.47 (-0.7 to 5.7) | 0.45 (-2.4 to 3.3) | -1.82 (-6.8 to 3.1) |
| **Gender of CfP** | p=0.23 | p=0.14 | p=0.21 | p=0.36 | p=0.34 | p=0.99 | p=0.93 | p=0.48 |
| Male | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| Female | 1.23 (-1.1 to 3.6) | 0.09 (-0.7 to 0.9) | 6.67 (3.1 to 10.3) | 5.44 (-9.9 to 20.8) | -3.23 (-10.5 to 4.1) | 2.47 (-0.7 to 5.7) | 0.45 (-2.4 to 3.3) | -1.82 (-6.8 to 3.1) |
| **Ethnicity** | p<0.01 | p=0.33 | p<0.01 | p=0.99 | p=0.51 | p=0.08 | p=0.15 | p=0.13 |
| White | Ref | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| BAME | **4.50** **(1.8 to 7.2)** | 0.47 (-0.5 to 1.4) | **5.99** **(3.7 to 8.3)** | 0.06 (-9.9 to 10.0) | 2.87 (-5.7 to 11.4) | *-3.29* *(-7.0 to 0.5)* | -2.40(-5.7 to 0.9) | 4.44 (-1.3 to 10.2) |
| **Relationship with CfP** | p=0.03 | p=0.58 | p=0.32 | p=0.05 | p<0.01 | p<0.01 | p=0.03 | p=0.12 |
| Parent | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| Spouse/Partner | **-6.83** **(-16.9 to 3.3)** | -0.95 (-2.4 to 0.5) | -3.18 (-6.7 to 0.3) | **3.57** **(-23.4 to 30.5)** | **-14.69** **(-27.5 to -1.9)** | **3.57** **(-6.6 to 13.7)** | **3.62** **(-5.3 to 12.5)** | -10.02 (-35.6 to 15.6) |
| Child/Sibling | **10.32** **(-1.2 to 21.9)** | -0.58 (-2.5 to 1.3) | -2.36 (-6.9 to 2.2) | **7.35** **(-14.0 to 28.7)** | **-12.82** **(-29.8 to 4.2)** | **12.09** **(4.0 to 20.2)** | **3.40** **(-3.7 to 10.5)** | 17.08 (-7.8 to 41.9) |
| Friend/Other relative | **-3.23** **(-17.2 to 10.7)** | -0.65 (-2.5 to 1.2) | -1.07 (-5.5 to 3.3) | **-30.46** **(-58.3 to -2.6)** | **8.02** **(-8.2 to 24.3)** | **12.25** **(1.7 to 22.8)** | **-9.53** **(-18.8 to -0.3)** | 22.03 (-10.1 to 54.2) |
| **Employment Status** | p=0.13 | p=0.81 | p=0.53 | p=0.33 | p<0.01 | p=0.74 | p=0.51 | p<0.01 |
| Work/Education | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| Not Working | -2.10 (-4.4 to 0.2) | -0.19 (-1.0 to 0.6) | 0.64 (-1.3 to 2.6) | 0.83 (-7.5 to 9.1) | **-10.04** **(-17.2 to -2.9)** | 1.18 (-1.9 to 4.3) | 1.47 (-1.3 to 4.2) | **-12.14** **(-16.9 to -7.3)** |
| Retired | 0.94 (-2.2 to 4.1) | -0.29 (-1.4 to 0.8) | 1.39 (-1.3 to 4.1) | -8.28 (-19.8 to 3.2) | **4.27** **(-5.5 to 14.0)** | -0.14 (-4.4 to 4.2) | -0.50 (-4.3 to 3.3) | **4.74** **(-1.9 to 11.4)** |
| **Highest education achieved** | p=0.19 | p=0.61 | p=0.66 | p=0.35 | p=0.48 | p=0.36 | p=0.16 | p=0.88 |
| Pre-university | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| Undergraduate/Professional | 1.25 (-0.9 to 3.4) | 0.47 (-0.3 to 1.2) | -0.63 (-2.4 to 1.2) | -3.69 (-11.6 to 4.2) | 0.54 (-6.2 to 7.2) | 1.23 (-1.7 to 4.2) | 0.55 (-2.1 to 3.2) | -1.27 (-5.9 to 3.4) |
| Postgraduate | -1.24 (-3.7 to 1.3) | 0.26 (-0.6 to 1.1) | -0.27 (-2.4 to 1.8) | 2.22 (-6.9 to 11.3) | -2.54 (-10.3 to 5.2) | 2.93 (-0.5 to 6.4) | 1.54 (-1.5 to 4.5) | -2.09 (-7.4 to 3.2) |
| Apprenticeship | -0.14 (-3.3 to 3.0) | 0.50 (-0.6 to 1.6) | 0.99 (-1.7 to 3.6) | 4.88 (-6.7 to 16.5) | -6.31 (-16.1 to 3.5) | 2.34 (-2.0 to 6.7) | 4.19 (0.4 to 8.0) | -1.70 (-8.5 to 5.1) |
| **Marital status** | p<0.01 | p=0.03 | p=0.16 | p=0.05 | p<0.01 | p<0.01 | p=0.06 | p=0.03 |
| Married | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| Single/Other | **-3.56** **(-5.6 to -1.5)** | **-0.76** **(-1.5 to -0.1)** | -1.19 (-2.9 to 0.5) | **7.33** **(0.0 to 14.6)** | **-11.16** **(-17.3 to -5.0)** | **3.53** **(0.8 to 6.3)** | *2.33* *(-0.1 to 4.7)* | **-6.50** **(-10.8 to -2.2)** |
| **Living arrangement** | p=0.13 | p=0.59 | p=0.30 | p=0.01 | p=0.37 | p=0.02 | p=0.24 | p=0.61 |
| With CfP | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| Not with CfP | -1.84 (-4.3 to 0.6) | -0.23 (-1.1 to 0.6) | -1.09 (-3.1 to 1.0) | **11.42** **(2.4 to 20.4)** | -3.39 (-10.9 to 4.1) | **3.91** **(0.6 to 7.3)** | 1.75 (-1.2 to 4.7) | -1.37 (-6.6 to 3.9) |
| **Disease of CfP** | p=0.17 | p=0.99 | p=0.71 | p=0.48 | p=0.42 | p=0.34 | p=0.09 | p=0.03 |
| Schizophrenia | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| Psychosis | -0.09 (-2.3 to 2.1) | -0.02 (-0.8 to 0.7) | 0.13 (-1.7 to 2.0) | -2.78 (-10.8 to 5.2) | 3.35 (-3.5 to 10.1) | -1.35 (-4.3 to 1.6) | *-1.19* *(-3.8 to 1.4)* | **2.53** **(-2.1 to 7.1)** |
| Type 1 Bipolar | -2.99 (-6.3 to 0.3) | 0.06 (-1.1 to 1.2) | 1.15 (-1.6 to 3.9) | 4.41 (-7.6 to 16.5) | -2.83 (-13.0 to 7.3) | 1.87 (-2.6 to 6.4) | *3.25* *(-0.7 to 7.2)* | **-6.89** **(-13.9 to 0.1)** |
| **Duration of Care****(hours/week)** | p=0.07 | p=0.49 | p=0.04 | P<0.01 | P<0.01 | p=0.41 | p=0.24 | p=0.43 |
| 1-9 | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| 10-19 | *-1.25* *(-3.8 to 1.3)* | -0.02 (-0.9 to 0.9) | **5.26** **(0.1 to 10.5)** | **-9.97** **(-33.7 to 13.8)** | **-5.98** **(-14.0 to 2.0)** | 2.14 (-2.1 to 6.4) | 2.45 (-1.2 to 6.1) | -4.61 (-11.1 to 1.9) |
| 20-34 | *-2.27* *(-5.2 to 0.7)* | 0.66 (-0.4 to 1.7) | **6.67** **(1.1 to 12.2)** | **-3.23** **(-29.9 to 23.5)** | **-11.00** **(-20.2 to -1.8)** | 4.24 (-0.7 to 9.1) | 1.61 (-2.7 to 5.9) | -3.99 (-11.5 to 3.6) |
| 35-49 | *-3.13* *(-6.5 to 0.3)* | -0.21 (-1.4 to 1.0) | **7.75** **(1.6 to 13.9)** | **37.77** **(8.5 to 67.1)** | **-15.47** **(-26.0 to -4.9)** | -0.59 (-6.6 to 5.4) | 3.55 (-1.7 to 8.8) | -8.14 (-17.4 to 1.1) |
| 50+ | *-4.29* *(-7.2 to -1.3)* | 0.49 (-0.5 to 1.5) | **6.28** **(1.6 to 10.9)** | **22.99** **(1.1 to 44.8)** | **-16.60** **(-25.8 to -7.4)** | 2.86 (-1.8 to 7.5) | 3.67 (-0.4 to 7.7) | -3.79 (-10.9 to 3.4) |
| **Time since onset** | p=0.52 | p=0.37 | p=0.04 | p=0.39 | p=0.81 | p=0.06 | p=0.88 | p=0.16 |
| 0-5 | Ref | Ref | Ref | Ref | Ref | Ref | Ref | Ref |
| 5-10 | 0.05 (-2.5 to 2.6) | -0.40 (-1.3 to 0.5) | **-2.21** **(-4.4 to -0.1)** | 4.43 (-4.8 to 13.7) | -1.96 (-9.9 to 6.0) | *3.57* *(0.1 to 7.0)* | 0.32 (-2.7 to 3.4) | 0.17 (-5.2 to 5.5) |
| 10+ | -1.32 (-3.8 to 1.2) | -0.59 (-1.5 to 0.3) | **0.80** **(-1.3 to 2.9)** | 5.94 (-3.2 to 15.1) | -2.25 (-10.0 to 5.5) | *3.33* *(-0.1 to 6.8)* | 0.79 (-2.2 to 3.8) | -4.76 (-10.1 to 0.6) |
| Constant | 46.07 (27.8 to 64.3) | 26.25 (21.6 to 30.9) | 27.60 (16.0 to 39.2) | 76.58 (25.6 to 127.5) | 93.09 (50.8 to 135.4) | 13.73 (-5.2 to 32.6) | 41.53 (24.9 to 58.1) | 95.04 (55.9 to 134.2) |
| **Interactions** | p<0.01 |  |  |  |  |  |  | p=0.11 |
| Age of CfP x Spouse/Partner | **-0.06** **(-0.3 to 0.2)** |  |  |  |  |  |  | 0.08 (-0.4 to 0.6) |
| Age of CfP x Child/Sibling | **-0.36** **(-0.6 to -0.1)** |  |  |  |  |  |  | -0.46 (-1.0 to 0.1) |
| Age of CfP x Friend/Other | **0.08** **(-0.2 to 0.4)** |  |  |  |  |  |  | -0.35 (-1.0 to 0.3) |
|  |  |  | p=0.15 | p=0.09 |  |  |  |  |
| Female x 10-19 hpw |  |  | -4.91 (-10.6 to 0.8) | *19.29* *(-5.5 to 44.1)* |  |  |  |  |
| Female x 20-34 hpw |  |  | -5.84 (-11.9 to 0.2) | *12.36* *(-14.7 to 39.5)* |  |  |  |  |
| Female x 35-49 hpw |  |  | -5.37 (-12.1 to 1.3) | *-18.76* *(-47.7 to 10.2)* |  |  |  |  |
| Female x 50+ hpw |  |  | -5.76 (-10.6 to -0.9) | *-7.30* *(-28.5 to 13.9)* |  |  |  |  |
|  |  |  |  | p=0.07 |  | p=0.06 | p=0.05 | p=0.15 |
| Spouse/Partner x 10-19 hpw |  |  |  | *-5.96* *(-37.4 to 25.4)* |  | *7.74* *(-4.0 to 19.5)* | *-3.23* *(-13.5 to 7.0)* | 0.44 (-17.6 to 18.5) |
| Child/Sibling x 10-19 hpw |  |  |  | *1.13* *(-25.4 to 27.7)* |  | *-12.43* *(-22.5 to -2.4)* | *-6.97* *(-15.8 to 1.8)* | 24.63 (9.1 to 40.1) |
| Friend/Other x 10-19 hpw |  |  |  | *59.26* *(19.8 to 98.8)* |  | *4.87* *(-10.0 to 19.7)* | *17.28* *(4.2 to 30.3)* | 1.49 (-21.5 to 24.5) |
| Spouse/Partner x 20-34 hpw |  |  |  | *19.59* *(-11.7 to 50.9)* |  | *3.39* *(-8.4 to 15.2)* | *0.29* *(-10.0 to 10.6)* | -5.26 (-23.5 to 13.0) |
| Child/Sibling x 20-34 hpw |  |  |  | *18.38* *(-9.8 to 46.6)* |  | *-7.79* *(-18.4 to 2.9)* | *-0.92* *(-10.3 to 8.4)* | 4.43 (-12.1 to 21.0) |
| Friend/Other x 20-34 hpw |  |  |  | *2.82* *(-51.5 to 57.2)* |  | *-16.42* *(-35.7 to 2.9)* | *-8.92* *(-25.9 to 8.0)* | 20.97 (-8.9 to 50.8) |
| Spouse/Partner x 35-49 hpw |  |  |  | *-10.02* *(-40.8 to 20.8)* |  | *9.07* *(-2.5 to 20.7)* | *-3.56* *(-13.7 to 6.6)* | -3.24 (-21.2 to 14.7) |
| Child/Sibling x 35-49 hpw |  |  |  | *0.96* *(-46.5 to 48.4)* |  | *-15.44* *(-33.3 to 2.4)* | *10.42* *(-5.3 to 26.1)* | 12.13 (-15.5 to 39.8) |
| Friend/Other x 35-49 hpw |  |  |  | *20.91* *(-24.8 to 66.6)* |  | *-8.58* *(-25.8 to 8.6)* | *6.30* *(-8.8 to 21.4)* | 8.54 (-18.0 to 35.1) |
| Spouse/Partner x 50+ hpw |  |  |  | *11.13* *(-15.0 to 37.3)* |  | *2.21* *(-7.6 to 12.0)* | *0.26* *(-8.3 to 8.9)* | -3.65 (-18.8 to 11.5) |
| Child/Sibling x 50+ hpw |  |  |  | *0.00* *(empty)* |  | *0.00* *(empty)* | *0.00* *(empty)* | 0.00 (empty) |
| Friend/Other x 50+ hpw |  |  |  | *-1.94* *(-52.2 to 48.4)* |  | *-8.13* *(-27.0 to 10.7)* | *-4.37* *(-20.9 to 12.2)* | -18.67 (-47.7 to 10.4) |

WEMWBS: Warwick-Edinburgh Mental Wellbeing Scale, MAKS: Mental Health Knowledge Schedule, ECI: Experience of Caregiving Inventory, CWS: Carer Wellbeing and Support Scale, FQ: Family Questionnaire, EQ-5D-5L VAS: EQ-5D-5L Visual Analogue Scale, Ref: Reference, values in blankets: 95% confident internal, p: probability, CfP: Cared -for person, BAME: Black, Asian, and minority ethnic, hpw: hours per week, Variables highlighted in bold-print are those with a p<0.05, Variables highlighted in italics print are those where 0.05≤p<0.10