|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PROM** | **GAD-7** | | | | | | | | **SQS** | | | | | | | |
| **Month** | **1** | | **3** | | **6** | | **12** | | **1** | | **3** | | **6** | | **12** | |
| **Group** | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **n** | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 |
| **Mean change** | -5.91 | -3.46 | -5.64 | -3.96 | -5.18 | -3.46 | -3.70 | -2.33 | 2.53 | 0.64 | 2.63 | 0.68 | 2.17 | 0.79 | 1.73 | 0.44 |
| **SD** | 6.42 | 5.18 | 5.96 | 5.53 | 6.39 | 5.39 | 5.75 | 5.02 | 2.57 | 2.08 | 2.56 | 1.68 | 2.58 | 2.11 | 2.47 | 1.89 |
| **t-value** | -3.639 | | -2.539 | | -2.521 | | -2.198 | | 6.963 | | 7.502 | | 5.030 | | 5.083 | |
| **P-value** | <0.001\*\*\* | | 0.012\* | | 0.012\* | | 0.028\* | | <0.001\*\*\* | | <0.001\*\*\* | | <0.001\*\*\* | | <0.001\*\*\* | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **PROM** | **EQ-5D-5L Index** | | | | | | | | **EQ-5D-5L Mobility** | | | | | | | |
| **Month** | **1** | | **3** | | **6** | | **12** | | **1** | | **3** | | **6** | | **12** | |
| **Group** | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **n** | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 |
| **Mean change** | 0.18 | 0.07 | 0.16 | 0.09 | 0.14 | 0.08 | 0.11 | 0.05 | -0.17 | -0.01 | -0.07 | -0.08 | -0.11 | -0.03 | -0.11 | -0.04 |
| **SD** | 0.25 | 0.16 | 0.24 | 0.19 | 0.23 | 0.19 | 0.22 | 0.17 | 0.68 | 0.58 | 0.92 | 0.44 | 0.70 | 0.49 | 0.72 | 0.44 |
| **t-value** | 4.359 | | 2.625 | | 2.400 | | 2.803 | | -2.270 | | 0.057 | | -1.072 | | -0.978 | |
| **P-value** | <0.001\*\*\* | | 0.009\*\* | | 0.016\* | | 0.005\*\* | | 0.023\* | | 0.943 | | 0.279 | | 0.321 | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **PROM** | **EQ-5D-5L Selfcare** | | | | | | | | **EQ-5D-5L Usual Activities** | | | | | | | |
| **Month** | **1** | | **3** | | **6** | | **12** | | **1** | | **3** | | **6** | | **12** | |
| **Group** | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **n** | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 |
| **Mean change** | -0.04 | -0.03 | -0.03 | -0.10 | -0.02 | -0.04 | -0.01 | -0.05 | -0.53 | -0.23 | -0.46 | -0.39 | -0.35 | -0.29 | -0.33 | -0.24 |
| **SD** | 0.80 | 0.60 | 0.71 | 0.47 | 0.65 | 0.59 | 0.61 | 0.47 | 1.05 | 0.72 | 1.11 | 0.89 | 1.00 | 0.79 | 0.95 | 0.76 |
| **t-value** | -0.130 | | 1.005 | | 0.847 | | 0.960 | | -2.802 | | -0.557 | | -0.557 | | -0.875 | |
| **P-value** | 0.896 | | 0.310 | | 0.398 | | 0.338 | | 0.005\*\* | | 0.575 | | 0.575 | | 0.383 | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **PROM** | **EQ-5D-5L Pain and Discomfort** | | | | | | | | **EQ-5D-5L Anxiety and Depression** | | | | | | | |
| **Month** | **1** | | **3** | | **6** | | **12** | | **1** | | **3** | | **6** | | **12** | |
| **Group** | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **n** | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 | 156 | 146 |
| **Mean change** | -0.45 | -0.19 | -0.38 | -0.25 | -0.35 | -0.25 | -0.27 | -0.14 | -0.88 | -0.44 | -0.76 | -0.51 | -0.74 | -0.50 | -0.57 | -0.29 |
| **SD** | 0.91 | 0.71 | 0.86 | 0.67 | 0.78 | 0.73 | 0.76 | 0.60 | 1.10 | 0.89 | 1.04 | 1.04 | 1.15 | 0.94 | 1.06 | 0.89 |
| **t-value** | -2.725 | | -1.398 | | -1.061 | | -1.579 | | -3.803 | | -2.086 | | -2.010 | | -2.506 | |
| **P-value** | 0.007\*\* | | 0.163 | | 0.290 | | 0.113 | | <0.001\*\*\* | | 0.038\* | | 0.044\* | | 0.012\* | |

***Supplementary Table 4. Independent samples t-test comparing changes patient-reported outcome measures (PROMs) from baseline at each time point to baseline between sleep quality groups.*** *Patients were grouped by their baseline SQS score: a score of 0 – 4 was ‘impaired sleep’ (group 1) whilst scores ≥5 meant ‘unimpaired sleep’ (group 2). Mean change for each PROM was compared between the two groups. Sample size consistent for all PROMs, n=302, except PGIC, n=264. SD=Standard deviation, GAD-7=Generalised anxiety disorder-7, SQS=Single-item sleep quality scale, PGIC=Patient global impression of change. p<0.050 = \*, p<0.010 = \*\*, p<0.001 = \*\*\*.*