Supplementary File 1: Post-hoc multiple comparisons of dependency, care needs, and costs between dependency groups.

Supplementary Table 1 presents results of the post-hoc tests. There were statistically significant differences in the reduction of weekly community care hours between all groups (p<0.05) except the medium and high dependency groups (p=0.068), and significant differences in the reduction of weekly community care costs between all groups (p<0.05) except the low and medium dependency groups (p=0.368).

Supplementary Table 1. Post-hoc multiple comparisons of dependency (NPDS), care needs (NPCNA), and costs between dependency groups (n=1007).

| Bonferroni-adjusted post-hoc multiple comparisons | Low dependency vs. Medium dependency | Low dependency vs. High dependency | Medium dependency vs. High dependency |
|--------------------------------------------------|-------------------------------------|-----------------------------------|--------------------------------------|
| Cost of episode                                  | *                                   | *                                 | *                                    |
| Length of stay                                   | *                                   | *                                 | *                                    |
| **NPDS / NPCNA**                                 |                                     |                                   |                                       |
| **Admission**                                    |                                     |                                   |                                       |
| NPDS total score                                 | *                                   | *                                 | *                                    |
| Care hours/week                                  | *                                   | *                                 |                                       |
| Care costs £/week                                | *                                   | *                                 |                                       |
| **Discharge**                                    |                                     |                                   |                                       |
| NPDS total score                                 | *                                   | *                                 | *                                    |
| Care hours/week                                  | *                                   | *                                 |                                       |
| Care costs £/week                                | *                                   | *                                 |                                       |
| **Change**                                       |                                     |                                   |                                       |
| NPDS total score                                 | *                                   | *                                 |                                       |
| Care hours/week                                  | *                                   | *                                 | NS (p = 0.068)                        |
| Care costs £/week                                | NS (p = 0.368)                      | *                                 |                                       |

NPDS = Northwick Park Dependency Score; NPCNA = Northwick Park Care Needs Assessment; NS: not significant at p = 0.05.

*Statistically significant, p < 0.05
Supplementary File 2: Post-hoc multiple comparisons of functional independence between dependency groups.

Supplementary Table 2 presents results of the post-hoc tests. There were statistically significant differences in total functional independence gains between all dependency groups (p<0.05) except the low and high dependency groups (p=0.317). Specifically, all groups differed significantly (p<0.05) in motor functional gains except the low and high dependency groups (p=0.979), but no group differences were seen in cognitive functional gains. No statistically significant group differences were seen in functional independence gains in activities of daily living.

Supplementary Table 2. Post-hoc multiple comparisons of functional independence (UK FIM+FAM) and activities of daily living (EADL) between dependency groups (n=1007).

| Bonferroni-adjusted post-hoc multiple comparisons | Low dependency vs. Medium dependency | Low dependency vs. High dependency | Medium dependency vs. High dependency |
|--------------------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| **UK FIM+FAM Admission**                        |                                     |                                   |                                   |
| Motor                                            | *                                   | *                                 | *                                 |
| Cognitive                                        | *                                   | *                                 | *                                 |
| UK FIM+FAM Total                                 | *                                   | *                                 | *                                 |
| **Discharge**                                    |                                     |                                   |                                   |
| Motor                                            | *                                   | *                                 | *                                 |
| Cognitive                                        | *                                   | *                                 | *                                 |
| UK FIM+FAM Total                                 | *                                   | *                                 | *                                 |
| **Change**                                       |                                     |                                   |                                   |
| Motor                                            | *                                   | NS                                | *                                 |
| Cognitive                                        | NS                                 | NS                                | NS                                |
| UK FIM+FAM Total                                 | NS                                 | p = 0.317                         | *                                 |
| **EADL**                                         |                                     |                                   |                                   |
| Admission                                        | *                                   | *                                 | *                                 |
| Discharge                                        | *                                   | *                                 | *                                 |
| Change                                           | NS                                 | NS                                | NS                                |
| EADL                                             | *                                   | *                                 | *                                 |

UK FIM+FAM = UK Functional Assessment Measure; EADL = Extended Activities of Daily Living; NS: not significant at p = 0.05.

*Statistically significant, p < 0.05
Supplementary File 3: Paired item-level changes in functional independence from admission to discharge for each dependency group.

Supplementary Table 3. Statistical significance of functional independence (UK FIM+FAM and EADL) item-level changes from admission to discharge for each dependency group.

| Items       | Wilcoxon signed-rank | Wilcoxon signed-rank | Wilcoxon signed-rank |
|-------------|----------------------|----------------------|----------------------|
|             | z        | p         | z        | p         | z        | p         |
| UK FIM+FAM  |          |           |          |           |          |           |
| Eating      | 2.8      | 0.005     | 6.0      | <0.001*   | 7.7      | <0.001*   |
| Swallowing  | 2.4      | 0.014     | 4.5      | <0.001*   | 3.2      | 0.002     |
| Grooming    | 5.6      | <0.001*   | 10.0     | <0.001*   | 10.9     | <0.001*   |
| Bathing     | 7.5      | <0.001*   | 11.4     | <0.001*   | 11.3     | <0.001*   |
| Dress upper | 6.1      | <0.001*   | 10.9     | <0.001*   | 12.1     | <0.001*   |
| Dress lower | 7.5      | <0.001*   | 12.1     | <0.001*   | 11.4     | <0.001*   |
| Toileting   | 6.5      | <0.001*   | 11.3     | <0.001*   | 10.9     | <0.001*   |
| Bladder     | 3.8      | <0.001*   | 9.5      | <0.001*   | 8.6      | <0.001*   |
| Bowel       | 4.2      | <0.001*   | 8.3      | <0.001*   | 8.6      | <0.001*   |
| Transfer bed| 8.0      | <0.001*   | 13.7     | <0.001*   | 12.9     | <0.001*   |
| Transfer toilet| 7.5    | <0.001*   | 14.0     | <0.001*   | 12.9     | <0.001*   |
| Transfer bath| 7.6     | <0.001*   | 12.5     | <0.001*   | 11.8     | <0.001*   |
| Transfer car| 8.0      | <0.001*   | 12.8     | <0.001*   | 11.2     | <0.001*   |
| Locomotion  | 6.4      | <0.001*   | 11.4     | <0.001*   | 11.8     | <0.001*   |
| Stairs      | 7.0      | <0.001*   | 9.0      | <0.001*   | 6.7      | <0.001*   |
|                          | Value 1 | Value 2   | Value 3   | Value 4 | Value 5 |
|--------------------------|---------|-----------|-----------|---------|---------|
| Mobility                 | 6.2     | <0.001*   | 9.8       | <0.001* | 12.2    | <0.001* |
| Comprehension            | 2.3     | 0.021     | 3.5       | <0.001* | 4.7     | <0.001* |
| Expression               | 2.1     | 0.037     | 3.7       | <0.001* | 6.3     | <0.001* |
| Reading                  | 1.5     | 0.126     | 4.8       | <0.001* | 6.6     | <0.001* |
| Writing                  | 4.5     | <0.001*   | 4.2       | <0.001* | 6.5     | <0.001* |
| Speech                   | 2.5     | 0.012     | 3.5       | <0.001* | 5.4     | <0.001* |
| Social interaction       | 2.7     | 0.008     | 5.1       | <0.001* | 4.9     | <0.001* |
| Emotional status         | 1.7     | 0.086     | 5.9       | <0.001* | 5.8     | <0.001* |
| Adjustment               | 3.4     | 0.001*    | 6.9       | <0.001* | 7.1     | <0.001* |
| Leisure activities       | 4.4     | <0.001*   | 7.6       | <0.001* | 7.9     | <0.001* |
| Problem solving          | 3.9     | <0.001*   | 7.0       | <0.001* | 7.7     | <0.001* |
| Memory                   | 2.7     | 0.006     | 4.9       | <0.001* | 5.8     | <0.001* |
| Orientation              | 2.5     | 0.011     | 4.8       | <0.001* | 5.7     | <0.001* |
| Concentration            | 3.3     | 0.001*    | 6.1       | <0.001* | 7.2     | <0.001* |
| Safety awareness         | 4.4     | <0.001*   | 7.4       | <0.001* | 6.9     | <0.001* |

**EADL**

|                          | Value 1 | Value 2   | Value 3   | Value 4 | Value 5 |
|--------------------------|---------|-----------|-----------|---------|---------|
| Meals                    | 5.3     | <0.001*   | 9.0       | <0.001* | 9.0     | <0.001* |
| Laundry                  | 4.5     | <0.001*   | 7.7       | <0.001* | 6.8     | <0.001* |
| Housework                | 4.8     | <0.001*   | 6.8       | <0.001* | 6.7     | <0.001* |
| Shopping                 | 4.9     | <0.001*   | 6.7       | <0.001* | 8.3     | <0.001* |
| Financial                | 3.9     | <0.001*   | 4.7       | <0.001* | 7.9     | <0.001* |
| Work                     | 3.9     | <0.001*   | 4.0       | <0.001* | 4.1     | <0.001* |

UK FIM+FAM = UK Functional Assessment Measure; EADL = Extended Activities of Daily Living.

*Statistically significant at Bonferroni-corrected $p = 0.00139$