

## Supporting Document 1

### Tele-healthcare Satisfaction Questionnaire – Wearable Technology (TSQ-WT) adapted to the evaluation of the sit-to-stand assistance system of the smart walker

| Dimension       | Statement  | 0                        | 1                        | 2                        | 3                        | 4                        |
|-----------------|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                 |  | Strongly disagree        | Disagree                 | Neutral                  | Agree                    | Strongly agree           |
| Benefit         | 1 I can benefit from this sit-to-stand assistance system.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 2 The effort of using this sit-to-stand assistance system is worthwhile for me.                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 3 I am confident I'm getting the most out of this sit-to-stand assistance system.                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 4 This sit-to-stand assistance system is helping me to stand up from a chair.                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 5 I would recommend this sit-to-stand assistance system to other people in my situation.                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Usability       | 1 The use of this sit-to-stand assistance system requires effort. <sup>†</sup>                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 2 The sit-to-stand assistance system is reliable according to my estimation and experience so far.         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 3 This sit-to-stand assistance system is easy to use.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 4 I feel safe when using this sit-to-stand assistance system.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 5 I feel good while using this STS assistance system.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Self-concept    | 1 The use of this sit-to-stand assistance system is an interesting challenge for me.                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 2 This sit-to-stand assistance system reminds me of losing my independence. <sup>†</sup>                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 3 The use of this sit-to-stand assistance system is making me feel older than I am. <sup>†</sup>           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 4 I (would) feel embarrassed using this sit-to-stand assistance system visible around others. <sup>†</sup> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 5 I like to use technological products or systems like this sit-to-stand assistance system.                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Quality of life | 1 Using this sit-to-stand assistance system could improve my physical well-being.                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 2 This sit-to-stand assistance system evokes unpleasant feelings. <sup>†</sup>                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 3 This sit-to-stand assistance system could enhance my social contacts.                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 4 This sit-to-stand assistance system could help me to maintain or increase my independence.               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                 | 5 The use of this sit-to-stand assistance system has a positive effect on me.                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

<sup>†</sup>These items are scored in reverse order (4 = strongly agree, 3 = agree, 2 = neutral, 1 = disagree, 0 = strongly disagree). *Note.* The original version of the Tele-healthcare Satisfaction Questionnaire – Wearable Technology (TSQ-WT) is available from <https://site.unibo.it/hfrs/en/questionnaires/tsq-wt/tsq-wt.pdf/@@download/file/TSQ-WT.pdf>