Supplemental Figure 1. HRQOL measure in this study

Mobility

1. I have no problems in walking about
2. I have slight problems in walking about
3. I have moderate problems in walking about
4. I have severe problems in walking about
5. I am unable to walk about

Self-care

1. I have no problems washing or dressing myself
2. I have slight problems washing or dressing myself
3. I have moderate problems washing or dressing myself
4. I have severe problems washing or dressing myself
5. I am unable to wash or dress myself

Usual activities (e.g. work, study, housework, family or leisure activities)

1. I have no problems doing my usual activities
2. I have slight problems doing my usual activities
3. I have moderate problems doing my usual activities
4. I have severe problems doing my usual activities
5. I am unable to do my usual activities

Pain/discomfort

1. I have no pain or discomfort
2. I have slight pain or discomfort
3. I have moderate pain or discomfort
4. I have severe pain or discomfort
5. I have extreme pain or discomfort

Anxiety/depression

1. I am not anxious or depressed
2. I am slightly anxious or depressed
3. I am moderately anxious or depressed
4. I am severely anxious or depressed
5. I am extremely anxious or depressed

Vision

1. I read or see without problems
2. I have slight problems reading or seeing
3. I have moderate problems reading or seeing
4. I have severe problems reading or seeing
5. I am unable to read or see.

Hearing

1. I hear in usual conversation without problems
2. I have slight problems hearing in usual conversation
3. I have moderate problems hearing in usual conversation
4. I have severe problems hearing in usual conversation
5. I am unable to hear

Communication

1. I speak and understand without problems
2. I have slight problems speaking or understanding
3. I have moderate problems speaking or understanding
4. I have severe problems speaking or understanding
5. I am unable to communicate.

Cognitive function

1. I have no problems with memory or concentration
2. I have slight problems with memory or concentration
3. I have moderate problems with memory or concentration
4. I have severe problems with memory or concentration
5. I am unable to memorize

Social relationship

1. I have very good contacts with my family and friends
2. I slightly lack contact with my family and friends
3. I moderately lack contact with my family and friends
4. I severely lack contact with my family and friends
5. I do not contact with my family and friends

Vitality

1. I am full of energy
2. I am slightly lacking in energy
3. I am moderately lacking in energy
4. I am severely lacking in energy
5. I have no energy

Sleep

1. I have no problems with sleep
2. I have slight problems with sleep
3. I have moderate problems with sleep
4. I have severe problems with sleep
5. I am unable to sleep