

## Appendix 2: VR-12 items and response options used in the classification system, and the corresponding attributes and levels used in the DCE

VR-12 questions and response options <sup>a</sup>		Attributes and levels used in the DCE <sup>b</sup>
Q2. The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much? a. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling or playing golf?	Yes, limited a lot	PF3: Moderate activities are <i>limited a lot</i>
	Yes, limited a little	PF2: Moderate activities are <i>limited a little</i>
	No, not limited at all	PF1: Moderate activities are <i>not limited at all</i>
Q3. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? a. Accomplished less than you would like.	No, none of the time	RP1: Accomplish less than you would like as a result of your physical health <i>none of the time</i>
	Yes, a little of the time	RP2: Accomplish less than you would like as a result of your physical health <i>a little of the time</i>
	Yes, some of the time	RP3: Accomplish less than you would like as a result of your physical health <i>some of the time</i>
	Yes, most of the time	RP4: Accomplish less than you would like as a result of your physical health <i>most of the time</i>
	Yes, all of the time	RP5: Accomplish less than you would like as a result of your physical health <i>all of the time</i>
Q4. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)? a. Accomplished less than you would like.	No, none of the time	RE1: Accomplish less than you would like as a result of your emotional problems <i>none of the time</i>
	Yes, a little of the time	RE2: Accomplish less than you would like as a result of your emotional problems <i>a little of the time</i>
	Yes, some of the time	RE3: Accomplish less than you would like as a result of your emotional problems <i>some of the time</i>
	Yes, most of the time	RE4: Accomplish less than you would like as a result of your emotional problems <i>most of the time</i>
	Yes, all of the time	RE5: Accomplish less than you would like as a result of your emotional problems <i>all of the time</i>
Q5. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?	Not at all	BP1: Pain <i>does not</i> interfere with your normal work
	A little bit	BP2: Pain interferes with your normal work <i>a little bit</i>
	Moderately	BP3: Pain interferes with your normal work <i>moderately</i>
	Quite a bit	BP4: Pain interferes with your normal work <i>quite a bit</i>
	Extremely	BP5: Pain interferes with your normal work <i>extremely</i>
Q6. How much of the time during the past 4 weeks: a. Have you felt calm and peaceful?	All of the time	MA1: Feel calm and peaceful <i>all of the time</i>
	Most of the time	MA2: Feel calm and peaceful <i>most of the time</i>
	A good bit of the time	-
	Some of the time	MA3: Feel calm and peaceful <i>some of the time</i>
	A little of the time	MA4: Feel calm and peaceful <i>a little of the time</i>
	None of the time	MA5: Feel calm and peaceful <i>none of the time</i>
b. Did you have a lot of energy?	All of the time	VT1: Have a lot of energy <i>all of the time</i>
	Most of the time	VT2: Have a lot of energy <i>most of the time</i>
	A good bit of the time	-
	Some of the time	VT3: Have a lot of energy <i>some of the time</i>

	A little of the time	VT4: Have a lot of energy <i>a little of the time</i>
	None of the time	VT5: Have a lot of energy <i>none of the time</i>
c. Have you felt downhearted and blue?	All of the time	MD5: Feel downhearted and blue <i>all of the time</i>
	Most of the time	MD4: Feel downhearted and blue <i>most of the time</i>
	A good bit of the time	-
	Some of the time	MD3: Feel downhearted and blue <i>some of the time</i>
	A little of the time	MD2: Feel downhearted and blue <i>a little of the time</i>
	None of the time	MD1: Feel downhearted and blue <i>none of the time</i>
Q7. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?	All of the time	SF5: Health interferes with social activities <i>all of the time</i>
	Most of the time	SF4: Health interferes with social activities <i>most of the time</i>
	Some of the time	SF3: Health interferes with social activities <i>some of the time</i>
	A little of the time	SF2: Health interferes with social activities <i>a little of the time</i>
	None of the time	SF1: Health interferes with social activities <i>none of the time</i>

Note: BP = bodily pain, DCE = discrete-choice experiment, MA = mental health - anxiety, MD = mental health - depression, PF = physical functioning, RE = role emotional, RP = role physical, SF = social functioning, VT = vitality

<sup>a</sup> Question numbers refer to the VR-12 questionnaire. VR-12 questions that were not used in the creation of the classification system (Q1, Q2b, Q3b, Q4b, Q8 and Q9) are not included in the table. As explained in the Methods section of the paper, the 'A good bit of the time' response option present in three VR-12 items (Q6a, Q6b and Q6c) was removed from the classification system. In circumstances where this response option is selected by a respondent, we suggest you randomly assign this response to an adjacent level (i.e., 'Most of the time' or 'Some of the time').

<sup>b</sup> Text in italic indicates the information that was varied in the description of health profiles (see Figure 1 in the paper for an example).