

CRRS v1 Administration and Scoring Guidelines

Administration:

The CRRS is designed for caregiver self-administration. Caregivers should be instructed to read the brief directions at the top of the page. After the caregiver's correct understanding has been confirmed, he/she should be encouraged to complete every item in order without skipping any. Some caregivers may feel that a given question is not applicable to them and will therefore skip the item altogether. **Caregivers should be encouraged to circle the response that is most applicable.** If, for example, a caregiver does not have any caregiving responsibilities other than to the patient, they should circle "not at all" to the question "I am less able to fulfil my other caregiving responsibilities".

Only caregivers who are **currently employed** should complete the Jobs and Career subscale.

It is likely that the CRRS is appropriate for interview administration by appropriately trained interviewers however the psychometric properties and statistical equivalence have not been tested across mode of administration (self vs. interview).

Scoring the CRRS:

The CRRS scoring guide identifies those items that must be reversed before being added to obtain subscale totals. Negatively stated items are reversed by subtracting the response from "4". After reversing proper items, all subscale items are summed to a total, which is the subscale score with higher scores indicated better QOL.

Please note three items CS57, CS1 and Sp9 do not contribute to a subscale score. A total score can be calculated as the sum of the un-weighted five core subscale scores: Support and Impact; Lifestyle; Emotional Health and Wellbeing; Self-care and Financial Wellbeing. The total score can be calculated using all 41 items or excluding the three standalone items, either score showed the predicted strength of correlation with measures for criterion and convergent validity. The Jobs and Career subscale should be treated as a standalone score and not included in any total score.

Handling missing items:

If there are missing items, subscale scores can be prorated. This is done by multiplying the sum of the subscale by the number of items in the subscale, then dividing by the number of items actually answered. This can be done on the scoring guide or by using the formula below:

$$\text{Prorated subscale score} = [\text{Sum of item scores}] \times [\text{N of items in subscale}] \div [\text{N of items answered}]$$

When there are missing data, prorating by subscale in this way is acceptable as long as **more than** 50% of the items were answered (e.g., a minimum of 3 of 5 items, 4 of 6 items, etc). The total score is then calculated as the sum of the un-weighted five core subscale scores: Support and Impact; Lifestyle; Emotional Health and Wellbeing; Self-care and Financial Wellbeing. The **overall item response rate** should be greater than 80% (i.e. at least 33 of 41 core CRRS items completed). This is not to be confused with individual subscale item response rate, which allows a subscale score to be prorated for missing items if greater than 50% of items are answered. In addition, a total score should only be calculated if ALL of the component subscales have valid scores. The Jobs and Career subscale should be treated as a standalone score and not included in any total score.

CRRS v1 Scoring Guidelines (Version 1)

1. Record answers in "item response" column. If missing, mark with an X
2. Perform reversals as indicated, and sum individual items to obtain a score
3. Multiply the sum of the item scores by the number of items in the subscale, then divide by the number of items answered. This produces the subscale score.
4. Add subscale scores \pm standalone item scores to derive total CRRS score. Note, the Jobs and Careers subscale is not included in the total score. ***The higher the score, the better the QOL.***

e.g. The negatively stated item CO7 "My caregiving responsibilities are a burden" is reverse scored, so an item response "4" would receive an item score $4 - 4 = 0$.

Subscale	Item Code	Reverse Item?	Item Response	=	Item Score
Support and Impact	CS56	0 +	_____	=	_____
	CS22	0 +	_____	=	_____
	CS55	0 +	_____	=	_____
	CS24	0 +	_____	=	_____
	CS21	0 +	_____	=	_____
	CS53	0 +	_____	=	_____

Subscale score
Score range 0-24

Sum individual scores: _____
Multiply by 6: _____
Divide by number of items answered: _____

Subscale	Item Code	Reverse Item?	Item Response	=	Item Score
Lifestyle	CO1	0 +	_____	=	_____
	CS2	4 -	_____	=	_____
	CO7	4 -	_____	=	_____
	CO9	4 -	_____	=	_____
	CO2	4 -	_____	=	_____
	CO4	0 +	_____	=	_____
	CO5	4 -	_____	=	_____
	GF6	0 +	_____	=	_____
	GF7	0 +	_____	=	_____
	CH4	4 -	_____	=	_____
	CH5	4 -	_____	=	_____

Subscale score
Score range 0-44

Sum individual scores: _____
Multiply by 11: _____
Divide by number of items answered: _____

Subscale	Item Code	Reverse Item?	Item Response	=	Item Score
Emotional Health and Wellbeing	CO8	4 -	_____	=	_____
	CO6	4 -	_____	=	_____
	CH11	4 -	_____	=	_____
	C010	4 -	_____	=	_____
	GE1	4 -	_____	=	_____
	CH6	4 -	_____	=	_____
	CH8	4 -	_____	=	_____
	CH7	4 -	_____	=	_____
	CR3	4 -	_____	=	_____

Subscale score Sum individual scores: _____
Score range 0-36 Multiply by 9: _____
 Divide by number of items answered: _____

Subscale	Item Code	Reverse Item?	Item Response	=	Item Score
Self-Care	CR4	0 +	_____	=	_____
	CR6	4 -	_____	=	_____
	CH9	0 +	_____	=	_____
	CH1	0 +	_____	=	_____
	CH2	0 +	_____	=	_____
	CH3	0 +	_____	=	_____

Subscale score Sum individual scores: _____
Score range 0-24 Multiply by 6: _____
 Divide by number of items answered: _____

Subscale	Item Code	Reverse Item?	Item Response	=	Item Score
Financial Wellbeing	FT3	4 -	_____	=	_____
	FT11	0 +	_____	=	_____
	CF1	0 +	_____	=	_____
	CF2	4 -	_____	=	_____
	CF3	4 -	_____	=	_____
	CF4	4 -	_____	=	_____

Subscale score Sum individual scores: _____
Score range 0-24 Multiply by 6: _____

Divide by number of items answered: _____

Subscale	Item Code	Reverse Item?	Item Response	=	Item Score
Jobs and Career*	CE3	4 -	_____	=	_____
	CE4	4 -	_____	=	_____
	CE5	0 +	_____	=	_____
	CE7	4 -	_____	=	_____
	FT9	4 -	_____	=	_____
	PE4	0 +	_____	=	_____
	PE7	0 +	_____	=	_____

Subscale score
Score range 0-28

Sum individual scores: _____

Multiply by 7: _____

Divide by number of items answered: _____

* Only completed by those in current employment

TOTAL SCORE*:

Score range 0-152

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \text{CRRS}$$

Support and Impact score	Lifestyle score	Emotional Health and Wellbeing score	Self-Care score	Financial Wellbeing score
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* The Jobs and Career subscale should be treated as a standalone score and not included in any total score. This total score excludes the three standalone items CS57, CS1 and Sp9. These scores can be added to the total if desired for a CRRS-41 total score.

Standalone items	Item Code	Reverse Item?	Item Response	=	Item Score
	CS57	4 -	_____	=	_____
	CS1	4 -	_____	=	_____
	Sp9	0 +	_____	=	_____