Rheumatoid Arthritis Impact of Disease
RAID questionnaire

1. Pain
Circle the number that best describes the pain you felt due to your rheumatoid arthritis during the last 7 days:

| No pain | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extreme pain |

2. Functional disability
Circle the number that best describes the difficulty you had with daily physical activities due to your rheumatoid arthritis during the last 7 days.

| No difficulty | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extreme difficulty |

3. Fatigue
Circle the number that best describes how much fatigue you felt due to your rheumatoid arthritis during the last 7 days.

| No fatigue | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Totally exhausted |

4. Sleep
Circle the number that best describes the sleep difficulties (i.e., resting at night) you had due to your rheumatoid arthritis during the last 7 days.

| No difficulty | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extreme difficulty |

5. Physical well-being
Considering your rheumatoid arthritis overall, how would you rate your level of physical well-being during the last 7 days? Circle the number that best describes your level of physical well-being.

| Very good | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Very bad |

6. Emotional well-being
Considering your rheumatoid arthritis overall, how would you rate your level of emotional well-being during the last 7 days? Circle the number that best describes your level of emotional well-being.

| Very good | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Very bad |

7. Coping
Considering your rheumatoid arthritis overall, how well did you cope (manage, deal, make do) with your disease during the last 7 days?

| Very well | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Very poorly |
RAID SCORING AND CALCULATION RULES

The RAID is calculated based on 7 Numerical rating scales (NRS) questions. Each NRS is assessed as a number between 0 and 10. The 7 NRS correspond to pain, function, fatigue, sleep, emotional well-being, physical well-being, and coping/self-efficacy.

1. Calculation

RAID final value =
(pain NRS value (range 0-10) x 0.21) + (function NRS value (range 0-10) x 0.16) + (fatigue NRS value (range 0-10) x 0.15) + (phys well being NRS value (range 0-10) x 0.12) + (sleep NRS value (range 0-10) x 0.12) + (emotional well being NRS value (range 0-10) x 0.12) + (coping NRS value (range 0-10) x 0.12).

Thus, the range of the final RAID value is 0-10 where higher figures indicate worse status.

2. Missing data imputation

If one of the 7 NRS values composing the RAID is missing, the imputation is as follows:
   a. calculate the mean value of the 6 other (non-missing) NRS (range, 0-10)
   b. impute this value for the missing NRS
   c. Then, calculate the RAID as explained above.

   If 2 or more of the NRS are missing, the RAID is considered as missing value (no imputation).