

Scoring Algorithm and Interpretation

Scoring Algorithm

The PROISCD–CG (Version 1.0T+) consists of multiple domains, including the Physical Domain (PHD), Mental Domain (MHD), Social Domain (SHD), Spiritual Domain (SBD), and a Chronic Gastritis–Specific Domain (CG). Each item is rated on a 5-point Likert scale, with response options ranging from 1 to 5.

For each domain, item scores are summed and linearly transformed to a standardized 0–100 scale according to the following formula:

$$\text{Standardized Domain Score} = \frac{\text{Observed score} - \text{Minimum possible score}}{\text{Maximum possible score} - \text{Minimum possible score}} \times 100$$

A total score is calculated by summing all item scores and applying the same linear transformation. Higher standardized scores indicate **better overall health-related quality of life** for functional domains and **lower symptom burden** after appropriate item direction alignment, in accordance with the PROISCD scoring manual.

Score Interpretation

Standardized scores range from 0 to 100, with higher scores reflecting better perceived health status and functioning. Domain scores provide information on specific aspects of health-related quality of life, while the total score represents overall patient-reported health status. Changes in domain and total scores over time may be used to evaluate treatment effects and disease progression in patients with chronic gastritis.