

Women's Health Initiative Observational Study (WHI-OS) frailty measure

Scoring: ≥3/5 criteria met indicates frailty; 1-2/5 indicates pre-or-intermediate frailty; 0/5 indicates non-frail.

Frailty Criterion	Definition
Slowness / weakness	<p>Meets criteria for slowness / weakness if: Score of <75 out of 100 on the Rand-36 Physical Function Scale¹: Includes 10 items measuring whether health limits physical function. Note: this is scored as 2 criteria.</p>
Poor endurance / exhaustion	<p>Meets criteria for poor endurance / exhaustion if: Score of <55 out of 100 on the Rand-36 Vitality Scale², using the following questions: Over past 4 weeks:</p> <ul style="list-style-type: none"> • <i>Did you feel worn out?</i> • <i>Did you feel tired?</i> • <i>Did you have a lot of energy</i> • <i>Did you feel full of pep?</i>
Physical activity	<p>Detailed physical activity questionnaire: Assess frequency and duration of walking and mild, moderate, and strenuous activities. Kcal of weekly energy expenditure calculated (metabolic equivalent task hours score = kcal/wk x kg), and those in lowest quartile score as meeting criteria for this component.</p>
Unintentional weight loss	<p>Meets criteria for weight loss if: Lost >5% body weight in last 2 years, and reported "Yes" to the question, "In the past two years, did you lose five or more pounds not on purpose at any time?" Equipment: scale for body weight; stadiometer for height.</p>
<p>¹ https://www.rand.org/health-care/surveys_tools/mos/36-item-short-form.html ² See energy / fatigue in Table 2: https://www.rand.org/health-care/surveys_tools/mos/36-item-short-form/scoring.html</p>	

References:

Woods NF, LaCroix AZ, Gray SL, et al. Frailty: emergence and consequences in women aged 65 and older in the Women's Health Initiative Observational Study [published correction appears in J Am Geriatr Soc. 2017 Jul;65(7):1631-1632]. J Am Geriatr Soc. 2005;53(8):1321-1330.