

## 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 /	Meets criteria for slowness / weakness if:
weakness	Score of <75 out of 100 on the Rand-36 Physical Function Scale <sup>1</sup> :
	Includes 10 items measuring whether health limits physical function.
	Note: this is scored as 2 criteria.
Poor endurance	Meets criteria for poor endurance / exhaustion if:
/ exhaustion	Score of <55 out of 100 on the Rand-36 Vitality Scale2, using the following questions:
	Over past 4 weeks:
	Did you feel worn out?
	Did you feel tired?
	Did you have a lot of energy
	Did you feel full of pep?
Physical	Detailed physical activity questionnaire:
activity	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.
Unintentional	Meets criteria for weight loss if:
weight loss	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.
<sup>1</sup> 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	

## 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.