



# Frailty

Predicts death, delirium and surgical complications better than age · and takes ten seconds to screen for

Watch them walk

then prescribe resistance training

## △ WHAT IT IS, AND THE THREE THINGS IT IS NOT

### THE DEFINITION THAT MATTERS

Reduced physiologic reserve across multiple systems, so a stressor a robust person absorbs -a UTI, a new drug, a night in an unfamiliar ward- produces a **disproportionate, cascading decline**. The clinical signature is exactly that: the patient who becomes delirious from a UTI, deconditions irreversibly over three days, or never returns to baseline after a minor operation **is showing you their reserve**.

### △ NOT AGE · NOT MULTIMORBIDITY · NOT DISABILITY

**Not age** -plenty of 85-year-olds are robust and some 65-year-olds are frail. **Not multimorbidity** -a patient can carry five diagnoses with substantial reserve, or one with none. **Not disability** -disability is established functional loss; frailty is the **vulnerability that predicts it**. They overlap, but **treating them as synonyms is exactly what leads to decisions made on the birth date**.

### WHY IT BELONGS IN GENERAL MEDICINE

It predicts **mortality, delirium, falls, length of stay, institutionalization and postoperative complications more accurately than chronological age**, and should change intensity of investigation, threshold for surgery, glycemic and BP targets, and which preventive drugs still make sense. **It is the concept that turns "he's 88" from a prejudice into a measurement**.

## MEASURING IT

| Tool                                                  | How it works                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>△ Gait speed</b><br>fastest useful screen          | <b>≤ 0.8 m/s</b> at usual pace over 4 meters -no equipment, seconds to do. Against the frailty phenotype it is <b>~99% SENSITIVE but only ~68% SPECIFIC</b> . <b>Read that properly: a NORMAL speed effectively rules frailty OUT</b> (the useful direction), while a slow one is a <b>prompt for fuller assessment, not a diagnosis</b> -plenty of slow walkers are slow for orthopedic, neurologic or pain reasons |
| <b>Fried phenotype</b>                                | Five criteria: <b>unintentional weight loss, exhaustion, weakness (grip strength), slow gait, low physical activity</b> . Score by how many are present: <b>0 robust · 1-2 PRE-FRAIL · 3+ frail</b> . <b>△ The pre-frail group is the point of the whole exercise</b> -most reversible, and nobody is currently looking for it                                                                                       |
| <b>Clinical Frailty Scale</b><br>deficit accumulation | Judgment-based <b>1 to 9</b> from illness, function and cognition: <b>1 very fit · 4 living with very mild frailty · 7 severely frail · 9 terminally ill</b> . Fast, widely adopted, and easy to hand over between teams                                                                                                                                                                                             |
| <b>△ Score the BASELINE</b>                           | <b>Do NOT score during acute illness or delirium</b> -that measures the illness, not the reserve. Use function from about <b>two weeks before admission</b> , with a <b>collateral history</b> if the patient cannot say. Grip strength with a dynamometer tracks change over time better than most clinic measures                                                                                                  |

## ANCHORING THE CLINICAL FRAILITY SCALE *it is judgment-based, so people score it inconsistently without anchors*

| Level                                  | What it looks like in practice                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1-3</b><br>very fit → managing well | <b>Robust, active, energetic</b> , exercising regularly or at least walking without help. Medical problems may exist but are <b>well controlled and not limiting</b> . <b>These patients are not frail and should not be treated as though they are</b>                                                                                            |
| <b>4</b><br>very mild frailty          | <b>Not dependent on others day to day, but symptoms limit activities</b> -"slowed up", tired during the day. <b>This is the group closest to the pre-frail phenotype and the one where intervention pays best</b>                                                                                                                                  |
| <b>5-6</b><br>mild → moderate          | <b>5:</b> needs help with the higher-order tasks -finances, transport, heavy housework, medications. <b>6:</b> needs help with <b>outside activities and keeping house</b> , often with bathing and dressing. <b>The transition point where hospital risk climbs steeply</b>                                                                       |
| <b>7-9</b><br>severe → terminally ill  | <b>7:</b> completely dependent for personal care, though stable. <b>8:</b> completely dependent and approaching end of life, not recovering even from minor illness. <b>9:</b> terminally ill, life expectancy under about 6 months without otherwise being frail. <b>At these levels the goals-of-care conversation is overdue, not premature</b> |

## △ IT IS DYNAMIC -AND THAT CHANGES EVERYTHING

### △ NOT ONE-WAY, NOT A TERMINAL LABEL

People move between robust, pre-frail and frail **in both directions**, and the pre-frail are the most reversible of all. **Treating a frailty score as a prognosis to document, rather than a target to treat, is the commonest misuse of these tools** -and using it to justify **WITHHOLDING** care rather than tailoring it is a misuse with real consequences.

### INTERVENTIONS, BY EVIDENCE

**1. PROGRESSIVE RESISTANCE TRAINING** within a multicomponent program (balance, gait, aerobic) -best evidence by a clear margin, and it **works in the very old and already frail**, precisely the group told to take it easy. **Prescribe it specifically:** what, how often, supervised where possible. **"Stay active" reliably achieves nothing**. **2. Protein** -needs are higher in older adults and intake is commonly inadequate; **protein plus resistance beats either alone**. **3. Deprescribing** -cutting anticholinergics, sedatives and drugs causing orthostasis directly improves cognition, balance and energy. **4. Vitamin D only if deficient** (not a general anti-frailty supplement; high intermittent dosing has been linked to MORE falls). **5. Comprehensive geriatric assessment**, which is where a positive screen should lead.

## LETTING IT CHANGE DECISIONS -WITHOUT RATIONING CARE

| Setting                        | What to do                                                                                                                                                                                                                                                            |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Perioperative</b>           | <b>Frailty beats age</b> for predicting complications, delirium, length of stay and mortality -use it for consent and procedure choice. <b>PREHABILITATION before elective surgery is one of the few chances to intervene in advance, and it is routinely wasted</b>  |
| <b>Treatment targets</b>       | <b>Relax targets whose benefit takes years</b> (tight A1c, intensive BP) while protecting what affects the patient this month. This is time-to-benefit reasoning applied to a <b>measured</b> horizon rather than a guess                                             |
| <b>△ But do NOT withhold</b>   | Frail patients still benefit from <b>anticoagulation in atrial fibrillation, treatment of infection, and appropriate surgery</b> . They need the decision made deliberately and the risks discussed honestly. <b>Frailty MODIFIES the plan; it does not cancel it</b> |
| <b>In hospital</b>             | Anticipate <b>delirium, deconditioning, falls, pressure injury and adverse drug events</b> . <b>Mobilize early and protect the day-night structure</b> -a frail patient loses function over days that takes months to rebuild                                         |
| <b>Reversible contributors</b> | Screen while you are there: <b>depression, undiagnosed cognitive impairment, hearing and vision loss, dentition, anemia, thyroid disease, vitamin D, undernutrition, and MEDICATIONS</b> -several look exactly like frailty and are fixable                           |
| <b>Severe and advancing</b>    | A legitimate prompt for <b>goals-of-care discussion and advance care planning, held early rather than in a crisis</b>                                                                                                                                                 |

**References:** Fried et al., frailty phenotype criteria · Rockwood Clinical Frailty Scale (9-point version) and the deficit-accumulation frailty index · published test characteristics of gait speed against the physical frailty phenotype · evidence reviews on resistance and multicomponent exercise, protein supplementation and comprehensive geriatric assessment in frailty.

*Educational aid; verify against current guidance and patient factors.*

