Within the next 20 years, nearly one quarter of the population will be aged ≥65 years. Cardiovascular morbidity and mortality rise rapidly after age 65, and this group accounts for 60% of myocardial infarction-related deaths. The high burden of comorbid conditions and concomitant lower physiological reserve render this group more complex and fundamentally different from its younger counterparts.

The concept of frailty has gained general acceptance in geriatric medicine as an important prognostic indicator for a range of adverse outcomes. According to current views, frailty can be defined as a physiological state of increased vulnerability to stressors that results from decreased physiological reserves. This reduction in reserve capacity results in difficulty maintaining homeostasis in the face of perturbations, including injury, acute illness, and invasive procedures.

Although a consensus definition and corresponding assessment tool do not exist yet, a widely used operational phenotype for frailty includes five criteria: exhaustion, weight loss, low physical activity, weak hand grip, and slow gait speed. There is emerging interest in understanding the role of frailty as it pertains to acute coronary care in elderly persons. A previous systematic review found that the prevalence of frailty as it pertains to acute coronary care in elderly persons.

Geriatric Assessment to Improve Risk Stratification in Older Patients Undergoing Coronary Revascularization

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The important message from the Singh et al study for interventional cardiologists and other clinicians is that non-traditional risk factors, such as frailty, are highly prevalent and carry important prognostic information among older persons undergoing coronary revascularization. Future studies should assess whether preprocedural frailty assessments can be used to refine selection of appropriate candidates for revascularization and improve mortality and reinfarction outcomes. Given the importance of functional outcomes for...
older patients, the risk of developing frailty after revascularization also should be clarified.

Incorporating assessment of frailty and particularly quality of life into routine clinical practice poses significant challenges to our healthcare system. Frailty and quality of life fall outside the traditional disease-oriented model of medicine and, thus, may be overlooked in clinical settings. Currently, there is no financial reimbursement or other incentives for performing such assessments. Decreasing lengths of stay, with growing pressure to complete evaluation and treatment plans expeditiously, present additional obstacles to routine assessment of such nondisease measures.

In the face of these disincentives, identifying the most efficient assessments that provide clinicians and patients with useful prognostic information is critical. Assessing all 5 frailty components may not provide much more prognostic information than assessing gait speed alone. Slow gait speed is a strong and consistent predictor of mortality in older persons, and the single best predictor of functional decline and disability. In light of its strong predictive abilities and objective assessment, there is growing consensus among geriatricians and gerontologists that gait speed should be considered a “geriatric vital sign.” The assessment of gait speed at usual pace over 4 m is an efficient, safe, and highly reliable measure with the ability to identify older adults at risk for a range of poor clinical outcomes.

To accurately inform medical decision-making, risk models must be useful for populations representative of those cared for in clinical practice, including patients with multiple chronic conditions, poor quality of life, and frailty. Traditional cardiovascular risk models were developed using data derived from younger populations and elderly patients who were rigorously screened to exclude common morbidities of old age. To meet the needs of the aging population, a new clinical paradigm is needed, one that starts with a comprehensive assessment of risk for adverse clinical and patient-centered outcomes and then tailors therapy and surveillance to each patient’s risk. Transitioning to this new paradigm is essential to ensuring that optimal care is provided to older patients with cardiovascular disease.

**Disclosures**

None.

**References**


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