Sarcopenia and the New ICD-10-CM Code: Screening, Staging, and Diagnosis Considerations

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The CDC recently recognized sarcopenia as a reportable medical condition necessitating better screening and diagnosis of this geriatric syndrome.

Sarcopenia is an age-related loss of skeletal muscle that may result in diminished muscle strength and functional performance. The prevalence of sarcopenia varies based on the cohort and the assessment criteria. According to the Health Aging and Body Composition (ABC) study, the prevalence of sarcopenia in community-dwelling older adults is about 14% to 18%, whereas the estimate may exceed 30% for those in long-term care.[1,2] This geriatric syndrome may disproportionately affect veterans given that they are older than the civilian population and may have disabling comorbid conditions associated with military service.[3]

Recently, there has been a call to action to systematically address sarcopenia by interdisciplinary organizations such as the European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO) and the International Working Group on Sarcopenia (IWGS).[4,5] This call to action is due to the association of sarcopenia with increased health care costs, higher disability incidence, and elevated risk of mortality.[6,7] The consequences of sarcopenia may include serious complications, such as hip fracture or a loss of functional independence.[8,9] The CDC now recognizes sarcopenia as an independently reportable medical condition. Consequently, physicians, nurse practitioners (NPs), and other associated health professionals within the VA will need to better understand clinically viable and valid methods to screen and diagnose this geriatric syndrome.

The purpose of this paper is to inform practitioners how sarcopenia screening is aided by the new ICD-10-CM code and briefly review recent VA initiatives for proactive care. Additional objectives include identifying common methods used to assess sarcopenia and providing general recommendations to the VHA National Center for Health Promotion and Disease Prevention (NCP) concerning the management of sarcopenia.

ADDRESSING SARCOPENIA

While the age-related decline in muscle size and performance has long been recognized by geriatricians, sustained advocacy by several organizations was required to realize the formal recognition of sarcopenia. Aging in Motion (AIM), a coalition of organizations focused on advancing research and treatment for conditions associated with age-related muscle dysfunction, sought the formal recognition of sarcopenia. The CDC established the ICD-10-CM code for sarcopenia in October of 2016, which allowed the syndrome to be designated as a primary or secondary condition.[10]

The ubiquitous nature of age-related changes in muscle and the mandate to engage in proactive care by all levels of VA leadership led to the focus on addressing sarcopenia. The recognition of sarcopenia by the CDC comes at an opportune time given recent VA efforts to transform itself from a facilitator mainly of care delivery to an active partner in fostering the health and well-being of veterans. Initiatives that are emblematic of this attempt to shift the organizational culture across the VHA include establishing the VA Center for Innovation (VACI) and issuing

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guidance documents, such as the Blueprint for Excellence, which was introduced in 2014 by then VA Secretary Robert McDonald.[11,12] Many of the following Blueprint themes and strategies potentially impact sarcopenia screening and treatment within the VA:

- Delivering high-quality, veteran-centered care: A major Blueprint theme is attaining the "Triple Aims" of a health care system by promoting better health among veterans, improving the provision of care, and lowering costs through operational efficiency. The management of sarcopenia has clear clinical value given the association of age-related muscle loss with fall risk and decreased mobility.[13] Financial value also may be associated with the effort to decrease disability related to sarcopenia and the use of a team approach featuring associated health professionals to help screen for this geriatric syndrome.[14,15] (Strategy 2)
- Leveraging health care informatics to optimize individual and population health outcomes: The inclusion of the most basic muscle performance and functional status measures in the electronic medical record (EMR), such as grip strength and gait speed, would help to identify the risk factors and determinants of sarcopenia among the veteran population. (Strategy 3)
- Advancing personalized, proactive health care that fosters a high level of health and well-being**:** The long-term promotion of musculoskeletal health and optimal management of sarcopenia cannot be sustained through episodic medical interactions. Instead, a contemporary approach to health services marked by the continuous promotion of health education, physical activity and exercise, and proper nutrition has demonstrated value in the management of chronic conditions.[16,17] (Strategy 6)

The new sarcopenia ICD-10-CM code along with elements of the VHA Blueprint can serve to support the systematic assessment and management of veterans with age-related muscle dysfunction. Nevertheless, renewed calls for health promotion and screening programs are often counterbalanced by the need for cost containment and the cautionary tales concerning the potential harms or errors associated with some forms of medical screening. The American Board of Internal Medicine Foundation has spearheaded the Choosing Wisely campaign to raise awareness about excessive medical testing. However, the Institute of Medicine has linked the provision of quality health care to a diagnostic process that is both timely and accurate.[18] Careful consideration of these health care challenges may help guide practitioners within the VA concerning the screening and diagnosis of sarcopenia.

Table 1. Sarcopenia Staging Criteria[a]

Stage	Muscle Mass[b]	Muscle Strength[c]		Performance[d]
Presarcopenia	✓			
Sarcopenia	✓	✓	or	✓
Severe Sarcopenia	✓	✓		✓

[a]Alternate criteria for muscle mass, grip strength, and gait speed cutoff values also have been proposed by multiple investigators and sarcopenia consensus groups.[37,40]
[b]Muscle mass (based on appendicular lean body mass scaled to height, kg/m^2)
Men: ≤ 8.50 kg/m^2; Women: ≤ 5.75 kg/m^2.
[c]Muscle strength (based on grip dynamometry, kg)
Men: < 30 kg; Women: < 20 kg.
[d]Standardized functional assessment (eg, the Short Physical Performance Battery < 7, or gait speed < 1.0 m/s).

SARCOPENIA ASSESSMENT

Sarcopenia can have several underlying causes in some individuals and result in varied patterns of clinical presentation and differing degrees of severity. The European Working Group on Sarcopenia in Older People first met in 2009 and used a consensus-based decision-making process to determine operational definitions for sarcopenia and create a staging algorithm for the syndrome.[19] This consensus group developed a conceptual staging model with 3 categories: presarcopenia, sarcopenia, and severe sarcopenia (Table 1). The impetus for sarcopenia staging was the emerging research findings suggesting that lean body mass (LBM) alone did not provide a high degree of clinical value in outpatient settings due to the nonlinear relationship between LBM and muscle function in older adults.[20,21] Using the consensus model approach, an individual is classified as sarcopenic on presenting with both low LBM and low muscle function.

Screening: A Place to Start

Findings from the Health ABC Study suggested that older adults who maintained high levels of LBM were less likely to become sarcopenic.

Whereas, older adults in the cohort with low levels of LBM tended to remain in a sarcopenic state.[6] Consequently, the early detection of sarcopenia may have important health promotion implications for older adults. Sarcopenia is a syndrome with a continuum of clinical features; it is not a disease with a clear or singular etiololgy. Therefore, the result of the screening examination should identify those who would most benefit from a formal diagnostic assessment.

One approach to screening for sarcopenia involves the use of questionnaires, such as the SARC-F (sluggishness, assistance in walking, rise from a chair, climb stairs, falls), which is a brief 5-item questionnaire with Likert scoring for patient responses.[13] In a cohort of National Health and Nutrition Examination Survey (NHANES) participants, SARC-F scores ≥ 4 were associated with slower gait speed, lower strength, and an increased likelihood of hospitalization within a year of the test response.[22] However, rather than stratify patients by risk, the SARC-F exhibits a high degree of test specificity regarding the major consensus-based sarcopenia classification criteria (specificity = 94.2% to 99.1%; sensitivity = 3.8% to 9.9%).[13] Given the known limitations of screening tools with low sensitivity, organizations such as the ESCEO have recommended supplementing the SARC-F questionnaire with other forms of assessment.[4] Supplements to the screening examination may range from the use of "red flag" questions concerning changes in nutritional status, body weight, and physical activity, to conducting standard gait speed and grip-strength testing.[4,19,23]

Performance-based testing, including habitual gait speed and grip-strength dynamometry, also may be used in both the screening and classification of sarcopenia.[2] Although walking speed below 1.0 m/s has been used by the IWGS as a criterion to prompt further assessment, many people within the VA health care system may have gait abnormalities independent of LBM status, and others may be nonambulatory.[24,25] As a result, grip-strength testing should be considered as a supplementary or alternate screening assessment tool.[26,27]

Hand-grip dynamometry is often used diagnostically given its previous test validation, low expense, and ease of use.[23] Moreover, recent evidence suggests that muscle strength surpasses gait speed as a means of identifying people with sarcopenia. Grip strength is associated with all-cause mortality, even when adjusting for age, sex, and body size,[28] while slow gait speed (< .82 m/s) has a reported sensitivity of 63% and specificity of 70% for mortality in population-based studies involving older adults.[29]

Gait speed (in those who are ambulatory) and grip-strength values could be entered into the EMR evaluation note by the primary care provider (PCP). Elements of the VA EMR, such as the ability to review the diagnosis of sarcopenia on the Problem List or the nominal enhancement of providing LBM estimates within the Cumulative Vitals and Measurements Report would support the management of sarcopenia. See Table 2 for cutoff values for frequently used sarcopenia screening and staging tests.

The pitfalls of excessive or inappropriate screening are well documented. The efforts to screen for prostate cancer have highlighted instances when inappropriate follow-up tests and treatment fail to alter mortality rates and ultimately yield more harm than good.[30] However, there are several points of departure concerning the screening for sarcopenia vs screening for prostate cancer. The screening assessments for sarcopenia are low-cost procedures that are associated with a low patient burden. These procedures may include questionnaires, functional testing, or the assessment of muscle performance. Additionally, there is a low propensity for adverse effects stemming from treatment due to disease misclassification given the common nonpharmacologic approaches used to manage sarcopenia.[31] Nonetheless, the best screening examination—even one that has low patient burden and cost—may prove to be a poor use of medical resources if the process is not linked to a viable intervention.

Screening people aged ≥ 65 years may strike a balance between controlling health care expenditures and identifying people with the initial signs of sarcopenia early enough to begin monitoring key outcomes and providing a formalized exercise prescription. Presuming an annual age-related decline in LBM of 1.5%, and considering the standard error measurement of the most frequently used methods of strength and LBM assessment, recurrent screening could occur every 2 years.[21,32]

Earlier screening may be considered for patient populations with a higher pretestprobability. These groups include those with conditions associated with accelerated muscle loss, such as chronic kidney disease, peripheral artery disease, and diabetes mellitus (DM).[32] Although accelerated muscle loss characterized by an inflammatory motif (eg, cancer-related cachexia) may share some features of the sarcopenia screening and assessment

Table 2. Sarcopenia Screening Tools and Confirmatory Tests

Tests	Cutoff Scores	Implementation	Implications
SARC-F	Positive test: Scores ≥ 4	Screening: May be administered by a physician or an associated health professional	Slower gait speed, lower strength, and an increased likelihood of hospitalization within a year of the test response; Sensitivity = 4% to 10%, specificity = 94% to 99%; Positive test values may prompt confirmatory testing and referral for physical therapy.
Gait speed	Positive test: Walking speed < 1.0 m/s	Screening: May be administered by a physician or an associated health professional	Lower muscle performance, and increased risk of sarcopenia and lower extremity functional limitations; Relative risk = 2.2 (95% CI = 1.8 – 2.7) in ambulatory older adults; Positive test values indicate a need for a formal exercise prescription and may prompt further assessment.
Grip strength	Positive test: Men: < 30 kg Women: < 20 kg	Confirmation test or screening: Often administered by an associated health professional; may be administered by a physician	Low muscle strength; associated with all-cause mortality; Sensitivity = 63%; specificity = 70%; Positive test values indicate a need for a formal exercise prescription, and may prompt further assessment; test results may be used for sarcopenia staging.
SPPB	Positive test: Score < 7	Confirmation test: Often administered by an associated health professional; may be administered by a physician (Represents a more comprehensive assessment of functional in comparison to gait test)	Diminished physical functioning and balance; associated with compromised ability to perform activities of daily living; Relative risk = 4.2 (compared with higher performing individuals who score 10-12 on the SPPB); Positive test values may prompt a referral for physical therapy; test results may be used for sarcopenia staging.
Lean body mass	Positive test: Men: < 8.50 kg/m^2 Women: < 5.75 kg/m^2	Confirmation test: DXA administered by radiology staff; alterative measures such as BIA are often administered by an associated health professional	Low muscle mass; associated with functional limitations and disability; Likelihood is estimated > 2 times greater older men and > 3 times greater in older women; Test results may be used for sarcopenia staging; ideally, muscle mass values are used in conjunction with the assessment of strength and functional status.

Abbreviations: BIA, bioimpedance analysis; CI, confidence interval; DXA, dual X-ray absorptiometry; SPPB, Short Physical Performance Battery.

approach, important differences exist regarding the etiology, medical evaluation, and ICD-10-CM code designation.

STAGING AND CLASSIFICATION

Staging criteria are generally used to denote the severity of a given disease or syndrome, whereas classification criteria are used to define homogenous patient groups based on specific pathologic or clinical features of a disorder. Although classification schemes may incorporate an element of severity, they are primarily used to characterize fairly distinct phenotypic forms of disease or specific clinical presentation patterns associated with a well-defined syndrome. Although not universally adopted, the European consensus group sarcopenia staging criteria are increasingly used to provide a staging algorithm presumably driven by the severity of the condition.[19]

The assessment of functional performance for use in sarcopenia staging often involves measuring habitual gait speed or completing the Short Physical Performance Battery (SPPB).[23] The SPPB involves a variety of performance-based activities for balance, gait, strength, and endurance. This test has predictive validity for the onset of disability and adverse health events, and it has been extensively used in research and clinical settings.[33] Additional tests used to characterize function during the staging or diagnostic process include the timed get up and go test (TGUG) and

the timed sit to stand test.[34,35] The TGUG provides an estimate of dynamic balance, and the sit to stand test has been used as very basic proxy measure of muscular power.[36] The sit to stand test and habitual gait speed are items included in the SPPB.[33]

Accepted methods to obtain the traditional index measure of sarcopenia—based on estimates of LBM—include bioimpedance analysis (BIA) and dual X-ray absorptiometry (DXA). The BIA uses the electrical impedance of body tissues and its 2 components, resistance and reactance, to derive its body composition estimates.[37] Segmental BIA allows for isolated measurements of the limbs, which may be calibrated to DXA appendicular lean body mass (ALM) or magnetic resonance imaging-based estimates of LBM. This instrument is relatively safe for use, inexpensive for medical facilities, and useful for longitudinal studies, but it can be confounded by issues, such as varying levels of hydration, which may affect measurement validity in some instances.

Despite the precision of DXA for estimating densities for whole body composition analysis, the equipment is not very portable and involves low levels of radiation exposure, which limits its utility in some clinical settings. While each body composition assessment method has its advantages and disadvantages, DXA is regarded as an acceptable form of measurement for hospital settings, and BIA is frequently used in outpatient clinics and community settings. Other methods used to estimate LBM with greater accuracy, such as peripheral quantitative computed tomography, doubly labeled water, and whole body gamma ray counting, are not viable for clinical use. Other accessible methods such as anthropometric measures and skinfold measures have not been embraced by sarcopenia classification consensus groups.[23,37]

Alternative methods of estimating LBM, such as diagnostic ultrasound and multifrequency electrical impedance myography, are featured outcomes in ongoing clinical trials that involve veteran participants. These modalities may soon provide a clinically viable approach to assessing muscle quality via estimates of muscle tissue composition.[37,38] Similar to the management of other geriatric syndromes, interprofessional collaboration provides an optimal approach to the assessment of sarcopenia. Physicians and other health care providers may draw on the standardized assessment of strength and function (via the SPPB and hand-grip dynamometry) by physical therapists (PTs), questionnaires administered by nursing staff (the SARC-F), or body composition estimates from other health professionals (ranging from BIA to DXA) to aid the diagnostic process and facilitate appropriate case management (Table 2).

Competing staging and classification definitions have been cited as a primary factor behind the CDC's delayed recognition of the sarcopenia diagnosis, which in turn posed a barrier to formal clinical recognition by geriatricians.[24] However, this reaction to the evolving sarcopenia staging criteria also may reveal the larger misapplication of the staging process to the diagnostic process. The application of classification and staging criteria results in a homogenous group of patients, whereas the application of diagnostic criteria results in a heterogeneous group of patients to account for variations in clinical presentation associated with a given disorder. Classification criteria may be equivalent to objective measures that are used in the diagnostic process when a given disease is characterized by a well-established biomarker.[39]

However, this is not the case for most geriatric syndromes and other disorders marked by varied clinical presentation patterns. On considering the commonly used sarcopenia staging criteria of LBM ≤ 8.50 kg/m^2 or grip strength < 30 kg in men and LBM ≤ 5.75 kg/m^2 or grip strength < 20 kg in women, it is easy to understand that such general cutoff values are far from diagnostic.[40,41] Moreover, stringent cutoff values associated with classification and staging may not adequately capture those with an atypical presentation of the syndrome (eg, someone who exhibits age-related muscle weakness but has retained adequate LBM). Such criteria often prove to have high specificity and low sensitivity, which may yield a false negative rate that is appropriate for clinical research eligibility and group assignment but inadequate for clinical care.

Screening, staging, and classification criteria with high specificity may indeed be desirable for confirmatory imaging tests associated with radiation exposure concerns or for managing risk in experimental clinical trials involving pharmacologic treatment. For example, a SARC-F score ≥ 4 may prompt the formal assessment of LBM via a DXA examination.[4] In contrast, those with a SARC-F score ≤ 3 with low gait speed or grip strength may benefit from consultation regarding regular physical activity and nutrition recommendations. Given the challenges of establishing sarcopenia classification

criteria that perform consistently across populations and geographic regions, classification and staging criteria may be best viewed as clinical reasoning tools that supplement, but not supplant, the diagnostic process.[7,42]

DIAGNOSIS

Geriatric syndromes do not lend themselves to a simple diagnostic process. Syndromes such as frailty and sarcopenia are multifactorial and lack a single distinguishing clinical feature or biomarker. The oft-cited refrain that sarcopenia is an underdiagnosed condition is partially explained by the recent ICD-10-CM code and varied classification and diagnostic criteria.[5] This circumstance highlights the need to distinctly contrast the diagnostic process with the screening and staging classifications.

The diagnostic process involves the interpretation of the patient history, signs, and symptoms within the context of individual factors, local or regional disease prevalence, and the results of the best available and most appropriate laboratory tests. After all, a patient that presents with low LBM and a gradual loss of strength without a precipitating event would necessitate further workup to rule out many clinical possibilities under the aegis of a differential diagnosis. Clinical features, such as the magnitude of weakness and pattern of strength loss or muscle atrophy along with the determination of neurologic or autoimmune involvement, are among the key elements of the differential examination for a case involving the observation of frank muscle weakness. Older adults with low muscle strength may have additional risk factors for sarcopenia such as obesity, pain, poor nutrition, previous bone fracture, and a sedentary lifestyle. However, disease etiology with lower probabilities, such as myogenic or neurogenic conditions associated with advancing age, also may be under consideration during the clinical assessment.[6]

Table 3. Sarcopenia General Diagnostic Categories[a]

Diagnosis	Criteria	Contributing Factors
Primary Sarcopenia	Age-related changes intrinsic and extrinsic to skeletal muscle	Age-related (notable decreases in muscle mass occur aged > 50 years)
Secondary Sarcopenia	Comorbid factors and behavioral conditions may be independent of age	Activity-related (eg, disuse atrophy) Disease-related (noncachexic conditions) Nutrition-related (eg, malnutrition)

[a]Other classification schemes have been proposed, such as sarcopenic obesity and Class I/Class II sarcopenia, which are based on alternate criteria derived from body composition estimates.[40]

In many instances, the cutoff scores associated with the sarcopenia staging criteria may help to guide the diagnostic process and aid clinical decision making. Since individuals with a positive screening result based on the SARC-F questionnaire (score ≥ 4) have a high likelihood of meeting the staging criteria for severe sarcopenia, a PCP may opt to obtain a confirmatory estimate of LBM both to support the clinical assessment and to monitor change over the course of rehabilitation. Whereas people who present with a decline in strength (ie, grip strength < 30 kg for a male) without an observable loss of function or a positive SARC-F score may benefit from consultation from the physician, NP, or rehabilitation health professional regarding modifiable risk factors associated with sarcopenia.

Incorporating less frequently used sarcopenia classification schemes such as identifying those with sarcopenic obesity or secondary sarcopenia due to mitigating factors such as chronic kidney disease or DM (Table 3) may engender a more comprehensive approach to intervention that targets the primary disease while also addressing important secondary sequelae. Nevertheless, staging or classification criteria cannot be deemed equivalent to diagnostic criteria for sarcopenia due to the challenges posed by syndromes that have a heterogeneous clinical presentation.

The refinement of the staging and classification criteria along with the advances in imaging technology and mechanistic research are not unique to sarcopenia. Practitioners involved in the care of people with rheumatologic conditions or osteoporosis also have contended with continued refinements to their classification criteria and approach to risk stratification.[39,43,44] Primary care providers will now have the option to use a new ICD-10-CM code (M62.84) for sarcopenia, which will allow them to properly document the clinical distinctions between people with impaired strength or function largely due to age-related muscle changes and those who have impaired muscle function due to cachexia, inflammatory myopathies, or forms of neuromuscular disease.

The ability to identify and document this geriatric syndrome in

veterans will help to better define the scope of the problem within the VA health care system. The median age of veterans is 62 years compared with 43 years for nonveterans.[3] Consequently, there may be value in the adoption of a formal approach to screening and diagnosis for sarcopenia among veterans who receive their primary care from VA facilities.[7] Indeed, the exchange between the patient and the health professional regarding the screening and diagnostic process will provide valuable opportunities to promote exercise interventions before patients incur significant impairments.

One of the biggest threats burdening global health is noncommunicable diseases, and many chronic conditions, such as sarcopenia, can be prevented and managed with appropriate levels of physical activity.[17] Increased physician involvement may prove to be critical given the identification of physical inactivity as a top 5 risk factor for general morbidity and mortality by World Health Organization and consensus group recommendations calling for physicians to serve a more prominent role in the provision of exercise and physical activity recommendations.[16,17]

This developing health care role should include NPs, PTs, physician assistants, and other associated health professionals. It also should include collaborative efforts between physicians and rehabilitation practitioners concerning provision of the formal exercise prescription and monitoring of patient outcomes.

Individuals with severe forms of sarcopenia rarely improve without intervention.[6] Although no pharmacologic treatment exists to specifically address sarcopenia, strengthening exercise has been shown to be an effective mode of prevention and conservative management.[8] Progressive resistance exercise cannot abate the expected age-related changes in skeletal muscle, but it can significantly reverse the loss of LBM and strength in untrained older adults and slow the age-related decline in muscle performance in older adult athletes and trained individuals.[45]

Local senior centers and community organizations may prove to be valuable resources concerning group exercise options, and they provide the added benefit of social engagement and peer group accountability. Federal resources include the Go4Life exercise guide and online videos provided by the National Institute on Aging and the MOVE! Weight Management and Health Program provided at select VA community-based outpatient clinics. Ultimately, collaborative efforts with exercise specialists may serve to reduce the PCP burden during the provision of health services, minimize diagnostic errors associated with sarcopenia assessment and help to connect patients to valuable health promotion resources.[17,18]

Increased physician involvement may prove to be critical given the identification of physical inactivity as a top 5 risk factor for general morbidity and mortality by World Health Organization and consensus group recommendations.

CONCLUSION

While practitioners should remain keenly aware of the pernicious effects of overdiagnosis, sarcopenia has long existed as a known, but undiagnosed, condition. Of course, geriatricians have traditionally managed poor muscle performance and mobility limitations by addressing treatable symptoms and providing referrals to physical medicine specialists when warranted. Nevertheless, the advent of ICD-10-CM code M62.84 provides the VA with an opportunity to take a leading role in systematically addressing this geriatric syndrome within an aging veteran population.

The following items should be considered by NCP for the development of guidelines and recommendations concerning sarcopenia screening:

1. Consider screening veterans aged > 65 years for sarcopenia every 2 years. Those with mitigating systemic conditions (eg, chronic kidney disease, DM, or malnutrition) or significant mobility limitations may be screened at any age.
2. Sarcopenia screening procedures should include at a minimum the SARC-F questionnaire and gait speed (when appropriate). Including gait speed or grip strength testing in the screening exam is recommended given the low sensitivity of the SARC-F questionnaire.
3. Veterans with positive SARC-F results (≥ 4) merit a physical therapy referral. In addition, these veterans should obtain confirmatory standardized assessments for LBM and functional status.
4. Veterans at risk for sarcopenia based on patient age, medical history, and the physical examination (eg, obesity, sedentary lifestyle, a previous fracture, self-

reported physical decline), but with negative SARC-F results should receive a formal exercise prescription from their PCP. Baseline assessment measures may be used for comparison with serial measures obtained during subsequent screening visits to support long-term case management.

5. Interprofessional collaboration involving geriatricians, PTs, nurses, radiologists, and other health care professionals should be involved in the screening, diagnosis, and case management of veterans with sarcopenia.
6. The VA EMR should be systematically documented with sarcopenia assessment data obtained from the gait speed tests, SARC-F, SPPB, grip strength tests, and LBM estimates to better characterize this condition within the veteran population.

Any expansion in the provision of health care comes with anticipated benefits and potential costs. Broad guidance from NCP may encourage veterans to pursue selected screening tests, promote the appropriate use of preventative services, and facilitate timely treatment when needed.[31] Clinicians who are informed about the screening, staging, classification, and diagnostic process for sarcopenia may partner with patients to make reasoned decisions about how to best manage this syndrome within the VA medical center environment.

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