



Beyond screening

Has preenrollment screening become a barrier to participation for sedentary older adults? These experts make the case for new counseling protocols

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In recent years, public health experts have paid considerable attention to the impact of preactivity screening protocols used throughout the fitness and wellness industry.¹ Amid growing concern that stringent, medically based screening procedures may be a barrier to participation, many experts suggest the time has come to reexamine the basis for these protocols—both for older adults and for the adult population as a whole.

The United States Preventive Services Task Force has brought the issue of preactivity screening to the center stage of debate this year. In a report, the task force recommends *against* the use of exercise stress tests for the screening of low-risk, asymptomatic individuals prior to starting a physical activity program.² This recommendation receives strong support from editorials and articles that question the value of exercise stress tests and preenrollment screening questionnaires.^{3,4,5,6,7}

Even so, current standards of practice endorsed by the major professional organizations recommend that adults, particularly those ages 40 and older, see a healthcare provider before beginning a program. Additionally, the American College of Sports Medicine counsels symptom-limited stress testing for sedentary males over 45 years and females over 55 years.⁸ However, an American College of Cardiology and the American Heart Association Consensus panel recently reexamined their own recommendation that asymptomatic persons without known coronary artery disease undergo routine exercise testing prior to initiating physical activity. After reviewing the available scientific evidence and assessing the magnitude of the net benefit, the AHA-ACC consensus panel concluded that the current recommendation requiring exercise testing is considered not useful and/or potentially harmful.

There is an urgent need today for the field of exercise science to reexamine the underlying rationale for and effectiveness of preenrollment screening. Until then, many fitness and wellness professionals will remain confused about the procedures to follow when advising sedentary older adults on how to become physically active.

Underlying basis for screening challenged

A number of different justifications are proposed for widespread, if not mandatory, preactivity screening. Among others, major stated goals for screening include the following:

- To ensure the safety of participants;
- To provide legal protection to facilities and fitness/wellness professionals involved in programs; and
- To help participants develop effective individualized activity programs.

Ensuring participant safety. Little evidence exists that current pre-enrollment screening procedures secure the safety of people who plan to participate in physical activity. This lack of supporting data extends to the two methods most widely used for screening:

- A physical examination by a physician or allied health professional (with or without an exercise stress test); and
- A physical activity readiness questionnaire (or symptom checklist).

Facilities often use these approaches to *screen out* people at risk for serious adverse events. Unfortunately, both methods fail in achieving this goal. Cardiovascular events in response to physical activity are both rare and unpredictable. Neither stress tests, nor screening instruments such as the Revised Physical Activity Readiness

Questionnaire (PAR-Q) effectively identify the tiny subset of individuals at risk for these events.^{1,6}

Both stress tests and preactivity questionnaires are associated with unacceptably high false positive and false negative results.⁶ Furthermore, these tests can place unwarranted psychological stress on those required to take them. The financial cost and time burden associated with testing often creates a barrier for older adults struggling to motivate themselves to be active, discouraging their participation. Instead of its intended effect, preenrollment medical screening may produce the reverse result making individuals fearful of exercise, reducing the number of regularly active individuals, and, inadvertently leading to a larger percentage of people at risk for cardiovascular disease and other inactivity-related disorders.

To date, screening protocols have concentrated almost exclusively on predicting cardiovascular events due to physical activity. This focus is unfortunate, since by far the most common adverse effects experienced by older adults are relatively mild musculoskeletal injuries due to poor matching of exercise options to the physical capabilities of the individual, improper exercise technique, or overenthusiasm in the early stages of a program. Customized physical activity preparedness plans would be of far more value to these individuals than the existing screening tools. Such plans help individuals select exercise activities that are most likely to increase their level of functioning, improve their health, enhance their quality of life, and provide tips and techniques for safely initiating exercise and increasing activity levels.

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Providing legal protection. Clearly, prudent program directors will continue to seek legal counsel when determining which protocols and procedures to follow before enrolling clients in programs. Legal advice almost always recommends following the accepted standard of clinical care, usually defined by position statements and/or guidelines published by the major professional organizations.

Despite the documented ineffectiveness of screening instruments, facility owners and managers will likely feel uncomfortable deviating from these *standards of care* until organizations update or replace them with more appropriate, scientifically justifiable recommendations. For this reason, every effort must be taken to build a consensus within the major scientific and professional organizations about this issue. Encouragingly, a forthcoming best practice statement from a joint American College of Sports Medicine and Centers for Disease Control and Prevention committee concludes that "...although ongoing dialogue between a patient and their health professional is always desirable, pre-exercise screening by a physician should not be a prerequisite for participation in low-intensity physical activity."

Helping participants develop programs. A compelling need exists to develop procedures and protocols that help sedentary older adults to develop a plan for transitioning from sedentary living to physically active lifestyles. To provide the most benefit, activity regimens must be customized to an individual's medical and functional status, as well as his or her specific needs and preferences. The fitness and wellness industry pays too little attention to asking individuals about their personal goals, choices and aspirations. Moreover, providing specific and personalized information is an

important way to help motivate older adults to initiate and adhere to regular exercise activities.

Simply knowing that regular physical activity is important is seldom sufficient to motivate sedentary older individuals to become regularly active. It is important that potential exercisers come to truly believe in the benefits of exercise as well as learn the skills needed to adopt these new behaviors as part of their everyday lives. A growing body of knowledge suggests that effective physical activity interventions should be guided by principles of behavioral change. By integrating a comprehensive behavioral management strategy into preactivity consultations, fitness and wellness professionals can maximize recruitment, increase motivation for exercise progression, and minimize attrition.⁹ For many older persons, the addition of a simple functional fitness test as an optional component of a preactivity consultation may provide the individual with important information about their functional ability relative to others of the same age and sex. Such knowledge may help motivate potential participants to exercise and may help them tailor their activity programs to areas of weakness or perceived need, and provide a visible marker for tracking progress.

Switching the focus

Responsible preactivity counseling for sedentary older adults should go far beyond identifying a single instrument or protocol. Rather, such counseling should focus on utilizing many different mechanisms and sources including individualized clinical consultations, group counseling, self-help books and pamphlets, and Internet-based resources to best meet the needs of the individual. The fitness and wellness industry does not need a new generation of screening instruments. Rather, the field requires a change in philosophy, from *screening out*

people to helping them safely and effectively tailor activity to their individual needs and preferences.☞

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