

## Conference Report

# Highlights of the Preconference Survey and Screening Roundtable Conference: A White House Conference on Aging Event

March 3-4, 2005; Chevy Chase, Maryland

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Medscape Public Health & Prevention. 2005;3(2) ©2005 Medscape  
Posted 09/07/2005

## Background

Current physical activity guidelines recommend that adults get at least 30 minutes of moderate-intensity physical activity on most days of the week. Yet, despite the multitude of health benefits associated with physical activity, many professional guidelines recommend that adults aged 40 and older undergo preactivity participation screening. Although screening was created as a means of protecting participants from exercise-induced mortality and morbidity, little evidence exists to prove that screening fulfills this function, particularly in mature adult populations who generally engage in lower levels of activity. Furthermore, the screening that is recommended is focused almost exclusively on detection and prevention of potential life-threatening cardiovascular events, which are often undetectable by current prescreening physical activity tests. Meanwhile, screening for musculoskeletal problems that might be aggravated by inappropriate activity is often neglected.

Screening issues have received increased attention in the past decade and there is now a growing body of literature on the topic. Key articles were summarized in an annotated bibliography prepared for this White House Conference on Aging (WHCoA) event that took place in March 2005. A portion of this bibliography appears in the Suggested Reading section at the end of this report.

Screening issues have become controversial in the past few years, with experts arguing strongly on both sides of the preactivity screening question. In an effort to understand the issues involved in preactivity screening across different populations and activity levels, and in the belief that it was time to move beyond the contemporary "to screen or not to screen" debate, the Texas A&M University System Health Promotion and Aging Program (part of the School of Rural Public Health) surveyed leading medical, nursing, behavioral science, exercise science, and aging experts about their current views. Building on this background knowledge, organizers convened a roundtable discussion (WHCoA event) of 16 specialists in fields related to exercise and physical activity in the older American population. The following text summarizes issues raised at the roundtable and highlights resolutions reached by the expert panel.

## Issues

### **Priority Issue #1: The New Screening Paradigm: From Screening to Tailoring**

The experts at the Roundtable agreed that routine physical activity is the desired goal for all older adults. Yet encouraging and enabling older adults to undertake physical activity as part of their daily routine is problematic in that many current guidelines have established the need for mandatory screening or medical clearance before the adult can participate in an exercise

program or use an exercise facility. Although screening has been found useful by some adults because it can serve as a means of motivation or as a way to connect with a physician, some individuals report being put off by the demand that a preactivity screening makes on their time and resources.

Because current research exists that calls into question the need for mandatory screening, the Roundtable focused on what could be done to encourage and enable older Americans to engage in more routine, moderate-intensity physical activity while alleviating the need for a mandatory screening. Among the proposed solutions were to create a cohesive, new policy focused on the need for, application of, and preferred kind of screening protocols, and to replace mandatory screening with information and tools for physicians. The information and tools would focus more on injury prevention, risk management, and matching physical activities to the kinds of activities of daily living in which the patient wishes to engage.

### **Barriers:**

- Current screening and exercise guidelines come from many sources, but there is not a standard guideline agreed upon by all of the major health organizations. The creation of such a document would be beneficial to efforts aimed at encouraging older Americans to become active. However, it would be difficult to effect, since each organization is highly invested in its own current guidelines.
- Studies have shown that the primary source of health information for older adults is the physician. Yet many experts at the Roundtable, some of whom were physicians themselves, felt that physicians lacked the information to help create a new paradigm, wherein screening is augmented by helping patients identify and learn to do the exercises that are best for their respective comorbidities.
- Finally, although mandatory screening may be unnecessary for most persons, there are some high-risk groups of older adults who would benefit from screening-like activities, as well as general guidance on physical activity from their physicians and from national organizations. These high-risk groups must be identified and evidence-based recommendations for them codified.

### **Recommendations:**

- The Roundtable participants encourage evidence-based review bodies, such as the United States Preventive Services Task Force (USPSTF), to evaluate the scientific evidence for various current screening recommendations (eg, the American Heart Association/American College of Cardiologists Guidelines and the American College of Sports Medicine Position Statement). Taking into account any new data about the benefits and risks of individual and programmed physical activity, this review should specifically address the need (or lack thereof) for preactivity screening among persons engaging only in light- and moderate-intensity activity such as walking and other lifestyle-oriented activities. The review should also address screening in asymptomatic (eg, for cardiovascular disease) older adult populations.
- The Roundtable participants further proposed that those groups which have established the current physical activity prescreening guidelines work together to establish a combined position statement on preactivity screening. To this end, these groups are encouraged to limit mandatory testing to those for whom testing has provided demonstrable benefit; this should lead to performing exercise stress tests only in a

minority of persons starting physical activity or exercise.

- Algorithms and tools that would enable health professionals and exercise providers to better tailor exercise programs and recommendations to individual functional needs and preferences should also be created.

## **Priority Issue #2: Dissemination of Best Practices**

Because physical activity is so efficient at preventing and relieving symptoms of comorbidities, it is an important lifestyle behavior to encourage. Thus, spreading the message of the benefits of regular physical activity, as well as of the dangers of staying sedentary, is of utmost importance. However, the public must be provided with the proper information to become active safely, ie, both practitioners and mature adults need to be taught the best practices to employ to become active gradually and habitually.

In discussing the dissemination of this best-practice information, several activities were suggested. Underlying all suggestions were the importance of:

1. Dissemination of information on risk management and injury prevention;
2. Creation of methods and tools that enable older Americans to easily track their progress and choose the activities they wish to pursue;
3. Involvement of older adults and their activity program providers ( eg, community and senior centers, private gyms, etc.) in the process of interpreting and disseminating messages about physical activity so that the messages are understandable to the consumer; and
4. Understanding of the influence of concerns related to potential litigation on the implementation of current screening guidelines, so that physical-activity program providers are protected and can appropriately and safely encourage and enable mature adults to initiate and maintain regular fitness programs.

### **Barriers:**

- Science does not always translate well to statements that the general public can embrace. The Roundtable experts believe that all recommendations should be evidence-based, yet they recognize the importance of messages being correctly translated and easily understood by the consumer.
- It is also believed that one of the most pressing reasons why across-the-board screening is still adhered to so loyally among physical-activity program providers, even without evidence showing that preactivity screening keeps older adults safe, is the fear of litigation in the event of an injury or death. Crafting an industry-wide legal statement about what actions are appropriate and what consequences can be expected when a group or person does not comply with those actions will be potentially costly and difficult to do.

### **Recommendations:**

- The Roundtable participants recommend convening a meeting of scientists, government representatives, healthcare professionals, older adults, consumer groups, and physical-

activity program providers with a goal of interpreting and framing messages related to seeing a physician or other healthcare professional.

- Engaging organizations, such as American Association of Retired Persons (AARP) and the Ad Council, to conduct focus-group testing of messages developed to reach mature adults with physical-activity information.
- In addition, leading medical associations, such as the American Academy of Family Physicians; federal agencies, including the Centers for Disease Control and Prevention (CDC); and the Aging Network should collaboratively develop a statement that encourages older Americans to enjoy regular, safe physical activity. This statement should empower people to be active, should be easy to understand, should not act as a barrier (as does the current "see your doctor before exercising" message), and should serve as a standard message that can be used by all organizations when communicating with the public.
- Investing in the study of older Americans who exercise (as well as those who choose not to do so) would help those creating the message to understand the motivating factors behind choosing a physically active lifestyle and would enable the creation of better messages.

### **Priority Issue #3: Monitoring/Surveillance for Community Programs**

Physician preactivity screening exists presumably to prevent activity-related deaths, illnesses, and injuries, particularly in older Americans. Although current research calls into question the effectiveness of screening to prevent or lessen such adverse events, especially given physical activity's benefits in reducing disease risk and burden, additional research is needed to quantify and further describe what kinds of injury, illness, and death risk people actually face when they are active. For instance, it is now known that although the risk of having a cardiovascular event brought on by exercise is, for an older American, comparatively low, the risk for musculoskeletal injuries caused by physical activity may be high. Current CDC injury surveillance can only inform us about the prevalence of major injuries.

More useful would be a system that seeks information not only about major events (such as cardiac arrests and other incidents which bring a person to an emergency room) but also about those that are clinically important and prevent or impair regular physical activity (eg, strains, sprains) and commonly require medical treatment, but do not usually require emergency care. It would also be appropriate and welcome to design a system capable of collecting information on the benefits experienced with a more active lifestyle as well. However, before such data can be used fully, the baseline injury rate in older Americans must be discerned.

#### **Barriers:**

- Research and surveillance offering good information on exercise-related injuries, illnesses, and deaths is typically expensive to obtain. Furthermore, such information is either often highly specific but applicable only to a few specific areas, or is more national in nature but very general; either scenario presents many limitations. It is monetarily and logistically difficult to get both national representation and specificity in the same instrument and technique. Because of the difficulty and expense of getting good, reliable, and specific data, Congress has in the past understandably been reluctant to allocate funds for such research.

## Recommendations:

- The Roundtable participants encourage funding a system to track exercise-related adverse events and injuries (especially those less major ones that might go unreported), or mandating that such information be gathered via national surveys.
- Creating a task force to study how big the fear of litigation really is, and if unfounded, what strategies may be employed to minimize legal concerns as a barrier to establishing programs that can encourage older adults to be more active.
- It is also recommended that organizing a meeting for the purposes of establishing research priorities, making recommendations about the nature of surveillance of activity-related injuries, and calling for funding of research and practice would be a worthwhile endeavor. This would be important to gain information that would then become the factual basis for creating consumer-oriented messages encouraging physical activity and would be used to develop activity plans and risk-management tools for physicians, activity providers, and the older American.

## Conclusions

Physical activity is one of the best means for preventing and controlling diseases, their symptoms, and their risk factors, particularly in older adult populations. Yet older Americans tend to get less physical activity than is recommended, and are among the most sedentary segment of the population. To ensure longevity and improved quality of life, older Americans should be encouraged to participate in regular moderate physical activity. Frail elders should be assisted in increasing physical activity. Part of the process of supporting the efforts of older adults to become more active is the need to evaluate the usefulness and purpose of mandated preactivity screening or other required medical clearance. New evidence-based and cost-effective recommendations about how best to make older adults ready for participation in physical activity can then be created and disseminated.

## Suggested Readings

- (Taken from *The Role of Pre-Activity Participation Screening in Older Adults: Selected Annotated Bibliography*)
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### **Acknowledgements**

We thank The Robert Wood Johnson Foundation for its generous support, and Dr. Terry Bazzarre for his guidance throughout all stages of this project and for serving as co-chairman at the actual WHCoA event. Further appreciation goes to Ms. Kerrie Hora, Conference Coordinator; Ms. Brigid Sanner, overall Conference facilitator; and Ms. Kate Barron, who worked on the Annotated Bibliography, served as Conference recorder, and drafted this report based on input from all participants.

Thanks also to the Planning Committee (David Buchner, Wojtek Chodzko-Zajko, and Barbara Resnick), as well as to the experts who came to the meeting and shared their experiences, challenges, and solutions. Expert advisors included Terry Bazzarre, Jane Bolin, David Buchner, Wojtek Chodzko-Zajko, Fernando Costa, Wendy Friar, Ken Germano, Margaret Hawkins, James Judge, Kay Loughery, Colin Milner, Karen Pocinki, Michael Rogers, Barbara Resnick, and Nancy Whitelaw.

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Disclosure: Marcia G. Ory, PhD, MPH, has disclosed no relevant financial relationships.

Disclosure: Barbara Resnick, PhD, CRNP, has disclosed that she has served as an advisor, consultant, or on the speaker's bureau for Johnson & Johnson, Forest Laboratories, and Amgen.

Disclosure: Wojtek Chodzko-Zajko, PhD, has disclosed no relevant financial relationships.

Disclosure: David Buchner, MD, MPH, has disclosed no relevant financial relationships.

Disclosure: Kate L. Barron, MPH, has disclosed no relevant financial relationships.

Disclosure: Kerrie L. Hora has disclosed no relevant financial relationships.

Disclosure: Terry L. Bazzarre, PhD, has disclosed no relevant financial relationships.