

Physical Activity Counseling in the Adult Primary Care Setting

Position Statement of the American College of Preventive Medicine

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Introduction

The American College of Preventive Medicine (ACPM or the College) is dedicated to providing position statements on issues for which one or more entities has previously conducted an evidence review and developed guidelines or recommendations. This position statement addresses the role of the primary care provider in counseling healthy adult patients on the benefits of regular physical activity for the purpose of primary disease prevention and health promotion. The term “physical activity,” as used within this statement, is defined as both exertion during routine daily activities and exercise for the sake of enhancing fitness. Although a significant amount of research has been conducted on this issue, the implications for clinical practice remain uncertain. The College, through expert opinion, puts forth this statement to lend guidance and clarity to current practice in light of the available data. It will be updated periodically as new scientific evidence accrues.

In 2002, the U.S. Preventive Services Task Force (USPSTF) determined that there is insufficient evidence to recommend for or against behavioral counseling to promote physical activity in the primary care setting.¹ This differs from the 1996 USPSTF recommendation that clinicians should counsel patients to incorporate regular physical activity into their daily routine.² This recommendation change was based on a new review of the evidence and a new USPSTF methodology that changed the standards for evidence on the effectiveness of behavior change.

Whereas the USPSTF provides a review of the evidence, professional organizations are encouraged to formulate their own recommendations independently.^{3,4} The American Academy of Family Physicians, the American Acad-

emy of Pediatrics, the American College of Obstetrics and Gynecology, the American College of Sports Medicine, and the American Heart Association have addressed physical activity counseling of some type in the primary care setting.^{5–10} The U.S. Department of Health and Human Services also encourages physical activity counseling within its *Healthy People 2010* objectives.¹¹

The American College of Preventive Medicine is in agreement with these organizations and believes that despite varying research results to date, several factors have emerged that speak to the importance of developing recommendations for physical activity counseling in the primary care setting. The College believes that an emphasis on counseling healthy adults for the purpose of primary disease prevention is vital for at least three reasons.

1. Trends in the obesity epidemic show an urgent need to address weight maintenance in normal weight and overweight adults. The significance of the obesity epidemic may require the promotion of physical activity by any expedient means available.
2. The health benefits of regular physical activity extend beyond weight loss and weight control. Prior research shows that body mass index and level of physical activity are independent predictors of all-cause mortality.¹² In addition, being obese and physically fit is better in terms of overall health than being obese and unfit—with the best health status occurring in normal weight, fit individuals.^{12–17}
3. Certain behavioral interventions have been shown to be effective in the primary care setting. Interventions using the stages of change approach and the 5A's (assess, advise, agree, assist, arrange) have been successful in other areas such as tobacco cessation, and could be applied to physical activity interventions.^{18,19} However, a more recent review of lifestyle interventions in primary care suggests that a modified approach may be necessary for successful stages of change based physical activity interventions.²⁰ Other interventions such as writing exercise prescriptions, establishing office support systems, and improving patient follow-up procedures have been shown to positively affect counseling and preventive services.^{18,21–26}

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In addition, the 2002 National Ambulatory Medical Care Survey shows 316 physician office visits per 100 persons (age adjusted) with 45% to 50% occurring in the primary care specialties.²⁷ Thus, the impact of using effective physical activity counseling interventions in this setting has enormous potential for population-level behavior change.

In light of these factors, the American College of Preventive Medicine puts forth its official position statement.

Background

Evidence supporting the health benefits of regular physical activity for people of all ages, both male and female, continues to accrue. These benefits include an overall decreased risk of hypertension, diabetes, cardiovascular disease, colon cancer, breast cancer, osteoporosis, and premature mortality, as well as an improvement in mental health, weight loss or maintenance, functional capacity, fitness, and quality of life.^{10,28-30}

Based on these findings, numerous governmental and professional organizations have put forth recommendations to guide individuals, communities, and healthcare professionals on the frequency, intensity, and duration of physical activity required for optimizing good health and the strategies necessary to attain these goals.^{1,5-11,31-33} The most recent and consistent recommendations encourage ≥ 30 minutes of moderate-intensity activity, 5 days per week or ≥ 20 minutes of vigorous activity 3 days per week.^{9,28,33}

These recommendations suggest a minimum weekly dose of physical activity, especially for sedentary individuals. Additional health benefits are likely when a greater amount of physical activity is performed each week.^{34,35} Moderate-intensity activities include options such as a 30-minute brisk walk, 30 minutes of lawn mowing or raking leaves, a 15-minute run, and 45 minutes of playing volleyball. Vigorous-intensity activities include similar activities performed for longer periods of time or at a faster pace. Nonetheless, according to the National Center for Health Statistics, only 32% of adults and 65% of adolescents engaged in the recommended amount of physical activity in 2001.³⁶

The effectiveness of physical activity in the prevention of chronic diseases is well known; however, the long-term effectiveness of counseling and educational efforts to promote regular physical activity in the general population is less clear. Studies of physical activity counseling in the primary care setting have suffered from major methodologic issues such as lack of randomization, poor follow-up rates, variable definitions of "active" and "sedentary," inconsistent primary outcomes, limited subgroup analysis, and minimal long-term assessment.^{3,37-39} A subset of higher-quality studies has shown mixed results in short-term and long-term effectiveness, and has identified several patient,

provider, and organizational barriers to successful interventions.^{21-25,40-45}

Given the multiplicity of factors that can influence behavioral change such as the important broader issues of environmental and policy changes that we are unable to address in this statement, and the unique characteristics of behavioral counseling interventions, challenges remain in developing a successful standardized approach to physical activity counseling.¹⁸ In the meantime, primary care clinicians should reinforce the importance of regular physical activity with their patients using the evidence-based techniques described below.

Studies have shown that primary care providers are interested and able to give tailored physical activity advice and write exercise prescriptions.^{22,23,25,46} However, only 10% of medical school graduates could design an exercise treatment,⁴⁷ approximately 34% to 50% of adult patients remember receiving exercise counseling,^{48,49} and physicians miss many opportunities for physical activity counseling.⁴⁹ In 2001, only 8.2% of total outpatient visits included counseling or education related to exercise.²⁷

Patients expect preventive health information from their primary care providers and clinician advice can be a strong external cue for health-promoting action.¹⁸ Patient characteristics associated with physician exercise counseling are female gender, age > 30 years, higher educational level, income $> \$50,000$, cardiac disease history, being overweight but not obese, and having a higher baseline physical activity level.⁴⁹ Factors that predict a positive change in physical activity in sedentary adults are increased educational level, greater self-efficacy, and presence of a social support network.⁵⁰

Rationale

Research has documented that moderate and vigorous physical activity provide similar health benefits.^{30,33} Possible exceptions include an effect on serum lipids and the development of coronary heart disease, where the evidence indicates that higher-intensity physical activity is more beneficial.^{34,35} A more expansive view of physical activity allows tailored advice based on individual preferences, baseline coordination and skills, and gender and cultural differences. It also assists patients in developing realistic goals and expectations for an incremental increase in physical activity. Walking, a moderate-intensity activity, remains the most common form of adult physical activity in the United States.^{28,51} Research has also shown risks associated with physical activity including up to a 30% annual rate of musculoskeletal injuries in healthy sedentary adults who initiate regular exercise and, rarely, myocardial infarction or sudden death.²¹ Thus, it is important to gradually build up to a desired level of physical activity and to rule out

underlying cardiovascular disease before beginning a physical activity program.

Recent reviews have identified several important factors encountered during primary care–based physical activity interventions, including quality and content of provider training; appropriate assessment of the individual patient; length of the counseling session and provider time limitations; content of the counseling session including the number of risk behaviors discussed, use of a behavioral change model approach, method of advice delivery, and inclusion of a follow-up plan; tailoring advice to certain subgroups based on sociodemographic variables or readiness for change; recommended frequency, duration, and intensity of physical activity; and cost-effectiveness and reimbursement for preventive services.^{18,26,38,39,52,53}

The most successful interventions focused on physical activity only (rather than attempting to change multiple behaviors in parallel); used a variety of health-care team members to deliver aspects of the counseling; included a tailored stage of change written exercise prescription; provided physicians with interactive training sessions; and used an office support system with clinical practice guidelines, provider reminders, and patient follow-up through a variety of communication channels. It is important to note that a level can be reached where more detailed interventions with extensive follow-up, and the associated increase in costs, do not necessarily provide better outcomes.²¹

Statement

After reviewing the potential benefits, risks, and trade-offs related to this issue, the American College of Preventive Medicine takes the position that primary care providers should incorporate physical activity counseling into routine patient visits. Effective interventions can be as brief as 2 to 4 minutes; however, longer sessions may be used depending on practice characteristics and patient needs. ACPM encourages professional organizations to offer training in counseling techniques for their members. The following are suggestions, based on the current literature, to enhance the effectiveness of such counseling.

Providers should obtain training in behavioral counseling techniques that emphasize collaboration between patient and provider such as shared decision making,⁵⁴ assessment of patient readiness to change, writing a tailored exercise prescription,²² and use of a variety of health-care team members for follow-up counseling and encouragement. Provider training sessions may range from 15-minute individual training sessions to 2-hour workshops.²⁶ The 5A's approach is effective, and can easily be applied to physical activity counseling in the primary care setting.¹⁸ Targeting one behavior change at a time is ideal, especially if there are time limitations. However, the Patient-centered Assessment

and Counseling on Exercise plus nutrition (PACE+) program successfully changed one physical activity and one nutrition behavior per patient.^{55,56} Follow-up counseling and encouragement using a variety of communication channels, such as telephone, general or tailored mailings, computer and video programs, and self-help guides are effective in the short term and possibly in the long term. Developing an office support system with physical activity counseling guidelines and provider reminders will allow for smoother implementation.

For more details on how to implement a coordinated physical activity counseling program, see the resources listed in the references.^{57–59}

ACPM acknowledges the controversy in asking primary care providers to incorporate behavioral interventions into their practice. However, the combination of two key behaviors—physical activity and poor diet—may be poised to become the leading causes of premature death in the United States,⁶⁰ and it is imperative that clinicians address these issues. The most important message in this position statement is that a few basic strategies such as providing brief provider training, creating an office support system, writing tailored exercise prescriptions, and using a variety of health-care team members can establish an effective approach to increasing physical activity for healthy adult patients in the primary care setting.

ACPM recognizes other important related issues including the need for improved medical and postgraduate education on primary prevention and counseling programs; the need for additional standardized assessment tools and easy-to-implement counseling programs; the complex interaction of dietary habits, physical activity level, and health outcomes; the important policy and environmental issues that impact the uptake and maintenance of regular physical activity in children, adolescents, and adults; and the need for more research, especially addressing the long-term effectiveness and cost-effectiveness of physical activity counseling in the primary care setting. Given the increasing importance of counseling as means to successful behavior modification for chronic disease risk factors, ACPM recommends that physical activity counseling be covered as an insurance benefit.

Addressing these additional issues will not only enhance the effectiveness of one-on-one physical activity counseling performed in the primary care setting. It will also provide a more complete socioecologic approach, emphasizing the interaction of social, environmental, and individual determinants of health in establishing regular physical activity for the purpose of disease prevention and health promotion in healthy adults.

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