

***NHLBI Workshop on
Peripheral Arterial Disease (PAD):
Developing A Public Awareness Campaign***

Meeting Summary

**Bethesda Marriott Hotel
Bethesda, Maryland
January 15, 2003**



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Heart, Lung, and Blood Institute**

NHLBI Workshop on Peripheral Arterial Disease (PAD): Developing A Public Awareness Campaign

Meeting Summary

**Bethesda Marriott Hotel
Bethesda, Maryland
January 15, 2003**



**U.S. DEPARTMENT
OF HEALTH AND
HUMAN SERVICES**



**National
Institutes
of Health**



**National Heart,
Lung, and
Blood Institute**

May 2003

Contents

NHLBI WORKSHOP ON PERIPHERAL ARTERIAL DISEASE (PAD): DEVELOPING A PUBLIC AWARENESS CAMPAIGN	1
WELCOME AND OPENING REMARKS (Dr. Alan T. Hirsch and Dr. Claude Lenfant)	1
PAD: THE SCIENCE BASE FOR MESSAGES (Dr. Mark Creager).....	2
OVERVIEW: DEVELOPING STRATEGIES FOR A PUBLIC AWARENESS CAMPAIGN (Ogilvy Public Relations).....	4
WHAT DO PATIENTS AND AT-RISK INDIVIDUALS WANT TO KNOW? (Facilitated Talk Show Format).....	5
FULL-GROUP DISCUSSION: LAYING THE FOUNDATION FOR A PAD PUBLIC AWARENESS CAMPAIGN.....	9
Laying the Foundation for a PAD Public Awareness Campaign	11
WORKING LUNCH: <i>THE HEART TRUTH</i> —AN ILLUSTRATIVE NHLBI CASE STUDY	12
DEVELOPING AND MARKETING A PUBLIC AWARENESS CAMPAIGN (Ogilvy Public Relations)	14
SMALL GROUP ACTIVITY: CREATING A DRAFT FRAMEWORK FOR A PAD PUBLIC AWARENESS CAMPAIGN	14
Reports From Small Groups	15
SUMMARY AND NEXT STEPS (Dr. Alan T. Hirsch and Dr. Peter Gloviczki).....	18
ATTACHMENT A: BREAKOUT SESSIONS: CREATING A DRAFT FRAMEWORK FOR A PAD PUBLIC AWARENESS CAMPAIGN.....	20
ATTACHMENT B: AGENDA	27
ATTACHMENT C: LIST OF ATTENDEES.....	29

**NHLBI WORKSHOP ON PERIPHERAL ARTERIAL DISEASE (PAD):
DEVELOPING A PUBLIC AWARENESS CAMPAIGN**

**Bethesda Marriott Hotel
Bethesda, Maryland**

January 15, 2003

WELCOME AND OPENING REMARKS (Dr. Alan T. Hirsch and Dr. Claude Lenfant)

Dr. Hirsch welcomed the participants on behalf of the Vascular Disease Foundation (VDF) and thanked them for their efforts in helping to develop a strong, nationally visible, and effective partnership to promote public education about peripheral arterial disease (PAD). Promoting vascular health is a central component of improving cardiovascular health. Inasmuch as Americans suffer the consequences of preventable cardiovascular disease (CVD), it is logical for national educational efforts to include vascular health messages. Dr. Hirsch noted that health improves and society benefits when individuals have access to accurate health information. Health information for the public improves outcomes when partnered with health care provided by professionals.

PAD is a common disease, affecting 8 to 10 million Americans, with many more at risk for this condition. PAD prevalence and its societal impact will increase in the next two decades. PAD is associated with a marked increase in health risks and avoidable consequences, such as heart attack, stroke, and death; claudication and functional impairment; and gangrene and amputation. The current knowledge base permits significantly better prevention, early diagnosis, integrated treatment, and rehabilitation. However, the public does not know that PAD exists—until the disease has progressed to its final stages and opportunities to reduce the chances of decrements in quality of life, myocardial infarction and stroke, amputation, or death are lost. An effective national education program to improve PAD outcomes requires determining which PAD messages are the highest priority. Vascular health messages as well as PAD-specific messages must be anchored in a robust “science base” to assure their accuracy. Additionally, special expertise is required if messages are to be effectively disseminated to all Americans “at risk” for or affected by PAD.

Dr. Hirsch described the VDF as a nonprofit, public-focused foundation devoted to public education on vascular disease. Its broad service mission is to increase public awareness of the benefits of prevention, prompt diagnosis, comprehensive management, and rehabilitation of vascular disease. The VDF currently represents a coalition of more than 40,000 American health care professionals and members of the public. The Foundation’s current coalition encompasses eight vascular professional societies, including the American Association of Cardiovascular and Pulmonary Rehabilitation, American Association for Vascular Surgery, American College of Cardiology, Society for Vascular Medicine and Biology, Society of Interventional Radiology, Society for Vascular Nursing, Society for Vascular Surgery, and Society for Vascular Ultrasound. Collaboration with the National Heart, Lung, and Blood Institute (NHLBI), professional organizations, other public advocacy organizations, and industry would represent a unique opportunity to create a unified effort toward national public education on vascular disease.

Dr. Hirsch acknowledged a series of prior efforts to provide public education about PAD from 1990 to the present. These include the public education templates developed by the Society for Vascular Nursing, the national PARTNERS Program, the Society of Interventional Radiology's "Legs for Life" program, and activities of the American Vascular Association, the Society for Vascular Medicine and Biology, the American Heart Association (AHA), the American Diabetes Association (ADA), the Society for Vascular Ultrasound, and other organizations. The AHA's "Atherosclerotic Vascular Disease Summit," held in July 2002, focused on bridging public messages to science. The "Peripheral Vascular Health Summit," organized by the Society of Interventional Radiology and held in August 2002, focused on how to enlarge the national coalition, as one more step toward today's meeting, which focuses on how this coalition will initiate a national PAD education program for 2004 and beyond.

After Dr. Hirsch reviewed the goals and agenda for the meeting, he thanked the NHLBI for its support, Ogilvy Public Relations for lending its expertise, and members of the VDF Board of Directors for their past and ongoing dedication to addressing this public health issue.

Dr. Lenfant expressed his thanks and acknowledged Dr. Hirsch's presentation. He welcomed the participation of the various professional and volunteer organizations and thanked them for their presence at this meeting. Dr. Lenfant specifically mentioned the presence of PAD patients and the commitment of all present in the quest to promote public awareness about PAD that, ultimately, will help PAD patients. He encouraged the support and participation of patients in this activity so that efforts to increase awareness and interest will be successful.

Dr. Lenfant noted that the VDF played a leading role in the efforts that have led to this meeting. He communicated his pleasure with the enthusiasm of the group and expressed his best wishes for a successful meeting and continued future activities.

PAD: THE SCIENCE BASE FOR MESSAGES (Dr. Mark Creager)

Dr. Creager defined PAD as a vascular disease in which the arteries supplying a limb (typically one or both legs) are obstructed. The most common cause is atherosclerosis, which results in plaque and thrombus deposition on the arterial wall and subsequent luminal narrowing or occlusion. PAD is one manifestation of atherosclerosis—a systemic disease that also affects the arteries of the brain, heart, kidneys, mesentery, and limbs. Sixty percent of PAD patients have coexisting coronary artery disease (CAD) or cerebrovascular disease. While some persons with PAD are asymptomatic, others exhibit intermittent claudication (fatigue, aching, discomfort, or frank pain in the leg that is provoked by exercise and that resolves with rest); functional impairment (slow walking speed, gait disorder); or, in severe cases, rest pain (pain or paresthesias in foot or toes, worsened by leg elevation and improved by dependency).

Dr. Creager said that many patients with PAD can walk at a speed of only 1–2 miles per hour (half the typical rate), and their maximal walking distance is limited (almost one-third have difficulty walking around their home, and two-thirds have difficulty walking half a block).

Diagnosing PAD. History taking alone will not detect PAD. In addition to a detailed clinical history, physicians should examine the legs for decreased or absent pulses; bruits; muscle atrophy; cool, pale, or cyanotic feet; and skin ulcers and necrosis. In severe cases, ischemic

ulceration may develop at the ends of toes and over bony prominences on the feet. Gangrene may ensue, putting patients at risk of amputation.

An important message is that a simple test can be used to diagnose PAD in the office setting: the ankle-brachial index (ABI). The ABI is the ratio of systolic blood pressure (SBP) measured at the ankle to the SBP measured at the brachial artery. A normal ABI is 1.0 or greater (0.90–1.30); PAD is diagnosed when the ABI is ≤ 0.90 . The ABI can be performed, in any office practice, by current personnel, using a sphygmomanometric cuff and a handheld Doppler instrument. The total equipment needed costs less than \$500. It takes about 10-15 minutes to measure ABI in both arms and both ankles.

Risk factors. Because PAD is a manifestation of atherosclerosis, the risk factors are the same: smoking, diabetes, hypertension, hypercholesterolemia, hyperhomocysteinemia, and elevated fibrinogen and C-reactive protein (CRP) levels. The risk of PAD is increased three to five times by smoking and two to four times by diabetes. Mild alcohol consumption is associated with a lower risk of developing PAD. The likelihood of developing claudication increases with the number of risk factors.

Prevalence and prognosis. In the United States, approximately 8.4 million persons over age 40 have PAD, with prevalence rising with age. Among persons ages 55 and older, 15 to 25 percent have PAD (as manifested by an abnormal ABI), and 6 to 8 cases of PAD per 1,000 persons occur each year. Many of these patients have claudication and functional impairment.

Dr. Creager mentioned the following data:

- In a community survey (Hirsch et al., 2001)¹ in 25 cities, 6,979 patients ages 70 years or older or ages 50 through 69 years with history of cigarette smoking or diabetes were evaluated by history and by measurement of the ABI. PAD was detected in 29 percent of this population. Overall, 13 percent had PAD only and 16 percent had PAD with other clinical manifestations of cardiovascular disease (CVD).
- Approximately 25 percent of patients with PAD will have worsening limb symptoms over 5 years, with 7 percent requiring revascularization and 4 percent requiring amputation (Weitz, 1996).² In patients who develop critical limb ischemia (which occurs in 500–1,000 per million PAD patients per year), approximately 25 percent require amputation.
- An estimated 30 percent of PAD patients will die within 5 years, and 20 percent will suffer nonfatal myocardial infarction (MI) or stroke. One study found the risk of MI to be two to three times higher among patients with an ABI < 0.9 . The risk of stroke in patients with an ABI < 0.8 increased from two-and-a-half to three-and-a-half times.
- The Edinburgh Artery Study³ examined the relationship between ABI and survival over 6 years and found that patients with the lowest ABI had the greatest risk of death.

¹ Hirsch AT, Criqui MH, Treat-Jacobson D, et al. Peripheral arterial disease detection, awareness, and treatment in primary care. *JAMA* 2001;286(11):1317–24.

² Weitz JI, Byrne J, Clagett GP, et al. Diagnosis and treatment of chronic arterial insufficiency of the lower extremities: a critical review. *Circulation* 1996;94(11):3026–49.

³ Leng GC, Fowkes FG, Lee AJ, Dunbar J, Housley E, Ruckley CV. Use of ankle brachial pressure index to predict cardiovascular events and death: a cohort study. *BMJ* 1996;313:1440–4.

- A 1992 study by Criqui et al.⁴ found that patients with PAD (even those with no symptoms) had significantly impaired survival. Patients with more atherosclerotic symptoms had a poorer prognosis. PAD patients had a sixfold risk of CVD-related death; approximately 55 percent died from cardiac disease and 15 percent from cerebrovascular disease.

Therapy. Dr. Creager stressed that we can do something about these findings by identifying patients with PAD and initiating therapy to reduce the risk of adverse cardiovascular events, improve functional capacity, and prevent amputation. Treatment to reduce the risk of MI and death includes intensive risk factor modification—smoking cessation programs, lipid-lowering therapy, antiplatelet agents, and angiotensin-converting enzyme (ACE) inhibitors. For persons with PAD symptoms, involvement in a supervised exercise program can improve functional capacity, and limited pharmacotherapy (e.g., cilostazol) is available. Treatment for patients with more severe disease includes catheter-based interventions and reconstructive surgery. If patients are identified early enough, such treatment can preserve limbs and increase quality of life.

Barriers and Solutions. Barriers to identifying and treating PAD are lack of awareness of the typical symptoms and signs of PAD; inadequate medical school curriculum time devoted to vascular diseases; insufficient attention to the diagnosis and treatment of PAD in the primary care setting; and pressure on “gatekeepers” to restrict time spent with patients, minimize diagnostic studies, and limit referral to appropriate specialists. Potential ways to facilitate the identification and treatment of PAD include public education using such channels as TV/radio, literature/pamphlets, informational articles in magazines, and Web sites on vascular disease. Other solutions involve holding PAD screenings at health fairs, providing physician education, mobilizing vascular societies and professionals, and funding outreach programs.

OVERVIEW: DEVELOPING STRATEGIES FOR A PUBLIC AWARENESS CAMPAIGN (Ogilvy Public Relations)

Mr. Tom Beall said that Ogilvy’s role at the meeting is to work with participants to help them begin to lay the foundation for a public awareness campaign on PAD. Planning such a campaign usually requires elucidating objectives, prioritizing target audiences, crafting science-based messages, and developing campaign tactics and components. Ogilvy has been involved in a number of large-scale public health awareness initiatives for the National Institutes of Health (NIH) and other public- and private-sector organizations.

The PAD campaign’s goal is to address the problem that too many people with PAD are undiagnosed and undertreated, with resulting unnecessary heart attack, stroke, pain, loss of limbs, and lower quality of life. Goals are to decrease morbidity and mortality, increase quality of life, and influence changes in society to improve the delivery of health care to people with or at risk for PAD.

⁴ Criqui MH, Langer RD, Fonek A, et al. Mortality over a period of 10 years in patients with peripheral arterial disease. *N Engl J Med* 1992;326(6):381–6.

Recent decades have seen public awareness campaigns in such areas as HIV/AIDS, breast cancer, high blood pressure, high blood cholesterol, and osteoporosis. Campaign outcomes have included enhanced awareness; new approaches to testing, diagnosis, and treatment; calls to action; and higher priorities for personal, professional, and public health agendas. Common elements of these campaigns include well-organized patient constituencies, coalitions of influential supporters, legislative attention/action, breakthroughs in science, increased widespread acceptance of diagnostic tests, endorsements by celebrities and public figures, and highly visible activities such as special events, fundraisers, and health fair screenings.

Mr. Beall described potential achievements of a public awareness campaign. For consumers, a campaign can build knowledge and awareness of disease; increase recognition of risk factors; affect behaviors related to prevention, screening, and treatment; empower people to take action; and increase sense of personal relevance. A campaign can also build physician awareness of disease and screening efficacy, elevate the issue on the social agenda (which can lead to increased resources for research and treatment), and begin to alter social norms.

Mr. Beall noted that consumers have become more empowered to seek information and to have a personal stake in influencing their health care decisions. However, consumers are bombarded with hundreds of messages each day, and a multitude of sources exist for health care information. The challenge is to get Americans to listen to PAD messages. Messages must be relevant, memorable, and powerful enough to break through the clutter. They must include a call to action that is easy to perform, have clear immediate benefits and few negatives, be consistent with social norms and values, and be tailored for diverse audiences. Coalitions help extend reach and credibility.

A successful campaign builds on formative research to identify who is most at risk, the barriers and motivators to getting diagnosed and treated, demographic and cultural considerations, and environmental constraints such as physician practice patterns and disincentives for screening and diagnosis. Research is also important concerning what efforts are in place, whom they target, how successful they have been, whether there are competing messages, and how the media have treated the issue.

The starting point is understanding the audience. To build an audience profile, it is important to look at demographics, physical characteristics, psychographics, behaviors, cultural factors, favored channels, credible intermediaries (e.g., partners outside the health care system), and life paths. It is also important to talk to and learn from patients themselves—as demonstrated in the next session.

WHAT DO PATIENTS AND AT-RISK INDIVIDUALS WANT TO KNOW? (Facilitated Talk Show Format)

Ms. Pam Jenkins of Ogilvy moderated a “mini-talk show” featuring five persons who have been diagnosed with PAD. She thanked these invited guests for giving their time to share their personal stories. As in a focus group, these participants provided insights into their perspectives and their knowledge, attitudes, and behaviors—information that is vital for planning a public awareness campaign.

Mr. Ron Burke said that he had not yet been diagnosed with PAD when he developed a mycotic aneurysm in 1990. He woke up with a blister in the groin area, a swollen leg, and pain. He went to the emergency room (ER) and was on the operating table 45 minutes later. The hospital staff burst the blister, and subsequent treatment included a patch, a Gortex graft, and a femoral artery bypass. Eventually, an artery was removed from his leg, and a filter for blood clots was placed in his abdominal cavity. Over 6 years, he suffered from venous stasis and ulcers. His followup care has included drug therapy and monitoring with arteriograms. Mr. Burke noted that when he became ill he had been addicted to drugs and had high blood pressure; he had a family history of heart disease and diabetes. After his hospitalization, he stopped smoking and using drugs and alcohol. Other lifestyle changes included exercising more and following a diet. He was motivated by the danger of losing a leg, and he found comfort in the power of prayer. A journalist for the *Washington Informer* (a Washington, DC, community newspaper), Mr. Burke has published articles about his disease and recovery in *Prevention* and *Natural Health* magazines. He noted that awareness starts in the community, and he suggested that African Americans should be invited to participate in planning the public awareness campaign.

Dr. Edith Couterier said that she had never heard of PAD, and she had visited several physicians who told her she did not have circulation problems and that “Nothing is the matter with you that a lot of walking won’t cure.” When she participated in an NIH study, she was diagnosed with intermittent claudication in one leg, but there was more concern about a kidney problem. A doctor of alternative medicine diagnosed her claudication more definitively. Finally, after she threatened to have chelation therapy, her doctor referred her to a radiologist, who sent her to a vascular surgeon for surgery on her leg arteries. An administrative assistant/nurse at NIH called after the surgery and told her to walk at least a half hour each day, but no doctor ever gave her this advice. Unfortunately, she later needed surgery for lung cancer, and she developed pain when walking after 2 weeks of forced rest. Since then, walking has not helped her PAD, and she expects that she will need more stents and surgery. Dr. Couterier noted that she had not smoked in 35 years and rarely drank alcohol or ate red meat. She thought that “clean living” would protect her. Like Mr. Burke, she has found comfort in the power of prayer.

Mr. Andrew Johnson said that a physician once told him that smoking causes constriction in the groin that affects the blood supply to the legs and suggested that walking would improve his circulation. However, his doctor did not reinforce this message. Mr. Johnson had a heart attack about 5 years ago and began exercising after heart surgery. He became aware of pain in his legs, which he attributed to aging. He mentioned the pain to his cardiologist at an annual checkup and was referred to a vascular specialist. That is when he learned about vascular disease (it was not called PAD). Mr. Johnson said that he had high blood pressure and high cholesterol and developed type 2 diabetes after his heart surgery. He expects that his diet and inactivity may have contributed to his illness. He has tried to eat healthier, sees his cardiologist every 4 months, and continues his physical therapy.

Mr. Ward Jones said that he had been a walker, but one day in 1988 he couldn’t walk. His doctor sent him to a surgeon who diagnosed blockage in his leg, and he immediately had leg artery bypass surgery. About 2–3 years ago, he developed pain in the other leg and was sent to a vascular surgeon who told him to keep walking. Several years passed, and the pain got worse, leading to leg surgery. Later, he also had coronary artery bypass surgery, but he had not had a heart attack. Mr. Jones said that he has stopped smoking, and he believes strongly in walking.

Mr. George Lowrance said that he had not heard the term PAD; it was called claudication or blockage. Three years ago, he felt ill and went to the ER. Shortly thereafter, he received a quadruple coronary artery bypass as a result of his heart attack. He smoked his last cigarette on the way to the hospital. He was referred for cardiac rehabilitation, which included physical therapy. While walking on the treadmill during cardiac rehab, he began having a burning sensation in the ankle area. He wasn't aware of the association between heart disease and leg pain, and he waited until the next visit to tell his cardiologist. His cardiologist sent him for a magnetic resonance imaging, followed by Doppler tests and referral to a vascular doctor. Mr. Lowrance was prescribed treadmill exercise and Pletal®. He still fights fatigue in his legs but continues the exercise and drug regimen. His blood pressure is normal, and he takes blood thinners and drugs for high blood cholesterol.

Questions and Answers

Participants asked the five speakers the following questions; their answers follow.

Where did you seek information about your leg pain?

- Nurses and physical therapists (doctors don't have time)
- Doctors
- Hospital discharge summaries
- The Internet
- Pamphlets at doctors' offices

What is/was your best source of information for PAD or health?

- Internist
- Vascular doctor
- Health care professionals

Have you seen ads about PAD?

- An ad for a drug to treat vein problems
- An ad soliciting African Americans for an NIH study

How would you describe PAD?

- Clogged arteries
- Claudication
- Pain in legs; malfunctioning legs

What are the messages people need to hear?

- Don't blame leg pain on aging.
- PAD is a disease.

What is most frightening to you about having PAD?

- Stroke, heart attack
- Not being able to walk
- Losing a leg
- Blood clots

What was your followup after bypass surgery?

- I was told to walk.
- I visit the cardiologist every 4 months and have physical therapy.

What made you give up smoking?

- I wanted to live. After 6 weeks in the hospital without smoking, drugs, and alcohol, I didn't miss them.
- Five days in intensive care will break the cycle.

Do you perceive walking as a definitive treatment?

- Yes. It's become a habit.
- Doctors recommend walking and swimming.
- Walking is the best exercise.

Before your circulatory problem, did doctors measure your circulation and cholesterol regularly? Now do they check your carotid circulation and for vascular diseases?

- None of my doctors was concerned about it before. Now cardiologists check my arteries every 4 months.

What did you think was causing your symptoms?

- Getting old
- Recurrence of back problem
- Muscle cramps
- Swelling

Does it take a dramatic threatening event in your life to motivate you to change behavior?

What would it take to make patients aware earlier?

- If I thought I was healthy, I wouldn't be interested. I was doing what I was supposed to be doing.
- Normal daily life doesn't make us walk much.
- I was walking; I didn't pursue doctors aggressively.
- People need an awareness of the vascular system—how it works and what can happen.

Would the elderly who are well have simple screening tests?

- Many elderly people cannot afford screening tests unless the tests are covered by Medicare.
- Seniors are more health conscious today.
- A public awareness campaign for screening would be worthwhile, as would holding exhibits and screening events in the community.

Besides prayer, what would be other sources of support?

- Support groups
- A PAD Web site with a chatroom
- My family and church
- My doctor. PAD should be emphasized in medical school.

FULL-GROUP DISCUSSION: LAYING THE FOUNDATION FOR A PAD PUBLIC AWARENESS CAMPAIGN

Mr. Beall led a discussion about the issues raised by the PAD patients and asked for other ideas for the PAD campaign. Participants made the following comments:

What the Campaign Should Focus On

- The concept of risk may be too abstract. We should identify a definitive measure to define health status/risk, such as an objective low-cost screening tool (e.g., the ABI).
- Major events motivate people to change their behavior. It is difficult to motivate people who do not have symptoms. The campaign should help patients identify risk and motivate change. Fear can be a motivator.
- We must decide whether to talk about PAD or the whole circulatory system. Some thought that messages should focus on the whole patient, because many PAD patients have had heart attacks, CAD, stroke, or MI in addition to claudication. Others thought that messages should focus on lower-extremity disease and “leg attack,” because if they focus on global awareness of CVD, the public will still have no clue about PAD.
- While the public understands hardening of the arteries, they may relate it to the upper body rather than the legs. (PAD also affects the arms, but this is much less common.) Talk about leg arteries (not veins).

Screening

- We need to educate physicians about whom to screen and when. We must provide incentives for physicians, who are overworked and underpaid. (Dr. Alan Wasserman, representing internists, thought that ABI screening would not work in physicians’ offices due to time constraints.)
- We must influence payers to cover screening. We must devote energy to urging the Centers for Medicare and Medicaid Services (CMS) to reimburse for office-based PAD diagnosis and screening.
- We need guidelines for PAD screening (like the ones for colorectal cancer and breast cancer). We know who should be screened and at what age, so it should not be difficult to develop screening recommendations.
- Is there evidence for the value of screening (especially for asymptomatic patients)? Do we have performance measures? We need to identify which patients would benefit from screening.
- Most believe that screening does help. For example, a cost-effectiveness analysis of ultrasound screening for aneurysms found that it was worthwhile.
- To make screening cost-effective, the persons who should be screened are those with the following risk factors: a history of smoking, diabetes, a family history of CVD, other arteriosclerotic events, a certain age (to be determined), or hypertension.
- We should not depend on claudication as a warning sign to get people to go for screening. For the sedentary patient with no warning signs, we lose an opportunity to prevent disease.
- Screening should be low cost to make it attractive to older people.

Campaigns To Learn From

- There are parallels between a PAD campaign and other health campaigns that focus on the need for prevention and a critical event as a wakeup call.

- Focus groups conducted 5 years ago on screening for colorectal cancer found very low public awareness of the benefits. Since then, awareness has greatly increased (in part due to Katie Couric's activity as a spokesperson).
- The Sun Smart program in Australia provides screening for melanoma and, over 20 years, has helped to reduce the prevalence of this disease. There are efforts to bring this campaign to the United States, but because risk is lower here, the message is less well-received. We should use the Sun Smart's prototype (Slip! Slop! Slap!). It was noted that Australians have also embraced the Society of Interventional Radiology's Legs for Life program.
- The Society of Interventional Radiology's Legs for Life screening program has three components: Know your ABI, abdominal aortal aneurysm (AAA) screening, and Stroke Check (checking risk factors for stroke and CAD).
- The Heart Truth campaign (see p. 12) also can be used as a model.

Messages for Patients

- We need a consistent message delivered in different ways. If the message focuses on symptoms, we will miss between 50 and 90 percent of patients who would benefit from screening.
- We need an attention-getting message to motivate people to get screening tests. Stress the importance of early diagnosis and treatment in saving limbs and lives. We can't depend on claudication as a motivating event.
- The message should be simple: ABI is one of your best tests. The public gets confused by too many tests (for high blood pressure, cholesterol, CRP, carotid ultrasound, etc.).
- Focus on basic messages, such as leg pain and poor circulation. Leg pain needs to be checked. It's not just a sign of aging.
- The following messages emphasize PAD as a marker:
 - If you have PAD, you're at risk for a major event (heart attack, stroke, or death).
 - Some patients with PAD may have disabling symptoms that could affect quality of life. This can be treated.
- Appeal to the elderly population: (e.g., Give me a few minutes, and I'll check your circulation.) The ABI or ultrasound can check for disease.
- Asymptomatic patients need to know that there is value in diagnosing PAD. There are treatments (drugs, surgery) for PAD.
- A low leg blood pressure can predict risk of heart attack and stroke. What's your leg blood pressure?
- Patients with a positive screening test need a strong message to encourage lifestyle change for reducing risk factors.
- Stress the importance of the ability to walk without pain.
- Piggyback messages about PAD onto messages for heart attack and stroke.

Messages for Primary Care Physicians

- Reducing risk factors for CAD will reduce risk for PAD.
- PAD is the most significant risk factor for CAD and CVD (e.g., better than cholesterol level).
- Vascular nurses can provide screening.

Delivering the Message

- We should reach the community through the correct delivery mechanism and messengers, such as faith-based groups and others who can communicate effectively to racial/ethnic groups.
- Celebrities would be useful in getting the message out.
- In North Carolina (which is in the stroke belt), patients are aware of “brain attacks.” They need to be informed about the warning signals of a “leg attack.” Because of interest in NASCAR racing, the public might identify with the concept of a car that is not working well. NASCAR drivers could serve as spokespersons.
- People at a certain age (40 or 50) should get a card with all their test results.

What To Call PAD

- Call it peripheral arterial disease, not PAD. PAD is a term for doctors, but we could introduce the term for the public.
- Call it blocked leg arteries (the term patients use) or leg pain due to vascular disease.
- Call it by any one name (e.g., “PVD”) to avoid confusion with other terms.

Ideas for the Campaign

- Call the campaign “One Step Ahead.”
- By holding screenings during events such as Stroke Month, activities could continue to raise awareness of vascular disease throughout the year.
- Provide rotating patient education about PAD. At one time it could focus on PAD; at another time it could focus on CVD or CAD. Cigarette packs could have circulatory warnings.

Laying the Foundation for a PAD Public Awareness Campaign

Mr. Beall led this part of the discussion on priority target audiences and objectives for the campaign.

Target Audiences

- Persons at highest risk (primary prevention): all persons ages 65 and older, persons 50 and older with risk factors (smokers, diabetics), any patient with leg pain or sores.
- Persons who have had other CVD events (secondary prevention). Some participants thought that these patients should not be the focus because they are already being treated, but others said that some patients with CVD are not receiving followup care.
- Primary care physicians (the gatekeepers).
- Family members (who could reach the elderly). A message could be: “If you or your loved one has had a heart attack, stroke, leg pain . . .”
- Don’t exclude younger at-risk individuals. Provide age-appropriate messages for school-age children to increase understanding of vascular disease.
- Minority groups with disparities. African Americans and Hispanics with diabetes have an amputation rate that is three times higher than that of whites.
- The news media and policymakers. Having Larry King or Oprah discuss the topic would provide a lot of attention.

Objectives

- Clearly focus on prevention in people who do not have PAD.
- Focus on diagnosis of symptomatic disease (leg pain/fatigue) in patients who have not been diagnosed.
- Identify people with PAD or those who are at risk. (Other programs identify people with atherosclerosis.) Tell them that treatment will prevent stroke and MI.
- Build awareness of what the disease is and what can happen if it is not diagnosed/treated.
- Explain the benefits of early diagnosis. Stress that PAD is treatable.
- Piggyback onto other CVD awareness programs, which share the same process with PAD.

WORKING LUNCH: *THE HEART TRUTH*—AN ILLUSTRATIVE NHLBI CASE STUDY

Ms. Jenkins described *The Heart Truth*, a national awareness campaign focusing on heart disease in women. This effort began when the NHLBI convened a women's heart health education strategy development workshop in March 2001. The workshop report laid the groundwork for the campaign and is available at <http://www.nhlbi.nih.gov/health/hearttruth/index.htm>.

The Heart Truth is cosponsored by the NHLBI, the AHA, the Department of Health and Human Service's Office on Women's Health, and WomenHeart: the National Coalition for Women With Heart Disease. The primary audience is women ages 40–60, primarily those who have at least one risk factor for heart disease and are not taking action for heart health. Some interventions target minority audiences.

The objective of *The Heart Truth* campaign is to increase awareness that heart disease is the #1 killer of women. The core messages for the campaign are as follows:

- Heart disease is the #1 killer of women. Heart disease can significantly decrease quality of life, and it can lead to a heart attack, disability, and death.
- The risk factors for heart disease are high blood pressure, high blood cholesterol, smoking, diabetes, overweight, physical inactivity, age (over 55 for women), and family history. Having just one risk factor raises your risk for heart disease. Having multiple risk factors multiplies your risk.
- Take action today. Talk with your doctor (or nurse). Find out your risk. Take action today to lower your risk. Learn more.

In addition to reaching out to women directly, the campaign is engaging health care providers and nontraditional corporate partners in ongoing efforts that underscore the importance of heart disease risk factor detection and education.

To help plan the campaign, 16 focus groups were conducted (4 with African American women). Most women were generally aware of the risk factors for heart disease but were surprised to learn that heart disease kills significantly more women than breast cancer. They were engaged by concepts featuring women like themselves, and they were receptive to the analogy of caring for one's outer and inner selves.

Strategies for the campaign include national public service advertising and media relations to build broad awareness; national partnerships at regional and local levels to extend the

campaign's reach and messages; and materials to equip community leaders to reach women with direct interventions.

The creative approach is to leverage women's interest in their outward appearance to focus on what is inside (e.g., their heart). Personalized campaign messages are relayed by real women and their stories. The *Heart Truth* Web page at <http://www.nhlbi.nih.gov/health/hearttruth> includes the women's stories (Stories From the Heart) as well as information and links to other sites. A hard-hitting, edgy approach is used to deliver a wake-up call to women.

The campaign launched in February 2003 with the "Red Dress Project," a partnership with the fashion industry that is designed to build a constituency and a memorable icon for women (like the pink ribbon for breast cancer). Nineteen top designers have designed and donated red dresses to the campaign; a leading accessory designer has created a pin; and Mercedes-Benz has developed a custom red coupe vehicle to be used in the campaign. These were debuted at a press event at Fashion Week in New York (February 7–13, 2003) along with messages about women and heart disease. Sponsors are being sought to take the dresses around the country to reach more women. The Red Dress Project appeared in Washington, DC, at the Spring Gala of the Society for Women's Health Research.

The "Red Dress" print ad says: "Heart disease doesn't care what you wear" and includes the message that heart disease is the #1 killer of women. The campaign includes two television public service announcements (PSAs) and five radio PSAs using two approaches: one says "If you could see inside yourself, you would talk to your doctor about heart disease." The other tells the stories of women who have heart disease. Campaign materials include an easy-to-read brochure in English and Spanish, a speaker's kit with a video, three fact sheets, and a revamped *Healthy Heart Handbook for Women*.

In response to a question about the costs of such a campaign, Ms. Jenkins said that the value partners bring to a campaign like this can be in the form of services or in-kind donations. For example, for *Heart Truth*, Mercedes Benz has donated the services of a high-priced fashion photographer, and Fashion Week is paying for the event in New York. Other organizations will provide additional resources as the Red Dress makes its way across the country.

Mr. Beall added that the campaign has included formative research, talking to women, and an evolution of objectives and strategies. The main goal is to increase awareness. The AHA will implement behavior-change programs to complement this campaign. Process measures will be used to measure changes in women's knowledge/attitudes over time, and the AHA will conduct surveys to assess changes in behavior.

Participants suggested that the type of approach used for *The Heart Truth* campaign might be applicable for a PAD campaign, because both are concerned with raising awareness of a disease that can be treated.

DEVELOPING AND MARKETING A PUBLIC AWARENESS CAMPAIGN (Ogilvy Public Relations)

Ms. Jenkins began by raising several issues that should be kept in mind while creating messages and materials.

- A strong creative platform is needed to get attention and be memorable. Typically, four to eight creative approaches are developed, followed by focus group research to identify what works best.
- The campaign brand (the graphic look and feel) should be simple, memorable, and consistent.
- Messages must be simple and have a unifying theme.
- Formats must match audience needs (e.g., with respect to age, literacy, and constraints).
- The campaign should consider distribution channels as well as partner needs.

Ms. Jenkins then showed three examples of campaign brands: NHLBI's *Star Sleeper* campaign (featuring Garfield the cat), which is designed to encourage kids to get at least 9 hours of sleep each night; the National Cancer Institute's *5 A Day For Better Health* campaign, which encourages people to eat more fruits and vegetables; and the Centers for Disease Control and Prevention's *Choose Your Cover* campaign, which targets teens and young adults with messages that should result in a decrease in the incidence of skin cancer.

Potential partners for public awareness efforts include government and private-sector nonprofit organizations, community organizations and programs, worksites, health care providers, retailers and pharmacies, corporate partners, the media, and consumers. Ms. Jenkins noted that Ogilvy's "Guide to Working With Your Local Media" is included in the meeting packet.

Technology can be used to maximize reach and impact by linking Web sites and creating Web communities. Internet media relations help to place stories that provide content to other sites. HTML-rich e-mails and PDF-file brochures are ways to distribute information without a printing budget. "Viral marketing" is the use of listservs and e-mail addresses for passing on information.

Tools to measure changes in awareness include baseline data that can be compared with survey data collected at later points in time; qualitative data from focus groups and interviews; formative research to test messages with target audiences; input from partners to ensure that strategies meet partner needs; and process measures to assess the reach and effectiveness of tactics.

SMALL GROUP ACTIVITY: CREATING A DRAFT FRAMEWORK FOR A PAD PUBLIC AWARENESS CAMPAIGN

The participants were divided into four small groups to address four different audiences. (See Attachment A for summaries of the individual meetings.)

Reports From Small Groups

After these breakout meetings, one member of each group presented a summary of the main points that were made. Each group considered objectives, messages, and potential strategies. Below are the summaries for each group.

Group 1. Target Audience: Patients/Consumers Ages 50–64 With One or More Risk Factors for PAD, Undiagnosed or Asymptomatic (Dr. Peter Sheehan)

Objectives

- Develop a broad public awareness message about the relevance and importance of PAD and the benefits of treatment.
- Encourage people to assess their risk of PAD.
- Emphasize PAD and then link it with other CVD and events.

Messages

- PAD is a common disease and a major risk factor for MI, stroke, and death.
- People at risk for PAD are smokers (both current and former) and persons with diabetes, high blood pressure, high cholesterol, and a family history of CVD.
- PAD is a treatable disease. Don't wait for symptoms. See/talk with a physician.
- Maintain the ability to live an active, healthy life. (This is a positive message; giving an asymptomatic population bad news might create a barrier and lead to denial.)
- What takes minutes could add years to your life. If you want to keep active, have the ABI test.
- Slowing down is not a natural consequence of aging.

Strategies

- Launch an aggressive media awareness campaign. Get the national media to report initiatives and recruit celebrity spokespersons (such as Jack Nicklaus and other athletes).
- Hold community awareness campaigns through civic and faith-based organizations. Disseminate messages through beauty salons, grocery stores, pharmacies, bus ads, and billboards.
- Form partnerships with AARP (formerly the American Association of Retired Persons), patient groups (such as the VDF), pharmaceutical companies, pharmacies, and grassroots organizations and constituencies.
- Give patients “scorecards” to carry in their wallets to record ABI results and other relevant tests.
- Create a presence at sport events, such as NASCAR races, to emphasize the theme of an active lifestyle. Establish tie-ins with health clubs.
- Distribute education materials at physicians' offices and clinics.
- Link with other disease management programs, such as those for diabetes. Place articles in health newsletters.
- Develop a theme or brand for the campaign.
- Utilize the Internet to disseminate information.
- Work with the National Committee for Quality Assurance's (NCQA) Health Plan Employer Data and Information Set (HEDIS) to get the ABI test accepted as a codeable performance measure.
- Educate physicians.

Group 2. Target Audience: Men and Women Ages 50–64 Who Were Recently Diagnosed With CAD (Dr. Peter Gloviczki)

Objectives

- Increase awareness of PAD. Silent or asymptomatic disease may be present in one of three patients. Define PAD as blocked arteries in the legs (PAD doesn't tell a lot to a lay audience).
- Educate physicians to diagnosis PAD by taking pulses and giving the ABI test (independent of symptoms).
- Develop a treatment plan, including exercise, drugs, angioplasty/stents, and surgery.

Messages

- If you have leg pain or fatigue during walking, you may have blocked arteries in your legs.
- Ask your doctor to check your pulses and measure your ABI.
- If you treat your heart, you help your legs.
- You don't have to live with leg pain.
- Blocked arteries in your legs can be treated by exercise, drugs, angioplasty, or surgery.
- Don't neglect blocked arteries in your legs.
- Save your life. Save your legs.

Strategies

- Include messages about PAD in hospital discharge instructions for patients with CAD. Evaluate patients for PAD before discharge.
- Encourage physicians to check pulses, give ABI exams, and provide educational material to patients. Nurses could also provide education about PAD.
- Use other channels to distribute patient education materials, (e.g., the lay press, other media, and organizations such as the AARP).

Group 3. Target Audience: Patients Age 65 and Older Who Have Heart Disease (Dr. Emile Mohler III)

This group felt that its target audience might not be the focus of the PAD campaign because these persons are already receiving medical care. However, some patients might have claudication without bringing it up to the cardiologist.

Objectives

- Look at awareness and identify risk. Use the term peripheral arterial disease or PAD once it is defined. (Other acronyms, like HIV/AIDS and COPD, are widely used and understood.)
- Educate about diagnosis.
- Focus on global treatment of the disease process.

Messages

- Make sure you mention your leg symptoms to your cardiologist.

- See your primary care doctor for a screening test. (However, physicians might not be equipped to handle an onslaught of these patients.)
- Bad news/good news: You could lose a leg or have a heart attack or stroke with PAD. But the good news is that it is treatable; medications and other therapies are available.
- High blood pressure in the arm is bad; low blood pressure in the leg is also bad.
- Don't be "de-feeted" by PAD.
- Take care of your legs, and you will also take care of your heart.

Strategies

Channels for delivering the messages include:

- The media (such as the Oprah show)
- The Internet
- Pharmacies, pharmaceutical companies
- Doctors' offices, nurses
- Celebrity spokespersons
- Fundraisers and walks—"Walk for those who can't."
- Senior centers, faith-based organizations

Group 4. Target Audience: Persons Ages 65 and Older With Risk Factors for PAD but Who Are Undiagnosed (Dr. Robert Rutherford)

Objectives

- Build awareness about what PAD is—for both patients and their relatives. Define PAD as blocked leg arteries. Stress that it is treatable.
- Explain the signs and symptoms of PAD (walking pain, rest pain, lesions); the consequences of the disease (MI, stroke, loss of limb, death); and the benefits of early diagnosis (in terms of limbs, life, and quality of life).
- Build awareness of simple, inexpensive diagnostic tests. Explain the ABI test.
- Create expectations of what can be done through screening, diagnosis, and treatment. Encourage people to ask their doctors for the ABI test.
- Make people aware of screening. Empower them to be their own advocates to get and promote ABI screening.
- Develop policy on screening for PAD.
- Make people aware that lifestyle changes can control risk factors.

Messages

- A three-pronged message: disease consequences are huge; screening is easy and simple; treatment is effective.
- PAD is a strong risk factor for heart disease, stroke, and amputation (greater than high blood pressure and high cholesterol combined).
- One of two persons with PAD will have a major event (e.g., MI).
- You may not know you have PAD. You may be at risk for heart disease, stroke, and amputation. What you don't know *can* hurt you. (PAD is a silent killer.)
- Know your ABI. Know your number.

- Suggested slogans/themes are:
 - Save a Leg. Save a Life. (Get a Life)
 - One Step More. One Step Ahead.
 - Get the Lead Out. Get a Life.
- PAD is blockage of leg arteries. (Use a graphic to illustrate the blockage of arteries by plaque.) You can't see what's happening inside.
- Early diagnosis and simple measures can save limbs and lives.
- Walking can save your legs and improve your symptoms.
- Help us to help you and others. Help yourself and help others: Ask your Congressional representative to support ABI screening.

Strategies

- Use the media—for example, PAD patients on talk shows, storylines with PAD on shows like ER or soap operas, articles in national and community newspapers.
- Enlist hospitals as partners.
- Hold screening events at health fairs, couple screening with walks.
- Distribute pamphlets and other information through senior centers and churches.
- Use PSAs and other advertising, direct mail, and the Internet (but no junk e-mail).
- Distribute information through professional societies and health care providers who see older patients, such as podiatrists, geriatricians, cardiologists, family physicians, and internists.
- Recruit high-profile spokespersons.

SUMMARY AND NEXT STEPS (Dr. Alan T. Hirsch and Dr. Peter Gloviczki)

Dr. Gloviczki acknowledged the participants for all their work, Dr. Hirsch for his leadership, and the NHLBI for its workshop.

Dr. Hirsch stated that the VDF has successfully served as a unique, inclusive public-professional coalition with the goal of promoting vascular health, but a new stage has clearly been reached. Now there is consensus that future vascular educational efforts must be expanded to include the input of primary care colleagues. This expansion is needed to ensure that educational messages on PAD are ones that will help the public seek care and help primary care providers deliver the care.

The immediate goal is to build on the efforts of individual organizations in order to create a larger, more effective effort. In creating a national campaign, the participants clarified their understanding that both individual societal and national efforts would be furthered by using PAD-specific language and terms. For example, there may be benefits from the use of descriptive terms, such as “blocked arteries.” A national educational effort might also teach the public acronyms such as PAD, since there is widespread understanding of such acronyms as HIV, AIDS, and COPD. Tension will always exist between the potential breadth and required focus for a campaign. Resolution of this tension cannot be accomplished at a single meeting, but will be resolved with time, reflection on resource constraints, and the contributions of organizations with experience creating health awareness campaigns. Dr. Hirsch echoed the

unified concern of all meeting participants that the role of PAD patients and the public in this campaign must be maintained and, ideally, expanded.

Dr. Hirsch thanked the participants for their hard work and reminded them that the meeting would resume the next day.

The meeting was adjourned for the day.

**ATTACHMENT A:
BREAKOUT SESSIONS:
CREATING A DRAFT FRAMEWORK FOR A PAD PUBLIC AWARENESS
CAMPAIGN**

Group 1. Target Audience: Patients/Consumers Ages 50–64 With One or More Risk Factors for PAD, Undiagnosed or Asymptomatic

Mr. Tom Beall facilitated this breakout session. The group recognized that most people in this age group are still employed but are starting to have more health problems. They want an active lifestyle and freedom from adverse events.

Objectives

- Make this audience aware of PAD. People ages 50 and older with one risk factor need to be aware of their risk for PAD. They need to recognize that PAD is a common disease in their age group and that it is a serious but treatable disease.
- Create a desire for information about the risk of PAD and its warning signs. People in this group need to know the risk factors for PAD and seek screening. Just as they know they need a colonoscopy, they need to know that PAD can be diagnosed by a regular physical exam that includes a simple test: the ABI.
- Focus on PAD. (Some participants suggested talking about vascular disease or atherosclerosis, but others felt that the focus needs to be on PAD.) Once PAD is diagnosed, the patient can be examined for evidence of CVD. Making the connection between PAD and heart attack/stroke will make people pay attention.
- Convince at-risk people to have the expectation that their physician will provide testing. Get patients to take responsibility for their own health care.
- Educate physicians to screen patients for PAD. (We can't tell people to seek screening if it is not available.) Physicians are not convinced that PAD is a marker of risk. Consumers can influence physician practice by asking to know their ABI. It was noted that physicians might take offense if patients bring health information to the office.

Strategies

- Use a two-pronged approach: (1) a broad message to reach everyone, and (2) a message focusing on a subset of people, asking them to take further action.
- Reach the general community and underserved minority populations through churches, civic organizations, TV shows, billboards, and bus ads. Potential partners include the AARP, patient advocacy organizations, grassroots organizations, the pharmaceutical industry, and sports teams.
- Reach physicians through their professional societies.
- Conduct an aggressive media campaign. Spokespersons might include an elderly celebrity or a sports figure—for example, NASCAR racers or Tiger Woods with his father.
- Provide outreach education and educational materials through pharmacies, supermarket chains, beauty parlors, large worksites, health fairs, health clubs, and physicians' offices. Physicians may not have the time to do screening; perhaps pharmacies and grocery chains could do this.

- Give patients a “report card” with their cholesterol, blood pressure, and ABI numbers.
- Influence payers to reimburse for screening. Advocate including the ABI as part of a routine examination. This would facilitate adoption by health maintenance organizations (HMOs). (A code for such screening was discontinued about 10 years ago.)
- Try to include PAD in NCQA programs, which include a diabetes recognition program and (soon to be implemented) a heart disease and stroke recognition program based on secondary prevention measures.
- Piggyback onto CVD risks and screenings. Link PAD with CVD.
- Encourage HMOs and hospitals to identify patients at risk for PAD and to include information about PAD in their mailings.
- Place information about PAD on the Internet (e.g., on the opening MSN Web page). Many people in the age range 50–64 are computer-literate.
- Promote screening for PAD to discover undiagnosed, untreated patients. Some participants asked whether there is evidence that screening changes outcomes.
- A potential “brand” for the campaign is “One Step Ahead” (with a graphic of legs walking).

Messages

- Everyone with symptoms benefits from treatment. (Ten years ago, the message was that people with mild-to-moderate PAD do not need treatment.) Provide a message of hope rather than a message of fear.
- Know your ABI. PAD is a major risk factor for MI, stroke, amputation, and death. Diagnosis takes minutes but could add years to your life.
- PAD may be the only signal that you are at risk for heart attack and stroke. Preventing PAD can prevent heart attack, stroke, or disabling loss of legs.
- PAD is a silent killer. Each year, 5 percent of patients with PAD will have a heart attack, stroke, or will die.
- PAD is treatable.
- Slowing down is not part of aging (image of person slowing down on the golf course). It may be a sign of PAD. You can prevent CVD, remain active, and maintain your quality of life by preventing and treating PAD.
- Take control of your health.

Group 2. Target Audience: Persons Ages 50–64 Who Were Recently Diagnosed with CAD

Ms. Susan Shero facilitated this breakout session. The group noted that patients in this target audience may not have PAD symptoms because they have adjusted their lives to be very inactive. Some patients are at higher risk than others.

Objectives

- Ensure good quality of life for patients’ next decades.
- Educate patients about PAD. Tell them that they are likely to have PAD.
- Tell patients about the association between leg pain/fatigue/burning and heart disease. If they have leg pain, they need an ABI. (Another participant thought that patients should have an ABI independent of symptoms; however, there is no reimbursement for asymptomatic ABI.)

- Identify those patients with greater risk—such as diabetics and smokers—who need ABI screening earlier.
- Screen at-risk patients. An ABI should be part of cardiac rehabilitation.
- Treat CVD/PAD risk factors.
- Inform patients that they should walk for health.
- Get the NHLBI to sponsor research on PAD to see if there is regression of disease with risk factor reduction.

Strategies

- Distribute patient education materials through health care providers such as cardiologists, internists, endocrinologists, and diabetes educators.
- Provide information in hospital discharge instructions.
- Use followup caregivers, such as staff at cardiac rehabilitation centers and dietitians, to help patients make behavioral changes that will modify risk factors.
- Place articles in the lay press (magazines, newspapers) and in publications of the AARP and similar organizations.
- Use other channels, such as celebrity spokespersons who have PAD, health fairs and screenings, worksites, the National Rifle Association, and NASCAR. (Use the analogy of a fast moving car and a clear artery.)
- Recruit corporate sponsors such as Nike and Reebok. Perhaps a special shoe design could serve as the symbol for the campaign (like the red dress for *The Heart Truth* campaign).
- Utilize the Internet to distribute information. Make sure the information is searchable; for example, searching for “leg pain” might be more productive than searching for “PAD.”
- Include PAD in the medical school curriculum.
- Disseminate PAD messages through the Bureau of Primary Health Care, Health Resources and Services Agency, which runs community health centers to reach the underserved. In addition, the CVD Collaborative is a disease-management paradigm that is disseminated through the community health centers. Other Federal agencies that might increase awareness include the Veterans Administration, the Indian Health Service, and the Office of Disease Prevention and Health Promotion. Exercise is one of the Surgeon General’s top three priorities.
- Educate schoolchildren to increase general awareness.

Messages

- If you have heart disease, you are at high risk (a 1 in 3 chance) of having blocked arteries in your legs. A simple test can diagnose this problem.
- If you have leg pain, you may have blocked arteries in your legs.
- Pain, burning, or fatigue in your legs is not normal. You don’t have to live with it.
- Ask your physician for a vascular assessment including a leg pulse test and an ABI. (It was noted that the ABI is hard to perform on diabetic patients.)
- If you treat your heart risk factors, you will help your legs. You need to exercise if you have had CVD. Exercise therapy is more efficacious than pills. Add the topic of PAD to messages about exercise.
- PAD is treatable with exercise, drugs, or surgery.
- Save your life; save your limbs. Treatment for your heart is also good for your legs.

- Controlling risk factors (e.g., by exercising, smoking cessation) can slow the progression of PAD as well as CVD.

Group 3. Target Audience: Patients Age 65 and Older Who Have Heart Disease

Ms. Ellen Sommer facilitated this session. The group noted that persons in this age group are most likely to have PAD. Retired people want to enjoy their retirement, and they fear loss of mobility. Management of pain is another issue for this group. This target audience is already being treated for heart disease. They may otherwise feel healthy but are starting to slow down.

Objectives

- Define the primary target audience, with whom the most progress can be made. This group might be patients who had an MI some time ago and who are not seeing a doctor regularly.
- Increase awareness of PAD as a disease and not just the consequence of old age. Get people to recognize symptoms and seek treatment. Prevention is optimal, but the focus should be on recognizing symptoms. Focus on smokers.
- Connect quality of life with preventing/treating PAD.
- Provide a simple definition of PAD (“not enough blood to the legs”), its symptoms, and potential outcomes. Decide what to call the disease. Some options are PAD, peripheral arterial disease, and lower extremity arterial disease (LEAD). Do people understand “peripheral”? “Get the lead out” could be a slogan. Other acronyms, such as AIDS and COPD, are used widely and understood.
- Educate physicians to give the ABI test. Make it feasible for them to do it by changing national reimbursement policies. Sponsor a demonstration project to show that early diagnosis is effective. (It was noted that Medicare requires definitive data to make changes in payment policies and that the CMS does not reimburse for supervised walking programs.)
- Identify sources of information for people with symptoms.
- Get people to have expectations for the ABI test and treatment. (Their doctor may tell them to wait and see.)

Strategies

- Distribute pamphlets in doctors’ offices. (This age group may not use the Internet as much as younger persons.)
- Use nurses to provide information.
- Identify channels such as the AARP, *Prevention Magazine*, pharmacies, senior centers, nursing homes, retirement communities, the National Older Women’s League, National Council on Aging (NCOA), and ADA.
- Recruit sponsors such as pharmaceutical companies, golf courses, the Senior PGA, and organizations concerned with walking.
- Recruit celebrity spokespersons in the target audience’s age group—e.g., Bob Dole, Falcon’s coach Dan Reeves. Identify persons who had PAD, such as Carroll O’Connor (Archie Bunker).
- Use blue suede golf shoes as a symbol (like the red dress for women’s heart disease).
- Partner with professional organizations. Place articles about PAD in their publications. Include PAD in continuing medical education.

- Get the media to cover PAD. Give people a phone number where they can order a PAD scorecard.
- Hold a walk or run for PAD.
- Hold screening programs or join with other groups that offer screenings. The Legs for Life screening programs included taking a history and giving a brief physical exam and ABI. These were conducted in partnership with other groups, with media coverage. The Partner's Program offered screening to smokers and diabetics older than age 50. A letter went back to the primary care physician (PCP), and participants were counseled to see their doctor. Carotid ultrasounds rather than ABI could be used to screen patients who have already had coronary artery bypass surgery.

Messages

- One cause of leg pain is PAD. Talk to your vascular doctor or cardiologist about your leg symptoms. You need to get an ABI test.
- Scenario for video: Two people leaving the cardiologist's office: One says to the other: "Did you tell him about your leg pain?" Later: "I told him and he took a blood pressure of my legs and diagnosed PAD."
- Ask your doctor to check your leg blood pressure. Low blood pressure in your leg is bad and can influence survival.
- PAD increases your risk of heart attack, stroke, and losing a leg. But PAD can be prevented and treated.
- Maintain your independence and an active lifestyle. Keep in circulation. Getting old can be fun; don't let PAD stop you. Stay independent.
- Prevent disability and death. Prevent heart attack and stroke.
- If you have smoked cigarettes, you increase the risk of losing your leg.
- Call 1-800-PAD for information and resources.

Group 4: Persons Ages 65 and Older With Risk Factors for PAD but Who Are Undiagnosed

Ms. Pamela Jenkins served as facilitator. The group felt that persons who should get an ABI include all people age 65 and older with risk factors (smoking, diabetes, high blood pressure, high blood cholesterol, other vascular event, family history, and leg symptoms). The critical audience to reach is the group of sedentary persons.

Objectives

- Explain what PAD is: blocked arteries caused by plaque buildup. Describe the consequences of PAD (loss of limb, loss of life) and the benefits of early diagnosis. Make people aware of PAD-specific risk factors and the signs and symptoms of the disease.
- Raise awareness and create expectations about screening and treatment that are available, appropriate, and cost-effective. Inform the public about the easy, painless, and inexpensive test for PAD: the ABI.
- Encourage patients with risk factors to visit their doctor and ask for screening. Get patients to ask their doctor for the ABI test and to know their ABI number. This will get them plugged into the health care system.

- Empower people to be their own advocates. This can affect physician behavior. (But what happens if their doctor does not provide screening or does not know they can be referred to a vascular specialist?)
- Encourage patients to make lifestyle changes to reduce risk factors.
- Educate physicians and health care agencies.
- Achieve Medicare reimbursement for screening. Influence policy change.

Strategies

- Use the media (radio, television, national and local newspapers, magazines) to spread the messages.
- Link to other Web sites. Use HTML-rich e-mails and viral marketing. (Some companies will donate money for each hit on their site.)
- Place PSAs on radio and television. Ask pharmaceutical companies to sponsor PSAs.
- Hold screening events and walks at health fairs. Hold an event on Capitol Hill.
- Distribute materials through senior centers, churches, and other community organizations.
- Partner with professional societies of caregivers who see older patients, such as podiatrists, geriatricians, and cardiologists. Ask these providers to distribute patient-education materials at their offices.
- Distribute information through the Association for Cardiac and Pulmonary Rehabilitation's 3,000 centers that offer patient education classes. Other venues might be organizations that offer support groups, such as the ADA, groups of diabetes educators, and so on.
- Feature PAD at a local forum such as a health lecture series. Form a speakers group from participants at this meeting.
- Enlist celebrities to act as spokespersons. Identify patients who can give testimonials.
- Try to include stories of patients with PAD on television shows (e.g., ER or soap operas) or on medical talk shows or the Discovery Health cable channels.

Messages

- Do you know your ABI?
- Leg pain caused by peripheral arterial disease (PAD) is not a normal sign of aging. PAD is blocked arteries or bad circulation in the legs. (Some participants did not like the term peripheral; they suggested defining PAD as leg artery disease.)
- You may be at risk for heart attack, stroke, and amputation.
- Save your legs. Save your life. (Show older healthy people being active.)
- What you don't know can hurt you. Illustrate with a blocked artery.
- Do you get leg pain when you walk or at night? Leg pain is not a normal sign of aging. You may have PAD. Talk to your doctor. For more information, call _____. Or check our Web site _____ for a list of vascular physicians in your area.
- Did you know that PAD is a greater risk factor than high cholesterol for heart disease and stroke? It can lead to immobility and loss of limbs. Thirty percent of people with PAD will have a heart attack, stroke, or death. (Show a risk-factor horse race or car race, with PAD coming in first.)
- Most patients with PAD can be treated simply and painlessly (a hopeful message). Treatments include lifestyle change and walking—things you can do for yourself.

- Early diagnosis and simple treatment/measures can save limbs and lives. A simple, painless test can diagnose PAD.
- Walking can decrease your symptoms.
- Help yourself; help others. Ask your Congressional representative to sponsor legislation for reimbursement for ABI screening.

**ATTACHMENT B:
AGENDA**

8:00–8:30 a.m.	Registration and Continental Breakfast	
8:30–8:45 a.m.	Welcome/Opening Remarks	Dr. Alan T. Hirsch Dr. Claude Lenfant
8:45–9:05 a.m.	PAD: The Science Base For Messages <ul style="list-style-type: none">• What is PAD?• How common is it?• Who is at risk?• Why does PAD need to be addressed?• What are the barriers and facilitators to getting PAD diagnosed, treated, and managed?	Dr. Mark A. Creager
9:05–9:30 a.m.	Overview: Developing Strategies for a Public Awareness Campaign <ul style="list-style-type: none">• What needs to be done to raise the societal importance attached to PAD?• What can a public awareness campaign deliver?• The role of formative research• Identifying and analyzing target audiences, including assessment of barriers and facilitating factors for communicating with them• Reaching your target audience(s): communications channels	Ogilvy Public Relations
9:30–10:30 a.m.	What Do Patients and At-Risk Individuals Want To Know? (Facilitated Talk Show Format) <ul style="list-style-type: none">• Features 4–6 patients in a mini-focus group• Patients with PAD tell what they wish they had known; provide insight into what they would have needed to “hear” to take action• What kinds of messages are helpful/not helpful? Delivered by whom, where, when?• Discussion/Q&A	
10:30–10:45 a.m.	Break	
10:45 a.m.–12:00 p.m.	Full Group Discussion: Laying the Foundation for a PAD Public Awareness Campaign <ul style="list-style-type: none">• Analysis of patient minifocus group• Discussion of implications for PAD campaign• Goals, objectives, and audiences for PAD campaign	

12:00–1:00 p.m.	Working Lunch: The Heart Truth, an Illustrative NHLBI Case Study	
1:00–2:00 p.m.	Developing and Marketing a Public Awareness Campaign	Ogilvy Public Relations
	<ul style="list-style-type: none"> • Creating effective messages and materials • Building partnerships • Using technology to maximize reach and impact • Evaluation 	
2:00–2:15 p.m.	Break	
2:15–3:30 p.m.	Small Group Activity: Creating a Draft Framework for a PAD Public Awareness Campaign	
	<ul style="list-style-type: none"> • PAD messages for targeted audiences • Channels, activities, materials, partnerships to reach targeted audiences 	
3:30–4:15 p.m.	Reports from Small Groups	
4:15–4:30 p.m.	Summary and Next Steps	Dr. Hirsch and Dr. Peter Gloviczki

**ATTACHMENT C:
LIST OF ATTENDEES**

**NHLBI WORKSHOP ON PERIPHERAL ARTERIAL DISEASE (PAD):
DEVELOPING A PUBLIC AWARENESS CAMPAIGN**

January 15, 2003

American Association of Cardiovascular and Pulmonary Rehabilitation

Karen Lui, R.N., C.M.S.

American Association for Vascular Surgery

William R. Flinn, M.D.

Robert W. Hobson II, M.D.

Michele F. Lentz

American College of Cardiology

Kenneth A. Rosenfield, M.D., F.A.C.C.

American College of Physicians-American Society of Internal Medicine

Alan G. Wasserman, M.D.

American Diabetes Association

Peter Sheehan, M.D.

Gwen Twillman

American Heart Association

Robert O. Bonow, M.D.

Meighan Girgus

Rose Marie Robertson, M.D.

American Podiatric Medical Association

Kathy L. Balderson

Allison Brewer

American Radiological Nurses Association

Kathleen Gross, M.S.N., R.N., B.C., C.R.N.

Leslie Woodward, B.S.N., R.N.

Bristol-Myers Squibb Company

Dennis R. Cryer, M.D.

Peripheral Vascular Surgery Society

David H. Deaton, M.D.

Society for Vascular Medicine and Biology

Emile R. Mohler III, M.D.

Society for Vascular Nursing

Patricia Lewis, F.M.P., C.V.N.

Marge Lovell, C.V.N.

Society for Vascular Surgery

Peter Gloviczki, M.D.

K. Craig Kent, M.D.

Society for Vascular Ultrasound

George L. Berdejo, R.V.T.

Steve Haraczak

Society of Diagnostic Medical Sonography

Anne Jones, R.V.T.

Society of Interventional Radiology

Michael D. Darcy, M.D.

Tricia McClenny

Harvey M. Wiener, D.O.

Vascular Disease Foundation

Sheryl Benjamin

Mark A. Creager, M.D.

Alain Drooz, M.D.

Alan T. Hirsch, M.D.

Pamela McKinnie

Dennis Newman

Lea Anne Owens

Judith Regensteiner, Ph.D.

Robert B. Rutherford, M.D.

Kerry Stewart, Ed.D.

Jean White, R.V.T

National Heart, Lung, and Blood Institute

Claude Lenfant, M.D.

Stephen C. Mockrin, Ph.D.

Gregory J. Morosco, Ph.D., M.P.H.

David M. Robinson, Ph.D.

Susan T. Shero, R.N., M.S.

Ellen Sommer, M.B.A.

Invited Guests

Ron Burke

Edith Couterier, Ph.D.

Andrew Johnson
Ward Jones
George Lowrance
Jean Lowrance

Ogilvy Public Relations Worldwide Staff
Tom Beall, M.H.S.A.
Pamela Jenkins



*U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Heart, Lung, and Blood Institute
May 2003*