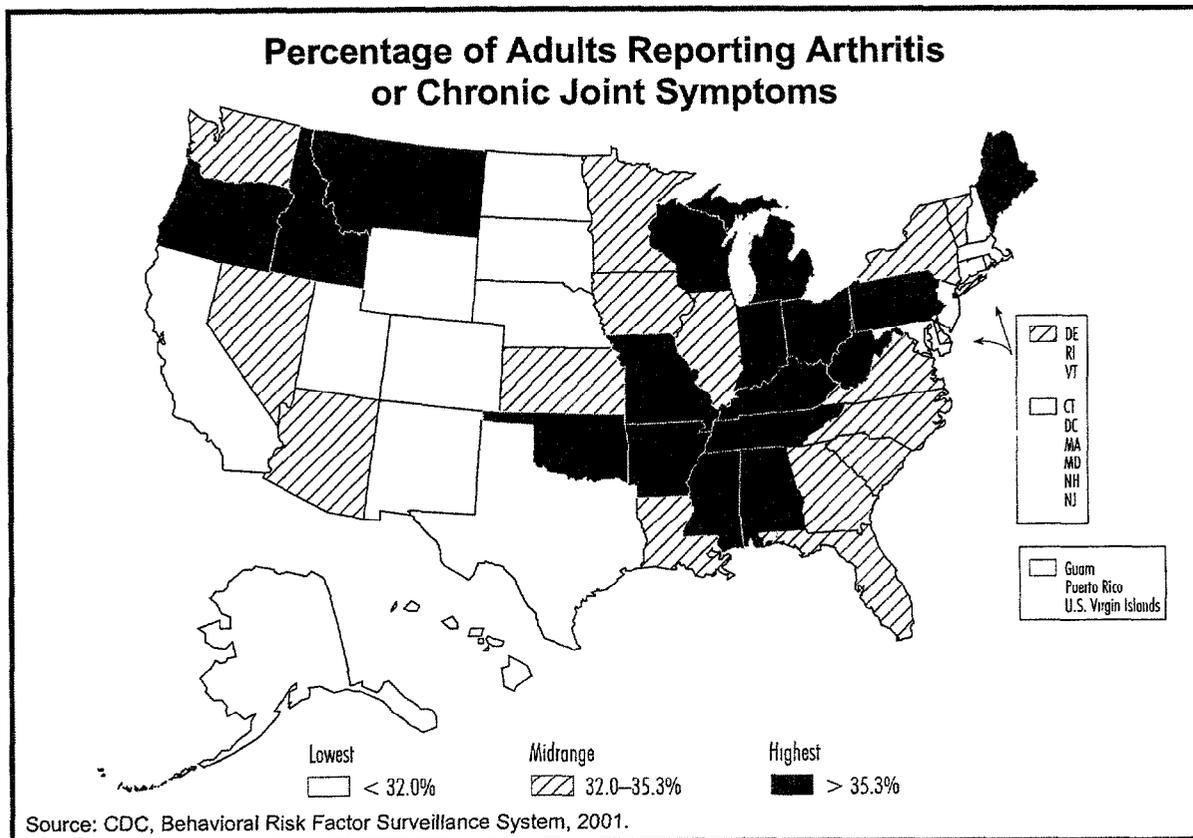


Exhibit 4

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EXHIBIT 4

Targeting Arthritis: The Nation's Leading Cause of Disability 2003



"Arthritis is the number one cause of disability and affects more people than ever imagined. It's time we, individually and as a society, fully realize the seriousness of arthritis and take action to limit its impact."

Tino Mantella
President and CEO
Arthritis Foundation, Atlanta, Georgia

Arthritis: The Nation's Leading Cause of Disability

What Is Arthritis?

Arthritis comprises over 100 different diseases and conditions. The most common are osteoarthritis, rheumatoid arthritis, fibromyalgia, and gout. Common symptoms include pain, aching, stiffness, and swelling in or around the joints. Some forms of arthritis, such as rheumatoid arthritis and lupus, can affect multiple organs and cause widespread symptoms.

Why Is Arthritis a Public Health Problem?

Arthritis or chronic joint symptoms affect nearly 70 million Americans, or about one of every three adults, making it one of our most common health problems. As the population ages, this number is likely to increase dramatically.

Arthritis limits everyday activities for millions of Americans. Arthritis and the disability it causes create huge costs for individuals, their families, and the nation. Each year, arthritis results in 750,000 hospitalizations and 36 million outpatient visits. In 1995, medical care for arthritis cost nearly \$22 billion, and the total cost, including lost productivity, topped \$82 billion, according to estimates from the American Academy of Orthopaedic Surgeons.

Arthritis is not just an old person's disease. Nearly two-thirds of people with arthritis are younger than 65 years. Arthritis affects young people and people of all

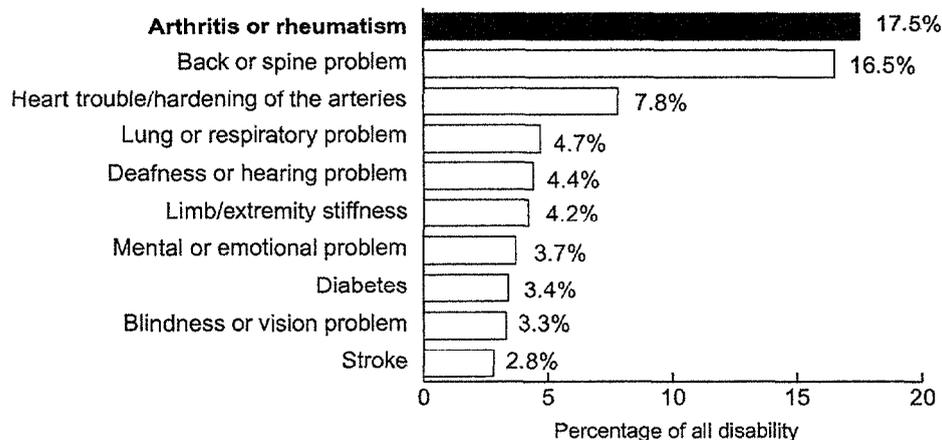
racial and ethnic groups; however, it is more common among women and older Americans.

What Can Be Done to Target Arthritis?

Fortunately, there are effective ways to not only prevent arthritis, but also to reduce the symptoms, lessen the disability, and improve the quality of life for people with arthritis.

- Weight control and injury prevention measures can lower the risk for osteoarthritis.
- The pain and disability that accompany arthritis can be decreased through early diagnosis and appropriate management, including self-management activities such as weight control and physical activity.
- Self-management education programs are also effective in reducing both pain and costs. One successful program, the Arthritis Self-Help Course, disseminated by the Arthritis Foundation, teaches people how to manage their arthritis and lessen its effects. This 6-week course reduces arthritis pain by 20% and physician visits by 40%. Unfortunately, less than 1% of the 70 million Americans with arthritis participate in such programs, and courses are not offered in all areas. More widespread use of the Arthritis Self-Help Course and similar programs could save money and reduce the burden of arthritis.

Most Common Causes of Disability* Among U.S. Adults, 1999



* People were considered to have a disability if they had difficulty with any one of a wide range of activities—for example, being able to lift or carry 10 lbs, climb a flight of stairs without resting, walk three city blocks, get in and out of bed, bathe, dress, prepare meals, or do light housework. In addition, people were considered to have a disability if they used a wheelchair, crutches, cane, or walker for more than 6 months, were limited in the ability to work at a job, or had any one of a number of other limitations. For the full definition of disability, see the source below.

Source: CDC. Prevalence of disabilities and associated health conditions among adults—United States, 1999. *MMWR* 2001;50:120–5.

CDC's Leadership in Arthritis Prevention and Control

What Are CDC and Its Partners Doing About Arthritis?

The *National Arthritis Action Plan: A Public Health Strategy* was developed by CDC, the Arthritis Foundation, the Association of State and Territorial Health Officials, and 90 other organizations to address the growing problem of arthritis. This landmark plan recommends a national coordinated effort to reduce pain and disability and improve the quality of life for people with arthritis. This plan forms the foundation of CDC's work in arthritis.

With about \$15 million in fiscal year 2003 funding, CDC is working with the Arthritis Foundation and other partners to implement the *National Arthritis Action Plan* and is supporting start-up activities in states. By carrying out the goals of the *National Arthritis Action Plan*, CDC and its partners will also be moving toward achieving eight arthritis-related objectives in *Healthy People 2010*, a comprehensive, nationwide agenda for promoting health and preventing disease.

What Activities Does CDC's Arthritis Program Support?

The primary goal of CDC's arthritis program is to increase the quality of life for people affected by arthritis. The program achieves this goal by supporting five key activities:

1. Building state arthritis programs.

States use CDC funding to strengthen partnerships with state Arthritis Foundation chapters and others, increase public awareness, improve their ability to

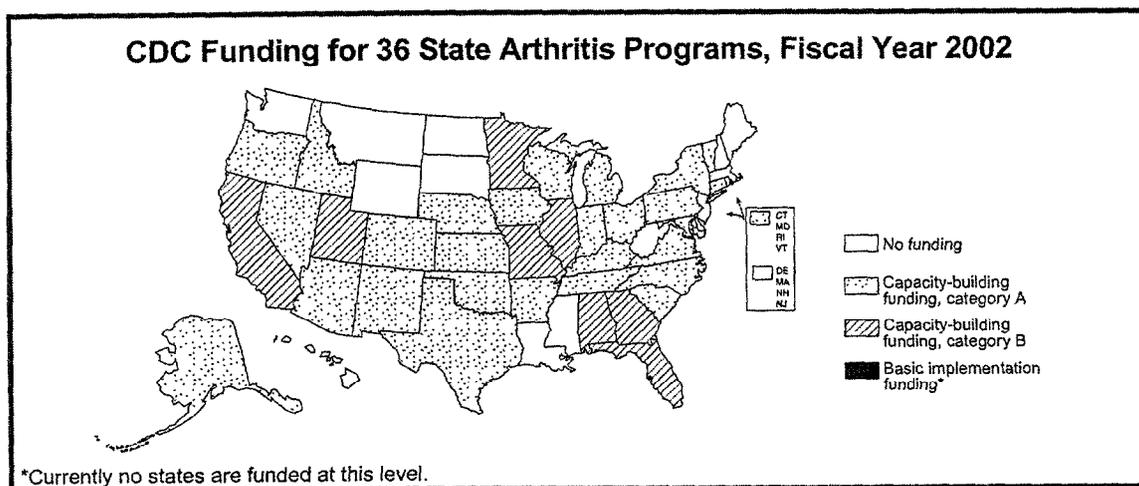
monitor the burden of arthritis, coordinate activities, and conduct interventions. The central aim is to let people know that something can be done to lessen the effects of arthritis and to increase the number of people who participate in arthritis self-help programs. CDC has following levels of program funding:

- *Capacity building funding* (formerly known as core or establishment funding; up to \$600,000).

Category A funding (average level, \$120,000) allows states to begin building an arthritis program. States funded at this level can develop a state arthritis action plan and start establishing and building programs and partnerships to reduce the burden of arthritis. In 2002, 28 states were funded at this level.

Category B funding (average level, \$320,000) carries this process further and also allows states to conduct pilot projects to improve the quality of life for people with arthritis. Many states funded at this level have been able to offer the Arthritis Self-Help Course and physical activity programs to more people. In 2002, eight states were funded at this level.

- *Basic implementation funding* (formerly known as comprehensive funding; \$600,000–\$1,000,000) would allow states to further reduce the burden of arthritis by integrating and establishing programs and evidence-based interventions more broadly. States also could work with partner organizations to enhance arthritis activities. No states are funded at this level.



A State Arthritis Program in Action

With CDC support, California is increasing its efforts to reduce the burden of arthritis among diverse populations. For example, to reach Hispanic farm and transient workers, the California State Health Department and the Southern California Chapter of the Arthritis Foundation worked together to disseminate a Spanish-language version of the Arthritis Self-Help Course. Hispanic people participating in the course have reported improvements in their general health, sleep, depression, and activities of daily living. The program sponsors are expanding this successful program to other underserved areas.

2. Increasing awareness.

CDC is working with state health departments and Arthritis Foundation chapters on a campaign that promotes physical activity to relieve arthritis pain among people aged 45–64 in lower socioeconomic levels. Radio scripts, brochures, and print pieces carry the theme “Physical Activity. The Arthritis Pain Reliever.”

3. Improving the science base.

CDC supports research to learn more about why arthritis occurs and progresses and how to deal with it, as these examples show:

- Hip and knee osteoarthritis, the primary causes of expensive joint replacement surgery, are becoming more common as the population ages. CDC, in collaboration with the University of North Carolina and the National Institutes of Health, is studying these conditions among 3,200 residents of Johnston County, a rural area of North Carolina. This study is the first ever to look at arthritis among African Americans and whites over time to learn more about preventing arthritis and limiting its progression and associated disabilities.

- Self-management programs are integral to reducing pain and disability. To learn which approaches are most effective and how these programs can be improved, CDC is working with the Arthritis Foundation and several universities to evaluate programs. PACE (People with Arthritis Can Exercise) is being evaluated at the University of Missouri and the University of North Carolina. Arthritis Basics for Change is being evaluated at St. Louis University.

4. Measuring the burden of arthritis.

CDC’s Behavioral Risk Factor Surveillance System, which all 50 states use to collect health information from adults, is the main source of state arthritis data. The data are used to monitor trends, define the burden of arthritis, and assess how arthritis affects people’s quality of life. CDC has added the same questions on national surveys so that state and national data can be compared.

5. Making policy and systems changes.

CDC and its national and state partners are making the policy and systems changes recommended in the *National Arthritis Action Plan*. For example, CDC is working with state health departments and managed care organizations in Missouri and Florida to pilot test changes in how medical care is delivered to people with arthritis.

Future Directions

With funded states and other partners, CDC hopes to

- Create a nationwide program to improve the quality of life for people affected by arthritis.
- Have current state arthritis programs reach more people.
- Develop and evaluate culturally appropriate programs to better serve diverse communities.
- Fund evaluation efforts to develop effective arthritis programs having the lowest possible cost.
- Develop health communication programs to increase physical activity among minority communities, the elderly, and people of low-socioeconomic status.

For more information, additional copies of this document, or copies of the *National Arthritis Action Plan: A Public Health Strategy* or the *Healthy People 2010* arthritis objectives, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-45, 4770 Buford Highway NE, Atlanta, GA 30341-3717; (770) 488-5464. ccdinfo@cdc.gov www.cdc.gov/nccdphp/arthritis