Arthritis creates work limitations for about a third of the working-age adults with the disease, impacting nearly 7% of the total U.S. workforce, according to a state-by-state study by the Centers for Disease Control. The first of its kind survey, drawing on data from the Behavioral Risk Factor Surveillance System, may foreshadow a profound challenge to the economy as the population ages. Arthritis today affects 46 million Americans, with an estimated economic toll of $128 billion a year, according to the Arthritis Foundation.

The random digit–dialed telephone survey of more than 200,000 households queried working-age adults in every state, Washington, Guam, Puerto Rico, and the U.S. Virgin Islands about whether they had been diagnosed with arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. Respondents with arthritis were asked whether arthritis or joint symptoms currently affected whether they were employed and the type and amount of work they could do.

The responses are weighted to represent the adult population in each state. A high degree of variability was found in the state-specific prevalence of arthritis-related work limitations among all adults between 18 and 64 years of age, from 3.4% of adults in Hawaii to 15% in Kentucky, reported Kristina A. Theis and associates at the National Center for Chronic Disease Prevention and the National Center on Birth Defects and Developmental Disabilities at the CDC (MMWR 2007;56:1045-9).

Among adults reporting physician-diagnosed arthritis and related conditions, work limitations were reported by a median 33%, ranging from 25.1% in Nevada to 51.3% in Kentucky.

“Arthritis is big in Nevada, and there are a lot of service industry workers here. There is a lot of physical work,” he said. Dr. Adams speculated that the variance might be explained by systemic factors, such as differences in state disability program formats, or perhaps populations. Nevada draws a “pretty young, healthy population” with a large percentage of workers who have recently moved from other locations, whereas Kentucky’s population may be older and more stationary.

In both states, rheumatologists said they advocate a team approach to arthritis management, with an emphasis on therapy and lifestyle modifications as well as medication. Occupational and physical therapy are offered on-site in a growing number of group rheumatology practices.

Such trends could make a difference in patient’s being able to maintain their ability to perform their jobs, said Ms. Theis from the CDC’s Division of Adult and Community Health.

Preliminary findings from a separate study by the CDC build on a growing body of published research suggesting that physician recommendations concerning arthritis management are highly influential in terms of patient behavior, she explained.

When a physician recommends weight loss, an arthritis-focused exercise program, or workplace accommodations in conjunction with the Americans with Disabilities Act, for example, patients are much more likely to attempt to follow that advice.

“We’re hoping physicians will say, ‘I have a really important voice that carries a lot of weight on a lot of levels.’” Ms. Theis said. “We see them as one of our most important audiences.”

Sometimes, the physician’s role on minimizing work limitations is direct, perhaps by prescribing traditional therapy regimens and even biologic therapy to patients early on in the course of their disease to preserve function.

Other times, a physician may refer a patient to physical or occupational therapy or to a hand surgeon for a customized thumb or wrist splint that permits normal workplace activities, said Diana Baldwin, who is an occupational therapist at the Missouri Arthritis Rehabilitation and Training Center.

“We’ve found that it isn’t enough to tell people, ‘Cut back on your hours,’ or ‘Be more flexible,’ or ‘Don’t do things that hurt,’” she said. “For the average working person with arthritis, that is not useful [advice].”

What does seem to make a difference is when physicians explain to arthritis patients early on that their joints are more vulnerable to common workplace conditions such as tendonitis or lower back pain, and provide a reasonable rationale for them to implement protective strategies, she said.

The Missouri Training Center in Columbia is currently completing a federally funded study that has randomized 84 adults with arthritis to receive either written materials about arthritis in the workplace or interventions conducted by Ms. Baldwin in the workplace setting, be it a manufacturing workshop, business office, or classroom.

She has spent 1.5-2 hours interviewing these workers with arthritis and then has studied them as they work, taking pictures that she will later diagram to show movements that stress the joints including twisting, grabbing, reaching, and bending.

She has investigated ergonomic surgical tools to aid an anesthesiologist, adapted the car of a traveling salesman, and added a step stool to ease a manufacturing specialist’s reach to a drill press.

Making such changes early on appears to keep people in the workplace longer, working more effectively and in less pain, she said.

But economic realities have proved to be a barrier to early workplace interventions, particularly in the lower paying, rigorous jobs that put the greatest stress on joints.

No janitors have agreed to allow Ms. Baldwin to come to their workplaces to identify practices that might be exacerbating their arthritis, for example.

“They’re not going to expose the fact that they have arthritis on the job,” she said.