Amputation, one of the most devastating and costly consequences of diabetes, can be prevented when patients are treated by podiatric physicians. That’s the finding of a national, large-scale study coauthored by Dr. James Wrobel, DPM, MS, associate professor of medicine at Rosalind Franklin University of Medicine and Science. He is also director of the Center for Lower Extremity Ambulatory Research (CLEAR) at the university’s Dr. William M. Scholl College of Podiatric Medicine. CLEAR is recognized for its work in treating and preventing lower-extremity complications associated with diabetes.

“More than half of all amputations in the U.S. are related to diabetes,” says Wrobel. “Podiatrists are detecting conditions that can lead to amputation. That’s just what we do.”

The first of its kind, the study examined records for almost 29,000 patients with diabetes, ages 18-64, and compared health and risk factors for those who had seen podiatrists to those who had not. Researchers found that podiatric care — defined as at least one podiatrist visit before a foot ulcer was diagnosed — was associated with a nearly 15 percent lower risk of amputation and 17 percent lower risk of hospitalization.

The study, funded by the American Podiatric Medical Association (APMA), used Thomson Reuters’ MarketScan Research Databases, which contain anonymous healthcare claims data.

“We statistically matched patients with diabetes and foot ulcers who had visited a podiatrist with like patients who had not,” says lead researcher Teresa Gibson, PhD, director of health outcomes research at Thomson Reuters. “Patients who had seen a podiatrist in the year prior to the onset of a foot ulcer had significantly lower rates of any amputation and hospitalization than those who had not.”

The large quantity of data and the precision of the data matching make the study findings more robust.

“We found people who looked very similar to each other, and we were able to observe the outcomes were due to podiatric care rather than something else distorting the data,” Wrobel says. “This is a very strong study, as it was conducted in patients already having a foot ulcer, and it highlights the podiatrist’s role in preventing hospitalizations due to infection and in preventing amputations if a foot ulcer develops.”

Diabetic foot complications are the leading cause of nontraumatic lower-limb amputation in the U.S., a lapse in prevention that costs an estimated $3 billion per year. The Centers for Disease Control and Prevention estimates that 24 million Americans have diabetes, and 86,000 undergo amputations each year.

Podiatrists diagnose and treat foot problems, which may be the first area to show symptoms of serious conditions like diabetes, arthritis and heart disease. People with diabetes are prone to foot infections and ulcers because of poor circulation and neuropathy (loss of physical sensation). Podiatrists can spot problems like calluses, blisters or ill-fitting shoes before a hard-to-heal sore develops.

The study, presented July 17 during APMA’s Annual Scientific Meeting in Seattle, adds to the body of evidence that shows that including podiatry in a multidisciplinary, coordinated effort to treat diabetes could prevent up to 50 percent of related amputations and the pain, depression and loss of quality of life that often follow.

Wrobel points to the conclusion of the study and numerous smaller studies that preceded it that show expert podiatric care not only saves limbs but possibly lives as well, given that the 5-year survival rate after an amputation is poorer than with many cancers.

Wrobel emphasizes the need for coordinated patient care and communication among healthcare providers. “The delivery of healthcare in this country happens too often in isolated pods — insurance companies, managed care providers, fee-based care,” he says. “There has been very little patient advocacy. Problems with diabetes are too pervasive for care not to be more coordinated. We’re beginning to see it now, bubbling up from patient frustration.”

However, in 10 states, according to Chad Appel, APMA state advocacy associate, Medicaid programs do not reimburse for podiatric care, including California, Michigan and, effective October 1, Arizona, where Native American populations suffer higher rates of diabetes and related complications.

“Budgets are hurting, and they have to look for somewhere to cut and right now, podiatric care is an optional service under Medicaid,” Appel says.