



Podiatry and Multidisciplinary Diabetes Management

A proactive, comprehensive approach benefits both your patients and your practice.

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Patients, too, need direct reinforcement about the importance of routine foot care and ongoing foot health maintenance, and they may need it over and over again to ensure they keep up with their individual care plans.

Podiatrists should also consider building relationships with colleagues both inside and outside of the specialty who share a preventive care mindset to catalyze collaboration across organizations and drive change at a systemic level.

Diabetes is among the most common and deadly chronic diseases, with more than 38.4 million people in the United States currently managing the condition, and a further 97.6 million living with pre-diabetes that may escalate without prompt clinical attention and sustained lifestyle changes.

Like most chronic conditions, the prevalence of diabetes is not evenly distributed across the population. Older adults are nearly three times more likely than other age groups to experience the condition (29.2% of those over 65 compared to 11.6% of the overall population), while members of certain racial and ethnic groups, including Black, Hispanic, and American Indian/Alaska Native individuals, are significantly more likely than white people to develop diabetes in their lifetimes. The negative consequences of diabetes follow similarly unequal patterns. For example, in 2019, non-Hispanic Black

individuals were 2.5 times more likely to be hospitalized with diabetes compared to non-Hispanic whites and 3.2 times more likely to be diagnosed with end-stage renal disease.

People in these communities are also nearly two times more likely to experience a diabetes-related lower limb amputation, a potentially catastrophic event that is associated with a five-year survival rate of only 43%—dramatically less than the average five-year sur-

clinical complications, including neuropathy, diabetic foot ulcers (DFUs), diabetic retinopathy, and kidney injury.

Podiatrists typically also enter the scene toward the reactive end of the treatment cycle, especially because of low referral rates for preventive routine foot checks from primary care providers and other members of the diabetes care team. Too often, podiatrists only see patients after an emergency department or inpatient visit, typically once

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vival rates of breast cancer, testicular cancer, or colorectal cancer.

Clearly, diabetes is a public health crisis of unprecedented proportions, and it's only getting worse as the population expands and ages. Yet the healthcare system has not devoted nearly as many resources to enabling upstream diabetes prevention as it has to the prevention of other conditions, including these common cancers. Instead, healthcare leaders and their partners in the technology space have largely focused on reactive treatment. Even the latest digital health devices, like automated insulin pumps and continuous glucose monitors (CGMs), are primarily geared toward managing diabetes after it has taken hold, when people are already at higher risk of

diabetic neuropathy is advanced or a foot ulcer has formed, leaving them to manage highly challenging conditions that often progress to undesirable outcomes despite their best efforts.

This is deeply unfair to patients, costly and inefficient for the health system, and a poor use of podiatrists' exceptional skills in maintaining foot health when given the opportunity. It's no secret that having a podiatrist as a member of the care team can prevent or mitigate common diabetes complications, including DFUs and diabetic neuropathy that often leads to serious falls, or that podiatry care can bring a systemic financial return of \$9 to \$13 for each dollar invested directly in foot health.

But to save more limbs and save

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more lives, podiatrists need to become much more integrated into the preventive care team and be given access to the resources they need to provide proactive, comprehensive foot care.

As new technologies continue to emerge and value-based care models help realign relationships and reimbursement across the care continuum, podiatrists have the opportunity to capitalize on this collaborative momentum and cement their position as a core member of the diabetes care team. Doing so will require podiatrists to embrace innovative digital tools and strategies, actively assist patients with identifying and overcoming barriers to care, and vocally participate in advocacy for enhanced reimbursement models that fairly compensate practitioners for an optimal combination of preventive care and acute services.

Using AI and Analytics to Predict and Prioritize High-Risk Individuals

People with type 2 diabetes have a 34% lifetime risk of developing a DFU. Between 50% and 60% of those ulcers will become infected, and 20% of those infections will require a lower extremity amputation. That equates to one amputation every three minutes and 30 seconds, every day around the clock.

Getting ahead of these tragedies, the majority of which are preventable, will require podiatrists to get familiar with the world of predictive analytics, allowing care providers to use a variety of clinical, administrative, and socioeconomic data points to identify individuals at high risk of negative events and prioritize these people for screenings or follow-up. As predictive technologies mature, these models should be able to take the basics of well-known clinical risk factors, such as loss of protective sensation, vascular disease, and clinical history, and enhance them with additional data, such as duration of diabetes, cardiac function, white blood cell and platelet count, and even socioeconomic status based on geographic and demographic data.

These tools can be based in the electronic health record for population-level surveillance or embedded into medical devices that add patient-generated sensor data to provide

a more immediate, real-time view of an individual's developing risks.

Currently, there are few EHR-based predictive models commercially available specifically for podiatry-related concerns. However, device-based options are proliferating more rapidly as developers seek to get as close to the patient as possible and provide insight quickly, including socks, insoles, and mats that can contribute real-time temperature, pressure, and activity monitoring, as well as fall prevention devices aimed at compensating for neuropathy and other balance-related issues.

The American Diabetes Association (ADA) is highly in favor of finding creative, innovative ways to use these

profession can support the research and development ecosystem by referring patients to clinical trials for potential participation, especially those who may not otherwise be aware of these options to enhance their care.

Connecting People with Diabetes to Appropriate Care and Personalized Education

With only around 18,000 podiatrists in the United States, it isn't surprising that too many people living with diabetes experience barriers when trying to access podiatric care. But the challenges aren't just about the numbers. There are more complex, systemic reasons behind low

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and other technologies to supplement the now-well-established ecosystem of insulin pumps and CGMs. In the 2024 Standards of Care for Diabetes, the association specifically emphasized the need to embrace AI and other tools to improve screenings and assist with self-management and education.

As these capabilities develop, it will be crucial to ensure that new analytics models accurately reflect diverse populations to ensure equitable delivery of high-quality care, especially among underserved communities that have, historically, been poorly represented in clinical research.

For podiatrists, this will mean taking a leading role in the development of algorithms and devices that address foot-specific concerns, since there is no one better suited to advocating for patients and providing the specialty expertise required to make these tools truly useful for proactively addressing emerging risks.

Podiatrists should consider getting more involved in research projects, pilots, and clinical trials involving data-driven tools, care transformation efforts, or digital medical devices, which can lead to mutually beneficial relationships with technology developers and device makers. In addition, the

participation in specialty foot care—and those reasons can look very different depending on one's perspective.

A 2022 study published in the *Journal of Foot and Ankle Research* found that patients tend to cite external barriers, such as socioeconomic challenges, poor understanding of care needs, and lack of access, for not being able to engage in podiatry care. Meanwhile, providers are more likely to flag internal issues, such as poor interprofessional communication and lack of professional knowledge, as reasons for not engaging in podiatric care. Both parties are correct: These are all pressing issues that podiatrists need to help address if they are to become more central to the diabetes care process. Improving access starts by educating both patients and primary care providers about the importance of incorporating routine, preventive podiatry care into the diabetes journey.

At the moment, the majority of diabetes care occurs in the primary care setting, since endocrinologists are in even shorter supply, and the gaps are growing worse over time. While primary care providers are adept at managing many aspects of diabetes care and can even conduct routine foot exams in their offices if properly trained, they do

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not always complete these exams—nor do they always make optimal decisions about referring higher-risk individuals out to podiatrists for enhanced care.

One rural primary care clinic in Alabama found that only 43% of its adult patients with diabetes eligible for a comprehensive diabetes foot exam actually received one prior to a focused quality improvement initiative, while a separate primary care practice in Southeast Texas found its foot exam rates were a mere 16% in 2018 before addressing the issue. In 2017, the national benchmark for Medicare beneficiaries was 76.17%, according to CMS data.

While both clinics saw impressive gains in foot exams after dedicated quality improvement efforts (resulting in a 74.1% annual exam completion rate in the Alabama clinic and 71% in the Texas office), not every primary care clinic is aware of the scope and scale of the disconnect, and many feel as if they lack the time and resources to devote attention to the issue.

Podiatrists are willing and able to take some of the burdens off of primary care providers by assisting with completing these exams—if patients are referred consistently and in a timely manner. To ensure that primary care providers are aware, podiatrists should consider forming stronger professional relationships with primary care organizations in their community, including offering peer-to-peer education about conducting screenings, understanding symptoms that require referral, and closing the loop on patients to ensure coordinated care.

Empowering Patients to Participate in Proactive Self-Management

Patients, too, need direct reinforcement about the importance of routine foot care and ongoing foot health maintenance, and they may need it over and over again to ensure they keep up with their individual care plans. Diabetes can be an overwhelmingly complex condition to manage, especially when people living with the disease are also juggling socioeconomic instability, multiple comorbidities, and the mental health challenges that often arise from the intersection of these circumstances.

Podiatrists cannot assume that de-

livering a piece of education one time will be fully received in the moment or stick with their patients for the long-term. Instead, they must present and reiterate key information in a manner that is respectful, non-judgmental, empathetic, and tailored to the person's health literacy level, cultural needs, and emotional/mental state.

For example, practitioners may wish to advise patients to preemptively remove their shoes and socks in the primary care office to remind their providers to conduct a foot exam, offer a printed version of foot care instructions translated into the patient's preferred language after a visit, or suggest digital health tools and devices that may be appropriate for self-management. They may also consider using motivational interviewing techniques to better understand the person's barriers, goals, and self-care capabilities to assist with developing a personalized care plan that meets them where they are in their journey.

Knowledge is power for patients, especially when that knowledge connects them to podiatry services in a timely manner. For example, one 59-year-old male patient with long-term diabetes who had been experiencing severe arch pain—and who had never seen a podiatrist before—was referred to the clinic after other physicians couldn't diagnose his concerns. His podiatrist was able to determine that he was experiencing an acute Charcot event of the foot, which is a serious complication with the potential to raise risks for permanent foot deformity, foot ulcers, and the need for a below-the-knee amputation.

Because this patient connected with specialty care in time, he was able to access aggressive treatment that stabilized the event and retained the majority of his foot function. He can now maintain his foot structure with a custom orthotic, and he prioritizes visits with his podiatrist every two to four months after what he described as an “eye-opening” encounter with major complications from his condition.

While he and his podiatrist feel fortunate that the situation was caught in time for successful treatment, the patient now understands the crucial role of education about potential complications and that engaging in preventive care is essential for achieving better outcomes.

Getting Involved in Advocating for Change

Podiatrists are a small community, but that doesn't mean they can't have an outsized impact on policies that affect their ability to deliver more proactive and preventive care. Staying vocal about the challenges facing podiatry care can help to remove persistent roadblocks and foster positive changes, such as adjusting coding and paying rules that prevent adequate reimbursement for preventive care.

Podiatrists should also consider building relationships with colleagues both inside and outside of the specialty who share a preventive care mindset to catalyze collaboration across organizations and drive change at a systemic level.

Getting more involved in broader professional societies and diabetes advocacy groups, including the American Diabetes Association, American Medical Association, American Public Health Association, or Association of Diabetes Care & Education Specialists, could help ensure that podiatrists are being heard and are actively contributing their valuable perspectives to the ongoing efforts of these organizations.

By combining more visible advocacy with broader use of emerging technologies and a sharper focus on professional collaboration and patient education, podiatrists can move into a more central position on the diabetes care team to foster equitable care and fully leverage their expertise to empower all people with diabetes to live healthier, longer lives. **PM**



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