

SPECIAL COMMUNICATION

All Feet On Deck—The Role of Podiatry During the COVID-19 Pandemic:

Preventing hospitalizations in an overburdened healthcare system, reducing amputation and death in people with diabetes

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The COVID-19 pandemic is driving significant change in the healthcare system and disrupting the best practices for diabetic limb preservation, leaving large numbers of patients without care. Patients with diabetes and foot ulcers are at increased risk for infections, hospitalization, amputations, and death. Podiatric care is associated with fewer diabetes-related amputations, ER visits, hospitalizations, length-of-stay, and costs. But podiatrists must mobilize and adopt the new paradigm of shifts away from hospital care to community-based care. Implementing the proposed Pandemic Diabetic Foot Triage System, in-home visits, higher acuity office visits, telemedicine, and remote patient monitoring can help podiatrists manage patients while reducing the COVID-19 risk. The goal of podiatrists during the pandemic is to reduce the burden on the healthcare system by keeping diabetic foot and wound patients safe, functional, and at home.

At the time of this publication, the global pandemic of the novel Coronavirus COVID-19 has infected more than 367,000 people worldwide and claimed 16,000 lives. In the United States, 41,000 have been infected and 490 dead so far. It has affected every state in the Union.

At the current trajectory, the healthcare system will be pushed to the brink, exceeding the available supply of Personal Protective Equipment, ICU beds, and ventilators. Front line providers will have to make decisions about rationing care based on the chances of survival.¹ Governments have taken unprecedented actions to flatten the curve of the infection rate which include social distancing (physical distancing), banning gatherings of people, quarantines, closure of businesses, and limiting movements outside the home. In addition to these actions, the healthcare system is changing at lightning speed in order to accommodate the anticipated need of masses of pandemic patients. The governments and regulators are advising postponing or canceling all non-essential medical services and elective surgeries, which include many podiatric procedures.^{2,3} Some, if not many, of these strategies will be in place for 12 to 18 months until herd immunity is in place through widespread vaccinations.⁴

But the effects of the pandemic will be felt far beyond just those who are infected with the novel Coronavirus. Because of the drastic containment and mitigation measures, other parts of the healthcare system that are impacted are leaving fragile patients without necessary services. Wound centers, where many podiatrists provide care for diabetic foot ulcers, are closing or reducing their hours since they are located in the physical space of the hospital and also as a result of a provider shortage from emergency medicine and infectious disease doctors being repurposed away from the wound center.⁵ Diabetic foot ulcer procedures and surgeries may be misclassified as non-essential, but without regular podiatric care,⁶⁻⁸ vascular diagnostics, or surgical intervention, these patients are at risk of quickly becoming infected, which will lead to an increase in amputations and deaths.^{9,10} Furthermore, people with diabetes represent a fragile population that is at increased risk of mortality from COVID-19.¹¹ It is

advisable to avoid unnecessary diabetes-related hospital admissions to reduce the risk of COVID-19 exposure in the hospital.

The sudden changes in the system are leading all healthcare workers to find their new place in combating a common enemy, COVID-19. The importance of podiatry’s role in unburdening the system by preventing diabetic foot-related hospitalizations can not be overstated.

But podiatrists will have to quickly adapt the new pandemic system of care and change to provide services in new and unique ways. We strongly recommend implementing a triage system for lower-extremity wounds and diabetic foot problems, which will drive the site and urgency of podiatric care (**Table 1**).

	Conditions	Site of Care	Urgency
<p style="text-align: center;">Critical (0.25% of patients with diabetes)</p>	<ul style="list-style-type: none"> - IDSA Severe and some Moderate infections - Gas gangrene - SIRS/Sepsis - Acute limb-threatening ischemia 	<p style="text-align: center;">Hospital</p>	<p style="text-align: center;">Priority 1 <i>Urgent</i></p>
<p style="text-align: center;">Serious (0.75% of patients with diabetes)</p>	<ul style="list-style-type: none"> - IDSA Mild and some Moderate infections (including osteomyelitis) - Chronic limb-threatening ischemia (CLTI) - Dry gangrene - Worsening foot ulcers - Active Charcot foot 	<p style="text-align: center;">Outpatient Clinic Office-based Lab Surgery Center Podiatrist Office</p>	<p style="text-align: center;">Priority 2</p>
<p style="text-align: center;">Guarded (3% of patients with diabetes)</p>	<ul style="list-style-type: none"> - Improving foot ulcer - Inactive Charcot foot (not yet in stable footwear) 	<p style="text-align: center;">Podiatrist Office Home Telemedicine</p>	<p style="text-align: center;">Priority 3</p>
<p style="text-align: center;">Stable (94% of patients with diabetes)</p>	<ul style="list-style-type: none"> - Uncomplicated venous leg ulcer - Recently healed foot ulcer - Inactive Charcot foot (in stable footwear) - Healed amputation - Diabetic foot risk assessments 	<p style="text-align: center;">Home Telemedicine</p>	<p style="text-align: center;">Priority 4</p>

We have identified the following changes in the healthcare system impacting podiatrists and their patients and recommend strategies to perform best practices in the new pandemic standard of care for the at-risk diabetic foot.

Shift Away from Hospital-Based Care

We strongly discourage hospitals and regulators from declaring all “podiatric procedures” as non-essential, arbitrarily based on our degree or licensure. Podiatrists treat a wide range of foot and ankle problems that are urgent, including serious foot infections, gangrene, and traumas. However, few places is the podiatrist’s role and unique expertise as valued as on the hospital’s wound team and limb preservation unit. Good, regular podiatric care has been shown to reduce diabetes-related ER visits, hospitalization, length-of-stay, and amputations.¹²⁻¹⁷

A large percentage of outpatient wound centers are located in the physical space of the hospital, which is unique among all outpatient service lines, for both billing reasons (hospitals charge facility fees) and safety considerations (ability to respond to hyperbaric oxygen treatment emergencies). However, in the coming months, we anticipate that many wound centers will close because of guidance from the US Surgeon General, CMS, and state/local governments to reduce outpatient traffic in the hospital and non-essential services.

In some cases that are not critical, podiatrists can shift the site of hospital-based wound care and surgical procedures to ambulatory surgery centers and podiatry offices. The CDC has made recommendations on preparing your practice for COVID-19 including materials that can be printed and posted outside and inside the office.¹⁸ Some patients who require revascularization can be referred to office-based labs that are extensions of vascular surgery, cardiology, or radiology outpatient offices.

Increased Use of Telemedicine and Remote Patient Monitoring

The CDC is recommending that providers leverage telemedicine whenever possible to protect patients and staff from COVID-19.¹⁸ The federal and state governments have been relaxing telemedicine regulations for providers. The Office of Civil Rights at the Department of Health and Human Services, the agency that enforces HIPAA, has issued an advisory that providers can now use standard video chat applications that are available on phones and computers during the national emergency.¹⁹ In our experience using FaceTime and Google Glass in wound-based assessment,^{20,21} combinations of “store and forward” photos, short message service (SMS) text, or text video chat are useful to screen for infection and evaluate wound progress.

CMS relaxed requirements so that providers can now bill Medicare to see new patients (previously limited to established patients) in any area of the country, in all care settings, at the same rates as regular in-person visits.²² Medicare has also eliminated the requirement that the provider have a license in the state where the patient is being seen by telemedicine.

Especially for high risk patients without active ulcerations, remote patient monitoring (RPM) shows great promise in identifying areas of impending injury/tissue loss, presence or absence of infection as well as in other areas of cardiometabolic care. RPM through temperature sensing devices meets CMS guidelines for a physiologic measure and has robust data as an early warning system for diabetic foot ulcers in high-risk patients.²³⁻²⁶ These patients were typically seen in podiatry offices every 2 to 6 months for preventative visits to reassess changes and risk for ulceration, but with RPM could be pushed out longer and the podiatrist notified when a problem is imminent. CMS has also allowed for reimbursement for RPM in many circumstances. Descriptions of CMS recognized Telehealth Visits, Online Digital Visits, and Remote Patient Monitoring are in **Table 2**.

Type of Service	Description	HCPCS/ E&M Codes	Relationship with Provider
Medicare Telehealth Visit	Visit between a provider and a patient using a telecommunication system	99201-5 99211-5	New or Established Patients
Virtual Check-In	Brief (5-10 minute) check-in with the provider by telephone or other telecommunications device to decide if an office visit is needed. Or an evaluation of recorded video or images from a patient	G2012 G2010	Established Patient
E-Visit	Communication between a patient and provider through an online patient portal	99421-3 G2061-3	Established Patient
Remote Patient Monitoring	Remote monitoring of a physiologic parameter (i.e. foot skin temperature)	99453-4,7	Established Patient

It is important to note that state licensing requirements still apply. However, many states have relaxed licensure requirements for telemedicine and sometimes physical practice for the period of the state's emergency declaration. The Federation of State Medical Boards is maintaining a list of states that have waived licensing requirements in response to COVID-19.²⁷ Finally, ensure your malpractice carrier covers you for virtual visits, especially across state lines, if that is desired.

More In-Home Visits

The use of home health is expected to rapidly expand as more patients are treated at home, some with regular telemedicine check-ins from a provider. Podiatrists can order home health

visits, dressing changes, and/or prescribe dressings and antibiotics to be used at home by the patient.

All indications are that podiatrists will be seeing a reduced regular workload over the next 12 to 18 months with cancellation of clinics and elective surgeries, increased patient no-show rate, and reduced demand for some foot and ankle care. There are opportunities for podiatrists to play a larger role in in-home care. House calls can be conducted with lower-extremity exams for infection and peripheral artery disease and podiatrists can perform simple wound procedures in the home. Podiatrists can provide application of intricate dressings and offloading during a home visit and escalate a patient who requires a higher level of care. A review of care provided in the epicenter of the COVID-19 pandemic in Italy urges the consideration of community-based care where doctors may be performing more house calls since home care and mobile clinics prevent patient movements and relieves pressure on hospitals.²⁸ Obviously, COVID-19 infection risks to the patient and provider have to be mitigated through the proper use of Personal Protective Equipment.

A Call to Action

All hands are on deck preparing to treat the expected wave of COVID-19 patients. Podiatrists must mobilize to provide organized care of the diabetic at-risk foot in a shifting environment and system. Our goal is to reduce the burden on the healthcare system by keeping patients safe, functional, and at home during the COVID-19 pandemic.

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