PANEL DISCUSSION

Raising CLTI Awareness for Both Patients and Practitioners

A conversation on efforts to raise awareness about chronic limb-threatening ischemia and amputation prevention, including success and roadblocks, the importance of early patient education, common misconceptions, and more.

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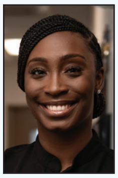

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Recent years have seen a push to raise awareness about chronic limb-threatening ischemia (CLTI) and amputation prevention, something you've all been invested in, from direct patient outreach to academic research to news broadcasts. What initiatives/approaches do you think are most successful at targeting patients and populations at risk for developing CLTI?

Dr. Fakorede, Mr. Burnham, Ms. Marion, and Mr. Reed: Peripheral artery disease (PAD) and CLTI awareness and amputation prevention efforts require a strategy as intentional and targeted as any successful marketing campaign, anchored in the "three Es" framework: experience, exposure, and education.

Experience involves integrating the voices of at-risk patients, amputees, caregivers, clinicians, and health departments into culturally competent, community-based awareness initiatives. For example, the Get a Pulse on PAD campaign leverages storytelling, tool kits, and multisocietal, peer-led testimonials to humanize the disease and build trust. It offers a scalable model and strong foundation for a long-term vision, highlighting the need for communities to customize their approach. This means identifying the right trusted messengers and leveraging a tailored mix of outreach channels to effectively engage high-prevalence populations.

Exposure means making sure at-risk populations consistently recognize the signs and consequences of PAD by screening high-risk individuals—using tools like ankle-brachial index (ABI) and toe-brachial index and engaging individuals through platforms they trust (eg, social media, national television, radio, partnerships with local community hubs and civic organizations that meet people where they are).

Education focuses on improving literacy beyond awareness, through initiatives like the American Heart Association (AHA) PAD National Action Plan and Association of Black Cardiologists–led training of frontline providers at American College of Physicians, Preventive Cardiovascular Nurses Association, and American Podiatric Medical Association conferences in referral and limb salvage pathways. These collective efforts have humanized the patient journey and empowered lawmakers to create the first-ever bipartisan Congressional PAD Caucus, championing legislative change to prevent avoidable amputations.

Dr. Ahmad: The most successful initiatives are those that activate every level of the system—from primary care to specialist teams—while keeping the patient at the center. Early detection in primary care is critical, especially for high-risk groups like those with renal disease or diabetes with related peripheral neuropathy. But detection alone isn't enough; we need seamless referral pathways, education for general practitioners and practice nurses, and a clear line to rapid-access multidisciplinary foot teams.

Secondary care plays its part through integrated vascular, podiatry, and diabetes services that speak to each other, ideally in joint clinics, shared tech platforms, and agreed care protocols. Hospital teams must be equipped to escalate care quickly, revascularize early, and not allow ulcers or ischemia to smolder.

Engaging patients means more than leaflets. It's about culturally tailored messaging, delivered by trusted clinicians and community leaders, especially in underserved or minority populations. Campaigns that focus on symptoms like foot pain at rest or nonhealing wounds—the red flags of CLTI—help people seek care earlier.

Finally, strategies like the Manchester Amputation Reduction Strategy show that when data are used to hold systems accountable (ie, by tracking amputation rates), outcomes improve. If we get the whole system pulling in the same direction, amputation becomes the exception, not the rule.

Drs. Smolderen and Mena-Hurtado: It all starts at the community level with multiprong approaches to raise awareness about cardiovascular and metabolic risk factors. This includes reeducation about diabetes, partnership with community initiatives that promote preventive strategies, routine feet checking, and raising awareness about PAD and CLTI in primary care practices.

Importantly, awareness needs to start early—rates of cardiovascular risk factors and diabetes are exponentially growing, and people often don't know what complications may arise from a combination of metabolic risk factors that are not well managed.

Dr. Dua: Based on data from a national consumer survey commissioned by the Society for Vascular Surgery (SVS), nearly one in three Americans at the highest risk for vascular disease have never heard of the most common conditions, including PAD.[1] That level of awareness is dangerously low and contributes directly to delayed diagnoses, missed opportunities for early intervention, and preventable amputations.

The most effective outreach strategies are those that meet patients where they are geographically, culturally, and clinically. The SVS Highway to Health campaign is a strong example. It translates complex vascular conditions into clear, accessible language and delivers it through engaging formats. The patient education tool kit—featuring videos, checklists, and interactive tools—not only demystifies the disease but also empowers patients to recognize early warning signs, initiate timely conversations with their providers, and participate in shared decision-making. It's the kind of focused, patient-centered education we need to move the needle on early detection and limb preservation.

What doesn't work?

Dr. Ahmad: What doesn't work is fragmentation of care, responsibility, and communication. A patient with a nonhealing ulcer will not stand a chance if their primary care physician doesn't know how or when to refer, if referrals disappear into a void, or if the system responds too slowly. Siloed services that don't talk—vascular here, podiatry there, diabetes somewhere else—create gaps where patients fall through.

Top-down initiatives that look good on paper but don't land in clinics fail fast. So does tick-box education that doesn't change practice and public health messages that don't reflect the realities or languages of the communities they're aimed at. Let's not forget digital tools that are clunky, inconsistent, or inaccessible across platforms—shared tech is only useful if it actually gets used.

Crucially, ignoring data is a killer. If no one is tracking time to assessment, rates of deterioration, or amputation trends by postcode or ethnicity, then we're flying blind. What doesn't work is assuming someone else is owning the problem. CLTI prevention only works when everyone, from receptionists to surgeons, knows their role and acts fast. Delay costs limbs. Silence costs lives.

Dr. Dua: Passive, one-size-fits-all education consistently falls short. Traditional health messaging that isn't culturally relevant or assumes patients have a high level of health literacy simply doesn't reach the individuals who need it most. We also see the limitations of hospital-centered strategies; they overlook the many patients who delay care, distrust the system, or never make it through the door in the first place.

Drs. Smolderen and Mena-Hurtado: A lot of the care that is provided currently is fragmented and reactionary. Obviously, this does not serve the chronic disease management model. Integrated approaches that are team-based and along the preventive spectrum are necessary.

Dr. Fakorede and team: Challenges include top-down messaging without grassroots input, one-off events with no follow-up, passive print campaigns that don't factor in the literacy level of the targeted audience, tech-reliant strategies in digital deserts, and lack of transportation or specialist access. All of these challenges limit impact and have not worked. The failure to engage celebrity voices or sports media has further stunted the reach and resonance of public messaging. Most importantly, there is an urgent need to rebrand PAD and CLTI, making the disease understandable to lay people by showing the real faces and lived experiences of those affected by it. Patients must be made visible, and the progression from mild PAD to limb-threatening disease and amputation must be clearly communicated, along with the consequences of suffering in silence. Humanize them at different stages! Only then can awareness be transformed into urgency, advocacy, and action.

Overall, looking at the entirety of CLTI care and care stakeholders, what are the biggest awareness-related roadblocks?

Drs. Smolderen and Mena-Hurtado: The biggest roadblocks are lack of awareness regarding complications of poor diabetes management, lack of education on why feet checking is important, and lack of knowledge that CLTI and PAD are part of the same family of cardiovascular diseases.

Dr. Fakorede and team: A major awareness roadblock in PAD/CLTI care is that PAD and CLTI are sometimes used interchangeably, and the general public is largely unaware of either term. Unlike oncology, where the distinction between early and late-stage cancer is clearly communicated and understood, PAD awareness lacks this clarity, leaving patients and communities uninformed about disease progression and its consequences. Combined with fragmented messaging, inconsistent provider screening, underrecognition by health department policymakers, and invisibility of those affected, this lack of clear language and education delays diagnosis, limits access to care, and perpetuates preventable suffering, especially in high-risk populations.

Dr. Dua: One of the most significant awareness-related challenges lies in fragmentation of the care pathway itself. There are missed opportunities at multiple points—from early risk identification to timely referral and coordinated treatment. In fact, data from a national survey of health care providers commissioned by the SVS indicate that more than 70% of health care providers would not initially refer an older patient showing signs of PAD (ie, persistent leg pain that goes away at rest and difficulty walking) to a vascular surgeon.[2] These aren't failures of individual providers or patients but rather signs of a system that hasn't yet evolved to fully support proactive, integrated vascular care.

Dr. Ahmad: The biggest awareness-related roadblocks in CLTI care are rooted in one simple problem. Too many people across all levels of the system still don't recognize CLTI for what it is: urgent.

In primary care, leg pain and foot ulcers are too often normalized in high-risk patients, especially those with diabetes or frailty. Delays happen not because clinicians don't care, but because they don't always know what to look for, when to refer, or how urgent it truly is. The term "chronic" in CLTI is perhaps part of the problem as it suggests slow-moving and low risk, when in reality, rest pain and tissue loss demand same-day attention. Furthermore, diabetic patients with CLTI are usually able to access multidisciplinary care quickly, but those without diabetes (ie, half of all major amputees) cannot. This inequality must be addressed. We need to level up access to the diabetes standard for all patients with foot ulcers, without compromising diabetes care. Moving from "diabetic" foot clinics to "high-risk" foot clinics would be a great start.

In secondary care, awareness gaps often lie between specialties. If vascular, podiatry, diabetology, and wound care teams aren't aligned, the patient ends up stuck in the middle—repeating their story, getting bounced between clinics, or waiting weeks when they need hours. That's the power of shared understanding and urgency.

Among patients, awareness is shaped by experience, trust, and messaging. Many don't report symptoms because they expect pain, ulcers, or blackened toes to just be "part of diabetes." Culturally insensitive health promotion, poor access to interpreters, or simply never having been told what to watch for all contribute to late presentations, especially in marginalized communities.

Even within hospital systems, lack of awareness shows up in less obvious ways, like bed managers not prioritizing limb salvage patients or administrative staff unaware that a foot ulcer is a red flag for rapid multidisciplinary team (MDT) input. Awareness must go beyond the clinical and become institutional.

Ultimately, we need to shift the mindset around CLTI. It's not a niche vascular problem. It's a cross-system, high-stakes condition with preventable outcomes. Until every stakeholder sees it that way, we'll continue to fight avoidable amputations with one hand tied behind our back.

What are the most common misconceptions a CLTI patient has about their diagnosis? What do patients typically not know about the reality of this phase of their disease/health?

Dr. Dua: One of the important realities is that it is an end-stage disease. Patients with CLTI may lose their lives within 2 to 5 years after the CLTI diagnosis, usually from a cardiovascular issue like stroke or myocardial infarction; therefore, it is important to ensure that medical treatments are optimized and the overall health of the patient is the focus rather than just the leg.

Dr. Ahmad: It really depends on the patient and the stage of disease. Some arrive already knowing the risks. They've heard the word "amputation" before and understand the seriousness. Others know they need to make changes, such as stopping smoking, exercising more, and managing their diabetes, but struggle to act. But in my experience, the biggest barrier isn't knowledge, it's activation. We often assume patients don't know enough, but that's rarely the case. Take smoking: The risks are literally printed on the cigarette packet (including pictures of amputated limbs), yet people continue to smoke.

Not because they don't understand the consequences but because behavior change is complex. It's tied up in addiction, mental health, poverty, social environment, and motivation.

The misconception is that more education equals better outcomes. In reality, if we only focus on knowledge, we're missing the point. What we need are systems that support patient activation—personalized interventions that help people take the first step, believe change is possible, and feel supported in the process. That might mean health coaching, peer support, or just being seen and listened to.

True impact comes when we stop asking, "Do they know what's wrong?" and start asking, "What's stopping them from doing something about it, and how can we help?" That shift in thinking is what turns awareness into action.

Dr. Fakorede and team: One of the most common misconceptions CLTI patients have is not realizing that they had PAD all along and that their condition has now quickly progressed to its most advanced and dangerous stage. Many people have never heard of PAD, nor do they connect it to common risk amplifiers like diabetes, tobacco use, hypertension, chronic kidney disease, or polyvascular disease affecting the brain, heart, and legs. These conditions silently drive inflammation and vascular damage over time, often going unrecognized until they lead to functional limitations or disease progression. Patients are often unaware that symptoms like leg pain, wounds, or numbness are warning signs of a serious vascular condition, leading to a dangerous lack of urgency in seeking care.

Another common and concerning misconception I encounter daily in the Mississippi Delta is the belief that amputation is the only or standard treatment option at this stage. In reality, limb salvage—through quality revascularization and coordinated multidisciplinary quality wound care—is often possible and in many cases is the preferred approach. This phase of CLTI is mainly preventable! Patients also don't fully grasp the life-threatening nature of CLTI. This is the equivalent of late-stage cancer, which carries high mortality rates, especially if untreated. Education is critical to helping patients understand that CLTI is not just a limb problem; it's a sign of widespread cardiovascular disease requiring urgent, comprehensive care.

Drs. Smolderen and Mena-Hurtado: I believe patients know all too well how devastating the condition is, and they are doing the best they can to get through it and push through. It impacts them tremendously from a psychological perspective, and I would say that we often underestimate the impact this disease has on all domains of life. Expansion of support is needed to take care of this condition from a multirisk, holistic perspective.

A recent publication by Secemsky et al found that nearly two-thirds of patients did not receive adequate care before undergoing amputation, highlighting a need for enhanced provider education.[3] From your experience, what are the common blind spots for these providers about the disease, and what are some strategies for outreach and education among primary care physicians regarding CLTI?

Dr. Fakorede and team: The excellent study by Dr. Secemsky and colleagues revealed a troubling reality that nearly two-thirds of patients who underwent major amputations for PAD or CLTI had no documented vascular evaluation or revascularization attempt prior to limb loss. This reflects persistent blind spots in primary and specialty care, including a lack of awareness that PAD—often asymptomatic or presenting with chronic symptomatic disease—can silently progress to CLTI, which is a life- and limb-threatening emergency. Providers may underestimate the urgency of rest pain, tissue loss, or nonhealing wounds, not recognizing these signs as vascular crises equivalent to stroke or myocardial infarction.

The article further exposed the persistent disparities in vascular care and outcomes among underserved and marginalized communities—disparities largely driven by unaddressed social determinants of health, structural racism, and systemic urban barriers. Studies show that low-income and Black patients often receive lower-intensity vascular care prior to amputation due to delayed access, underresourced health systems, and competing challenges such as poverty, transportation barriers, and housing insecurity.[4] These inequities are deeply rooted in structural forces that many primary care providers or health care systems are not equipped to address alone. Closing these gaps requires engaging stakeholders beyond the health care sector, including those who understand the broader impacts of poverty, exclusion, and limited education and bring evidence-based, sustainable solutions to address nonmedical drivers of health. It also calls for integrating PAD- and CLTI-related amplifiers, including social determinants of health, into primary care continuing education; expanding community health worker programs; and implementing clear referral pathways and electronic health record–based alerts to ensure timely, equitable care.

Another key challenge is confusion around referral pathways. Many primary care clinicians aren't sure whether to send patients to an interventional cardiologist, interventional radiologist, vascular surgeon, vascular medicine, or podiatrist, and they often wonder whether these specialists will pursue aggressive limb salvage through revascularization, offloading, and wound care before considering amputation. This uncertainty, paired with fragmented care and limited access to MDTs, especially in rural or underserved "vascular deserts," leads to delayed intervention and preventable limb loss. All primary care providers and advanced practice providers should be connected to regional limb preservation networks, with transportation support ensured for patients to facilitate timely access to specialized care (regardless of financial status).

Critically, the United States Preventive Services Task Force (USPSTF) has not yet recommended PAD screening for high-risk populations, which sends a damaging signal and undermines the importance of early detection. As a key evidence-based authority guiding primary care, the USPSTF's stance influences clinical priorities. Updating these recommendations is vital to give primary care providers the mandate to intervene early. Reframing PAD and CLTI as urgent, preventable, and treatable conditions and equipping providers with the education and support they need can drive meaningful change, reduce disparities, reduce health care costs, and ultimately save both lives and limbs.

Drs. Smolderen and Mena-Hurtado: I have spoken to patients who had a diagnosis of type 2 diabetes early in life but did not take its management seriously because they did not think it could go wrong; yet, they ended up developing CLTI and undergoing amputation. Competing life struggles, barriers in access to care, health literacy, economic hardship, social determinants of health, and exposure to trauma are potential blind spots for us as providers to see and address. We need developmental and community-based multiprong tactics to address the impact of this disease. Collective advocacy for a population health approach is also a shared responsibility for us to highlight and address these issues.

Dr. Ahmad: When it comes to improving CLTI outcomes, we don't need to reinvent the wheel; we already know what works. The evidence is clear. The National Diabetes Foot Care Audit consistently shows that faster time to first expert assessment is associated with better outcomes and fewer amputations. "Time is tissue" isn't just a slogan, it's the clinical reality. Every delay costs viable tissue and, in many cases, lives.

The question isn't what to do: It's why this isn't happening. We have national guidelines and risk stratification tools, and we know the red flags. But the gap lies in system responsiveness. Pathways aren't being followed, referrals aren't being triaged urgently enough, and access to rapid MDTs isn't consistent. It's not about lack of knowledge but lack of execution.

We also need to stop assuming education alone is the solution. Whether it's patients who keep smoking despite knowing the risks or clinicians who are aware of the guidelines but still refer late, the real challenge is activation and accountability. Patients need support to act, and systems need to be held accountable when they don't respond quickly enough.

Improving CLTI care means asking the harder questions: Where are the delays? Who owns the pathway? Why are patients still waiting? Until we fix that, we'll keep knowing the right answers but failing to deliver them in time.

Dr. Dua: The fact that nearly two-thirds of patients do not receive guideline-recommended care before undergoing amputation highlights a critical gap in how we identify and manage CLTI. This is not a reflection of a lack of concern among providers but rather the result of limited awareness and fragmented care pathways.

According to recent survey data from the SVS, primary care providers rank vascular disease among the top three health crises facing our aging population, behind only heart disease and cancer.[1] Yet, > 80% of those providers report feeling uncertain about their ability to recognize or diagnose vascular conditions. These findings make it clear: The commitment to patient care is there, but many clinicians have not been equipped with the training or tools to confidently take action.

National initiatives like the SVS Highway to Health campaign play an important role in broadening awareness, empowering patients, and supporting shared decision-making. But efforts cannot stop there. Ongoing medical education must reflect the real-world complexity of CLTI and provide practical, actionable guidance for primary care teams.

Equally important is ensuring that these teams know when to refer and feel confident that a coordinated care plan—anchored by collaboration with vascular surgeons—will follow. When we provide that level of clarity and support, we reduce delays, eliminate uncertainty, and ultimately improve outcomes for patients at risk of limb loss.

The AHA scientific statement by Smolderen et al highlighted the many intersections of pain and PAD.[5] What do clinicians need to understand about how reports of patients' pain may indicate PAD before it progresses to CLTI?

Dr. Fakorede and team: Pain can be an early and critical indicator of PAD, even when it doesn't present in the classic way. As highlighted by Smolderen et al, many patients experience atypical leg symptoms under the subset of chronic symptomatic PAD (ie, heaviness, fatigue, vague discomfort) that are often misattributed to aging or arthritis.[5] This misinterpretation leads to underdiagnosis and delays in care, increasing the risk of progression to CLTI. Clinicians need to ask detailed questions about how pain affects daily life, walking ability, and sleep. Early ischemic pain may not be constant, but it often signals declining circulation and warrants further vascular evaluation. Importantly, pain reporting and treatment can be influenced by race, gender, and socioeconomic status, contributing to health disparities. We must listen closely, validate patients' pain, and ensure timely testing like ABI to detect PAD before it advances. In short, pain is not just a symptom, it's an opportunity to intervene early and save limbs.

Drs. Smolderen and Mena-Hurtado: Clinicians need to understand that multiple comorbidities impact the pain experience and that pain is not necessarily a direct reflection of the degree of ischemic damage. It is the role of cognitions, emotions, and behaviors in addition to other pain syndromes patients may already have—as well as diabetes—that influence the pain experience in PAD.

Dr. Dua: Crampy pain in the calf that comes with exertion (walking) and goes away with rest is a classic sign of claudication but can often be mistaken for other issues and overlooked unintentionally. When patients progress to having CLTI, rest pain (defined as pain continuously, even at rest) can be insidious and be mistaken for other issues. Thus, it is important for clinicians to understand that pain in the legs or feet can be limb ischemia and patients should be evaluated with a pulse exam and ABIs.

Dr. Ahmad: There's a medical saying: "Listen to your patient, listen to your patient, listen to your patient—they are telling you the diagnosis." Nowhere is that more true than in PAD. If a patient tells you they have pain in their calves when they walk that goes away with rest, that's intermittent claudication, and it is PAD until proven otherwise. The challenge is making sure clinicians recognize it early, before it progresses to CLTI.

Clinicians need to include PAD in their differential diagnosis, especially in high-risk patients with diabetes, smoking history, or renal disease. All too often, leg pain gets dismissed as arthritis or neuropathy, and the window for early intervention is missed. That's a failure of clinical listening and pattern recognition.

But the bigger issue isn't just recognizing PAD, it's how we treat it. We know supervised exercise therapy works. It's guideline-recommended and evidence-backed. Yet 70% of patients referred never attend, and most systems don't have the capacity to manage the 30% who do. That's a systemic problem, not a patient one.

If we're serious about reducing progression to CLTI, we need to address this bottleneck head-on. That means investing in accessible, community-based rehab models, making pathways easier to navigate, and supporting patients to engage, not just handing them a leaflet and hoping they show up.

If we act early at the claudication stage and truly listen, diagnose, and treat, we can stop a huge proportion of patients from ever reaching the point of rest pain or tissue loss. The opportunity is there. The question is: Are we structured to take it?

Efforts have been made to raise awareness and address concerns related to PAD and amputation prevention on the legislative level, including the recently reintroduced ARC Act in the United States. Where else is education needed for governmental stakeholders?

Dr. Ahmad: Legislative moves like the ARC Act are welcome. They show that PAD and amputation prevention are finally being taken seriously at the national level. But for a real impact, education for governmental stakeholders must go further. Awareness is just the start—what's needed is understanding of the structural gaps that allow avoidable amputations to persist.

A key opportunity lies in the national cardiovascular strategy. Right now, "cardio" is well represented (heart failure, hypertension, and stroke), but "vascular" representation remains poor. Claudication, for example, is essentially angina of the legs (same pathophysiology, same risk factors, same systemic implication), just in a different location. Yet, it's rarely given the same urgency or investment. If PAD was treated with the same seriousness as coronary artery disease, we'd see far fewer people progressing to CLTI.

This is where education is critical: Policymakers need to understand that PAD is part of the same atherosclerotic spectrum. It should be fully integrated into a strengthened cardiovascular strategy, not siloed off as a niche issue.

Beyond that, we need political will to address the real-world delivery problems. The National Diabetes Foot Care Audit shows that earlier access to expert assessment reduces amputations. We don't have a knowledge gap—we have a system responsiveness gap. Too many patients are still waiting too long for MDT input, and community services like supervised exercise therapy remain underfunded, underattended (with 70% nonparticipation), and under capacity.

We know what works. The challenge is scaling it. Governmental support should focus on building pathways that are fast, equitable, and resourced across primary, community, and specialist care. Major amputation isn't just a clinical outcome—it's a policy failure. Preventing it is as much about system design as it is about medicine.

Dr. Dua: Government stakeholders need to be educated on what PAD is and how it presents in our patient population. One of the biggest issues currently facing this population is awareness in the general public, including the people who make up the government. Everyone understands what a heart attack or a stroke is but according to the SVS survey, up to 80% of people have not heard of PAD, even though its etiology and histopathology is similar to heart attack or stroke but presents in the legs and can lead to amputation.[1]

Dr. Fakorede and team: We're proud that the ARC Act has been reintroduced by the 119th Congress, and efforts are now underway to reestablish the bipartisan PAD Caucus. But education for governmental stakeholders must go far beyond raising awareness—it must clearly communicate the clinical, economic, and human toll of PAD on both state and community levels. There remains a dangerous lack of understanding about PAD's link to major adverse cardiovascular events and major adverse limb events, both of which dramatically increase mortality and reduce quality of life. Amputation is not just a limb issue; it's a life issue, with outcomes worse than many forms of cancer.

We're especially proud of the progress in Illinois, where the state chapter of the American College of Cardiology (in partnership with the Association of Black Cardiologists) has used the ARC Act as a guiding framework. Their collaborative advocacy helped pass Senate Bill 1418 (SB1418) in the Illinois Senate and the Illinois House Insurance Committee. If passed by the full Illinois House, slated for a vote in mid-May, this will be headed to the governor to sign. If signed into law, it would ensure PAD screening and insurance coverage for those at risk, making Illinois a national leader in legislative action to combat PAD. This could be a major pathway for other states to follow.

Still, federal and other state lawmakers need to be shown how early detection, proper screening, and access to guideline-based care can prevent unnecessary amputations, reduce health care costs, and save lives—especially in underserved communities where disparities remain stark. Too many patients are still suffering in silence due to a lack of education, outreach, and systemic support. With the right policy tools, partnerships, and cultural shift in how we view PAD, we can build a national, community-centric model focused on limb preservation, equity, and prevention. This is more than passing legislation—it's about changing the standard of care and protecting lives.

Drs. Smolderen and Mena-Hurtado: Education starts in the schools at an early age. How to understand our bodies, what we eat, how we move, how stress impacts disease and cardiovascular health, and how to prioritize self-care and mental health are critical elements to support individuals in healthy aging throughout their lifespan. Addressing barriers in accessing care is another big area. If people avoid getting care because they experience financial obstacles or are simply not able to get to their doctor, that is a big problem.

Surveying the current literature base for CLTI, what type of research or guidelines would most improve what we currently know about CLTI and, in turn, improve care?

Drs. Smolderen and Mena-Hurtado: Lowering the amputation rates among high-risk groups is an absolute priority. Initiatives require high-quality national data, accountability, community approaches, and frameworks for value-based care to hold us all accountable.

Dr. Fakorede and team: A multisocietal approach to providing the USPSTF with additional strong, evidence-based data is essential to support an update to its current recommendations on PAD screening. Without guidance to screen high-risk populations, early detection is deprioritized, sending the wrong message to clinicians and patients alike.

To improve care for CLTI, research should focus on distinguishing treatment delivery from treatment decision-making, ensuring patients not only receive the right interventions but also access them in a timely, equitable manner. There is a critical need for continued research into system-wide PAD and CLTI hotline models to expedite urgent referrals, along with improved methods for assessing foot perfusion and identifying reliable predictors of both technical and clinical success after revascularization. Simultaneously, more evidence-based research is needed to advance therapies that enhance below-the-knee perfusion—addressing both macro- and microcirculation—to support effective wound healing, with a strong emphasis on demonstrating clinical and cost-effectiveness. Comparative studies on endovascular, surgical, and hybrid approaches in diverse populations are needed, along with more data on long-term outcomes, including quality of life and functional recovery. Emphasis should also be placed on the incorporation of solutions to social drivers of health throughout the care continuum of these patients pre- and postrevascularization. There is also a pivot to rebrand PAD and CLTI (much like oncology has done) by elevating its public and clinical profile to reflect its true severity. This shift would help it resonate with medical trainees, health care providers, and the public as a critical cardiovascular emergency, on par with stroke or heart attack.

Dr. Ahmad: When it comes to CLTI, we're not short on knowledge—we know what works. We know timely revascularization saves limbs. We know early identification and MDT-led care reduces progression. We know supervised exercise, smoking cessation, and glucose control all improve outcomes. The real question is how to implement this effectively—especially in financially challenged systems.

What's missing isn't another set of broad guidelines but research that focuses on delivery. We need implementation science that shows how to make proven interventions scalable, accessible, and efficient. For example, how do we make revascularization technologies—which are advancing rapidly—available to patients in a timely manner, especially in systems where waiting lists, geography, or referral bottlenecks delay access?

Similarly, we need studies that model service redesign. What does a high-performing limb salvage pathway look like across a whole region? How do we optimize community triage, speed up referral into vascular care, and integrate podiatry and diabetes teams more tightly? The success of programs like the Manchester Amputation Reduction Strategy shows what's possible when systems align around rapid access and accountability.

We also need economic research, such as cost-effectiveness studies that demonstrate to commissioners and policymakers that early investment in CLTI pathways saves money in the long run by avoiding major amputations, prolonged admissions, and long-term disability.

In short, we don't need to redefine the *what*. We need practical, real-world evidence on the *how*, especially in underfunded health economies, to turn existing knowledge into consistent action. Because knowing is not enough. Implementing is where lives and limbs are saved. ■

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