



THE PAD PATIENT JOURNEY IS MORE DIFFICULT – ESPECIALLY FOR UNDERSERVED POPULATIONS, PEOPLE WITH DIABETES, AND WOMEN

Peripheral artery disease (PAD), a chronic disorder caused by progressive narrowing of the blood vessels (arteries), impacts more than 230 million adults worldwide.¹ PAD most commonly affects the arteries of the lower limbs, with blockages that restrict bloodflow to the legs and feet. The disease can cause troublesome symptoms that include claudication (pain brought on by walking) as well as both pain at rest and the formation of non-healing ulcers when the condition is severe. At best, PAD patients' quality of life can be significantly reduced; at worst, the condition can lead to amputation and premature death.

Despite its widespread prevalence, PAD remains underdiagnosed and undertreated²: among participants in the PARTNERS (Peripheral Arterial Disease Awareness Risk and Treatment: New Resources for Survival) program³, nearly half of enrolled people received their diagnosis only after inclusion in the study.

Recent research reveals that adults lack knowledge about PAD: a population-based telephone survey found that only a quarter of Americans over the age of 50 had some familiarity with PAD.⁴ Even more concerning is that primary care physicians – besieged by ever-increasing workloads – are aware of a PAD diagnosis having been established among their patients only around half the time⁵, indicating a perception that PAD as a significant or modifiable disease entity is lacking.

These findings align with those from a new Abbott survey that explores differing perceptions and experiences of 1,289 people suffering from vascular disease (including PAD) across 13 countries – along with those of 408 physicians and 173 administrators.

Our study has confirmed that PAD patients experience significantly more difficult journeys than their CAD counterparts – with challenges that have the potential to delay a clear diagnosis and development of a treatment path. This, in turn, increases the risk of severe consequences – such as amputations – due to disease progression.⁶

COMPARED WITH CAD PATIENTS, PAD PATIENTS ARE:

- 52%** more likely to be misdiagnosed
- 71%** more likely to report ineffective treatment
- 68%** more likely to have personal routines or priorities that prevent them from seeking timely medical attention
- 87%** more likely to switch doctors often
- 84%** more likely to feel anxiety about visiting doctors' offices
- 69%** more likely to experience uncertainty while awaiting an appointment

“My primary care provider... referred me to an orthopedic doctor, which did not help. Finally, I was referred to a vascular surgeon. It was a year before I got the right referral,” explained a female PAD patient in her early 70s from the United States.

The care journey becomes even more difficult when PAD patients are part of underserved communities (especially women), and when they also suffer from diabetes.

Underserved⁷ PAD Patients Struggle More Than Their Non-Underserved PAD Counterparts.

Overall, underserved PAD patients have a much tougher experience than non-underserved PAD patients throughout the care journey.

COMPARED WITH NON-UNDERSERVED PAD PATIENTS, UNDERSERVED PAD PATIENTS ARE:

- 74%** more likely to report initial misdiagnosis
- 48%** more likely to report that they felt the treatments they received were ineffective
- 171%** more likely to lack a primary care doctor
- 100%** more likely to have personal routines or priorities that prevent them from seeking timely medical attention
- 99%** more likely to feel their symptoms “are not a big deal”

“My experience would have been less challenging if the clinic doctor had sent me for the proper tests in the first place,” said a male PAD patient in his early 60s from Canada. “I was able to find out what needed to be done in 10 minutes, while the doctor I was going to never did in the three years I saw him. He just kept sending me for unnecessary tests.”

Unsurprisingly, the experience of underserved PAD patients worsens based on how underserved they are. For example, highly underserved⁸ PAD patients are nearly three times as likely to be misdiagnosed than non-underserved PAD patients – and more than twice as likely to report ineffective treatment. Highly underserved PAD patients also struggle to notice their symptoms – and tend to underplay them – three times more often than non-underserved PAD patients. And, they’re about six times as likely to feel uncomfortable about sharing personal data with their doctor and to lack a primary care doctor.

Underserved Patients With PAD and Diabetes Face an Even Tougher Road

People with diabetes have at least twice the risk of developing PAD, CAD, and ischemic stroke.⁹ Approximately 20 to 30 percent of individuals with PAD have diabetes mellitus.¹⁰ Individuals with both diabetes and PAD are at higher risk than other PAD patients of rapid disease progression, worsening symptoms, and of developing CAD.¹¹

“Lower-extremity care of diabetes is a top-10 condition in terms of the global burden of disability,” explained Dr. David G. Armstrong, Professor of Surgery at USC’s Keck School of Medicine, citing recent data from the World Health Organization. “This is the most common medical problem that many people know nothing about. In fact, many would be shocked to learn that the direct costs of care for lower-extremity diabetes limb complications are more expensive in the United States than the five most expensive cancers.”

When PAD patients with diabetes are also underserved, their experience becomes considerably more difficult.

COMPARED WITH NON-DIABETIC UNDERSERVED PAD PATIENTS, **DIABETIC, UNDERSERVED PAD PATIENTS ARE:**

- 56%** more likely to report that their physician lacks proper diagnostic equipment
- 150%** more likely to struggle with noticing symptoms
- 81%** more likely to have personal routines that prevent them from receiving timely medical attention
- 88%** more likely to feel overwhelmed while trying to manage multiple medical conditions
- 148%** more likely not to have a primary care doctor
- 90%** more likely to struggle to find the right doctor
- 81%** more likely to switch doctors often

“I believe that using technology and digital tools would have helped me a lot because they would avoid more waiting and headaches,” explained an underserved diabetic PAD male patient in his late 60s from Brazil.

Highly underserved patients with PAD and diabetes have an even worse experience.

COMPARED WITH OTHER HIGHLY UNDERSERVED PAD PATIENTS, **HIGHLY UNDERSERVED PAD PATIENTS WITH DIABETES ARE**

- 54%** more likely to be misdiagnosed more often
- 114%** more likely not to have a primary care doctor
- 104%** more likely to switch doctors often
- 100%** more likely to feel anxious about visiting hospitals or doctor's offices
- 83%** more likely to have trouble finding the right doctor

Surprisingly, although underserved PAD patients with diabetes are more likely to report issues such as misdiagnosis, they tend to have overall more positive perceptions of their experience than underserved patients who don't suffer from diabetes. For example, compared with other highly underserved PAD patients, highly underserved PAD patients with diabetes are more than twice as likely to believe that nothing could have been done differently to improve their diagnostic experience.

Underserved Women With PAD Experience More Hurdles Than Underserved Males With PAD

Our survey also revealed that underserved women with PAD face more challenges than underserved male PAD patients – particularly when dealing with lifestyle issues and relationships with physicians.

COMPARED WITH THEIR MALE COUNTERPARTS, **UNDERSERVED WOMEN WITH PAD ARE:**

- 90%** more likely to have personal routines or priorities that prevent them from seeking timely medical attention
- 62%** more likely to feel overwhelmed in managing their different conditions
- 56%** more likely to feel their symptoms are not a big deal
- 54%** more likely to lack a primary care doctor
- 44%** more likely to have difficulty finding a reputable physician
- 41%** more likely to feel anxious about visiting hospitals or doctor's offices

“Just being listened to properly would have made the most difference,” stated 75+-year-old underserved female patient with PAD from the Australia-New Zealand region.

Next Steps: How do we Convert Pain Points Into “Gain Points” Across the PAD Patient Journey?

While there is no single solution to address the challenges highlighted in this report, the healthcare industry can begin to take strides forward by working to reduce the complexities and barriers that currently hinder the patient journey for PAD sufferers by focusing on three “meta-needs” of all patients with PAD: informational needs, functional needs, and emotional needs.

INFORMATIONAL NEEDS

The first step in addressing informational needs could be to establish a process that will help healthcare providers recognize the signs and symptoms of PAD, alongside evidence-based basic screening to establish a diagnosis.

In addition, patients and carers require a high degree of clarity and transparency throughout the PAD journey. This involves openness, honesty, and a sense of authenticity built through trust. Transparency in information-sharing between healthcare providers and patients establishes a foundation for improved healthcare experiences. Beyond transparency, patients and healthcare providers need to understand concurrent health conditions and how they might impact care. This includes addressing issues around access to medical records and health histories across the patient care continuum.

Some patients and their carers demand a strong degree of autonomy throughout their care journey, from having control over healthcare providers and treatment options, to actively engaging in preventative or other health practices.

Others may not require more than to be informed to a level that suits them; such a dichotomy requires an adaptive, interactive, and engaging healthcare experience in order to drive longer-term effectiveness.

“We can deliver better patient experiences – and save money – by having clearer pathways to referrals and diagnosis,” explained Dr. Armstrong. “We need to stop forcing patients to stumble from one doctor to the next without getting the proper diagnosis and treatment. Physician awareness and a coordinated approach are critical. Saving a patient’s leg should be a message that resonates with all providers.”

FUNCTIONAL NEEDS

With consumerization of the healthcare experience and increasing patient engagement, responsiveness from healthcare providers holistically is now needed to a level never seen before; provision of appropriate products, services, and solutions to service these needs is critical to improving patient experience across the entire care continuum.

EMOTIONAL NEEDS

It’s clear that patients need to feel confident about their diagnosis and treatment plan – and this mandates a mutual understanding between physicians and patients about what they are attempting to accomplish as a team. As any individual engages with uncomfortable, unfamiliar, or complex health issues relating to PAD, confidence is a critical enabler of great experiences in healthcare that allow patients not only to enjoy a sense of comfort, but also to act as brand advocates with other patients, as well as enabling them to navigate their own PAD journey.

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7. We used the following weightings (on a scale of 5) to determine whether patients were “less” underserved, “moderately” underserved, or “highly” underserved: Difficulties affording food (1.75), Difficulties affording medicine (1.5), Avoids medical care due to costs (1.0), Lower income than others in state/region (0.5), Has access to transportation when needed (0.25).
Based on these weightings, we determined that 27 percent of our underserved respondents fall into the “less” category, 13 percent into the “moderate” category, and 11 percent into the “high” category.
8. In Abbott’s survey, “highly underserved” individuals are more likely to: Have lower incomes than others in their state/region, avoid medical care due to costs, experience difficulties affording food and medicine.
9. Bulugahapitiya U, Siyambalapitiya S, Sithole J, et al, “Is Diabetes a Coronary Risk Equivalent? Systematic Review and Meta-Analysis,” *Diabet Med*. 2009;26:142–148.
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