



March 25, 2021

Dear Congressional Black Caucus Member:

The Association of Black Cardiologists (ABC) is seeking your original cosponsorship support of the Amputation Reduction and Compassion (ARC) Act. The ARC Act, first introduced in the 116th Congress as H.R. 8615, seeks to reduce the number of avoidable amputations suffered by peripheral artery disease (PAD) patients.

PAD is often a complication of diabetes that affects more than 30 million Americans.¹ When diabetes is not managed well, the risk of developing PAD increases. PAD develops when arteries become clogged with plaque resulting in reduced blood flow to the legs which puts patients at a dramatically higher risk of limb amputation. This condition is often associated with disease in other vessels of the body resulting in the concomitant risk of a heart attack or stroke.

It is estimated that one out of three people with diabetes 50 years of age or older has PAD, and African Americans are more than twice as likely to have PAD as their white counterparts.²

PAD treatment often involves lifestyle changes and medication; yet, only 20-30 percent of patients with PAD are being treated.³ Revascularization often becomes necessary to improve the blood circulation to the legs.

Race, income, insurance status, first point of medical contact, geographical location, and modifiable risk factors all determine patient outcomes. For patients with PAD, these factors also determine whether the outcome is a limb amputation. Every day, an estimated 230 Americans with diabetes will undergo an amputation.⁴ Yet, many PAD-related amputations are preventable if these individuals are aggressively screened and treated. The practice of unnecessary amputations disproportionately affects patients located in medically underserved communities. For example, in rural areas of the southeastern United States, amputation rates, especially among Black patients with diabetes, are high. In these regions, the risks of major amputation are often three to four times the national average.⁵

If PAD is caught in time, and patients referred in a timely manner, significant benefit could be derived from a peripheral vascular intervention. This involves a vascular specialist performing an angiogram to assess the blood flow to the limb, identifying vessels narrowed by plaque, and restoring blood flow to the limb by special techniques. If blood flow is restored and an existing wound is given time to heal, amputation is prevented. This procedure usually takes 90 minutes and ideally is performed as an outpatient procedure due to its cost benefits. Timely referral for an angiogram and intervention reduces the probability of an amputation by 90 percent.⁶

The human cost of amputations is significant with mortality following amputation ranging from 39–80 percent in five years — worse than most malignancies.⁷ Unnecessary amputations is also create a financial burden on our

¹ American Diabetes Association <https://www.diabetes.org/resources/statistics/statistics-about-diabetes>

² Department of Health and Human Services https://www.nhlbi.nih.gov/health/educational/pad/docs/pad_extfctst_general_508.pdf

³ Dhaliwal G, Mukherjee D. Peripheral arterial disease: Epidemiology, natural history, diagnosis and treatment; *Int J Angiol.* 2007 Summer; 16(2): 36–44. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2733014/>

⁴ American Diabetes Association <https://clinical.diabetesjournals.org/content/30/3/130>

⁵ Goodney, P., Dzebisashvili, N., et al. Variation in the Care of Surgical Conditions: Diabetes and Peripheral Arterial Disease; A Dartmouth Atlas of Health Care Series. https://www.dartmouthatlas.org/downloads/reports/Diabetes_report_10_14_14.pdf

⁶ CardioVascular Coalition <https://cardiovascularcoalition.com/cardiovascular-care/peripheral-vascular-intervention-amputation-prevention/>

⁷ Beyaz, S., Güler, Ü. Ö., & Bağır, G. Ş. (2017). Factors affecting lifespan following below-knee amputation in diabetic patients. *Acta orthopaedica et traumatologica turcica*, 51(5), 393–397. <https://doi.org/10.1016/j.aott.2017.07.001>

health care system, at a more than \$10 billion annually.⁸ Also, if you consider many amputees do not return to work, and the ripple effect of each amputation on family members and communities, it is an extraordinary financial burden to our economy as well.

Mississippi is an epicenter for cardiovascular disease including PAD and amputations, and it has had the lowest reduction in the probability of dying from cardiovascular disease.⁹ An initiative led by ABC member Foluso Fakorede, MD, and which has served as a model for the ARC Act, resulted in a reduction in the rate of amputations in a focal region of the Mississippi delta by 87.5 percent over the last 3.5 years. His story can be found in a [2020 ProPublica article](#).

This successful model was the result of a team of individuals who used aggressive early screening, diagnosis and treatment of modifiable cardiovascular risk factors in at-risk patients and advocated for clinical care algorithms focused on angiograms before amputations. They promoted patient medical literacy and advocacy via a faith-based approach, building community navigators, educating the community about PAD and stressing the importance of prevention over cure. They also recognized the social determinants of health and discussed solutions with stakeholders on local and state levels.

The results in Mississippi can be realized elsewhere. Taking this as an example that amputation reduction is possible, there is the need to publish research, to develop real-world treatment algorithms to effect change in other underserved communities, to require accurate reporting of demographic data, and to pass legislation that includes common-sense policies that can reduce otherwise avoidable amputations. Other hotspots around the country for PAD include rural areas of Texas, Arkansas, Oregon, and North Dakota.

In summary, unnecessary amputation results from the failure to perform early screening, failure to provide early treatment of at-risk patients, and the lack of a multidisciplinary approach. This is reflective of low-value care which should end. The practice of unnecessary amputations must be disincentivized. Policies are needed that will incentivize physicians to offer patients a chance of limb salvage before amputation, that is, “no amputation without vascular evaluation.”

The techniques to save limbs already exists. Help from Congress is needed to create a path for patients to actually reach a vascular specialist in time to benefit from these techniques. We ask you to become an original cosponsor of the ARC Act. To become an original cosponsor of the bill, please complete [this form](#). If you have any questions, please contact Sam Morgante in Rep. Payne, Jr.’s office at sam.morgante@mail.house.gov.

Thank you for your consideration of our request.

Sincerely,



Paul L. Underwood MD, FACC, FSCAI
Co-chair, ABC Policy and Advocacy Committee



Jennifer L. Ellis, MD, MBA, FACS, FACC
Co-chair ABC Policy and Advocacy Committee

Founded in 1974, the ABC is a nonprofit organization with a national and international membership of 2,023 cardiovascular specialists, cardiologists in training and other health professionals, as well as professionals outside of health care who are members of the community (Community Health Advocates) and corporate and institutional members. The ABC is dedicated to eliminating disparities related to cardiovascular disease for all people of color and adheres to the vision that all people regardless of race, ethnicity or gender should benefit equally from reduction in the frequency, duration and impact of diseases of the heart and blood vessels.

⁸ Yost, M. Cost-Benefit Analysis of Critical Limb Ischemia in the Era of the Affordable Care Act. *Endovascular Today*, May 2014.

⁹ The Burden of Cardiovascular Diseases Among US States, 1990-2016; *JAMA Cardiol.* 2018;3(5):375-389. doi:10.1001/jamacardio.2018.0385 Published online April 11, 2018.