

Preventing Unnecessary Amputations:
**Peripheral Artery Disease and
Congressional Responses**

Panelists

Dr. Bryan Fisher – Moderator; Congressional Black Caucus 40 Under 40

Dr. Foluso Fakorede – Association of Black Cardiologists

Dr. Osama Ibrahim – North Memorial Health, Minneapolis, MN

Dr. Ehrin Armstrong – Society for Cardiovascular Angiography and Interventions

Dr. Lola Coke – Preventive Cardiovascular Nurses Association

Paulsen-Payne Initiative

Reducing Amputations in Patients with PAD

- This past February, Reps. Paulsen, Payne and 30 other members of the Congressional Black Caucus sent letters to HHS and the VA
- Letters highlighted significant racial disparities in amputations
 - African-American patients with diabetes have amputation risks 4X higher
 - Native-Americans in the west more than twice as likely to be amputated
 - Hispanics up to 75% more likely to be amputated
- Letters showed need for comprehensive approach to amputation prevention
- Letters have led to discussion with HHS over the possibility of an intragovernmental workgroup on amputation reduction with CMS, VA, and the Indian Health Service

Facts

Peripheral artery disease or PAD commonly refers to the presence of a stenosis or occlusion in the aorta or arteries of the limbs

Prognosis is correlated with the severity of PAD as measured by the ankle brachial index (ABI)

General practitioners (e.g., PCP, Podiatrists, etc) must be engaged in the diagnosis and management of PAD—it can be life saving

Early referral to a vascular specialist can facilitate optimal risk factor modification and management—this saves lives and reduces unnecessary amputation(s)

Economic Burden/Challenge

Annual 2015 expenditure \$215-380 Billion

75% of that “tab” picked up Medicare

More cost than CAD and DM

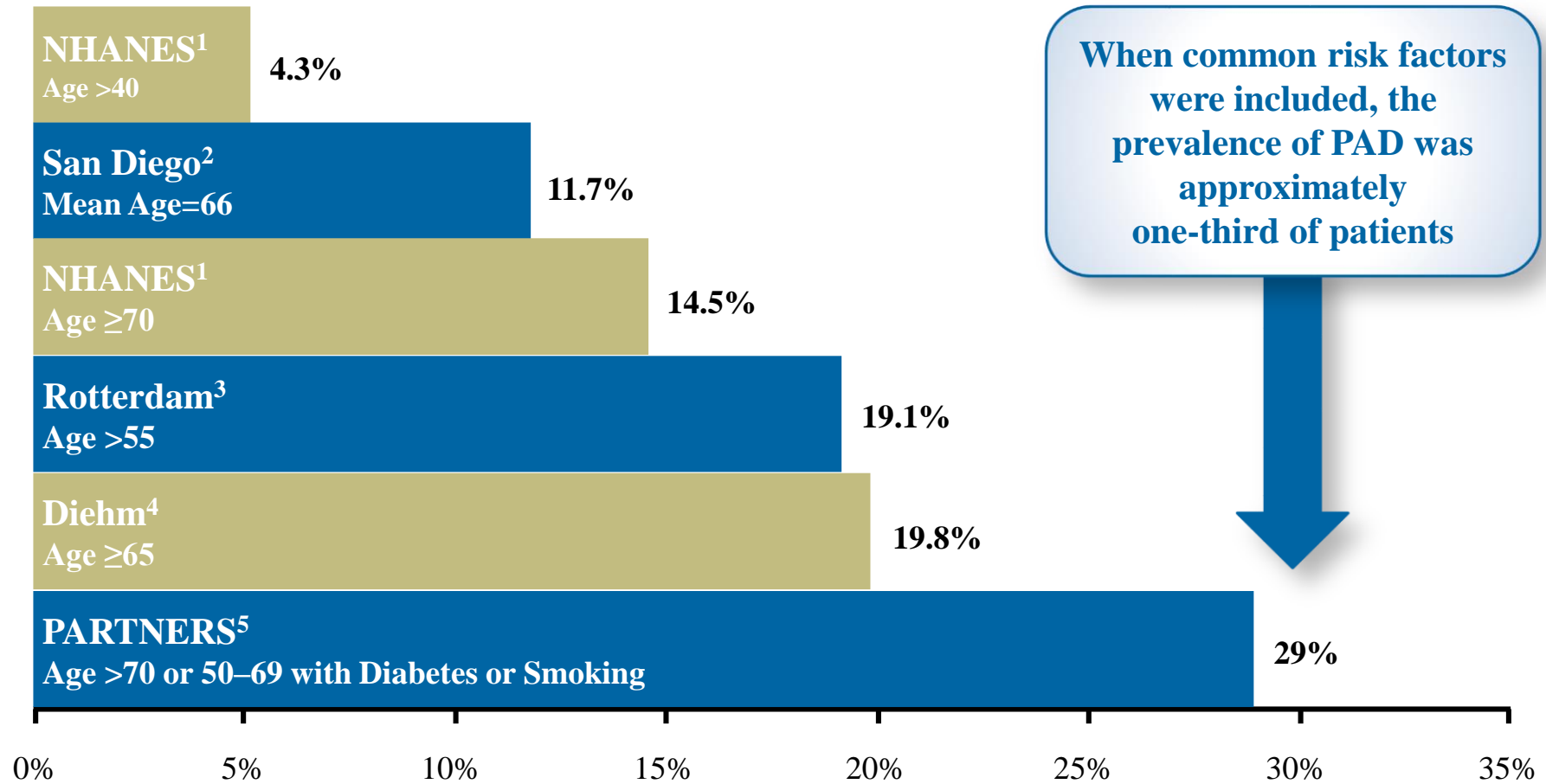
More prevalent than CAD and AFIB (2 major cardiac conditions)

More prevalent than all cancers combined

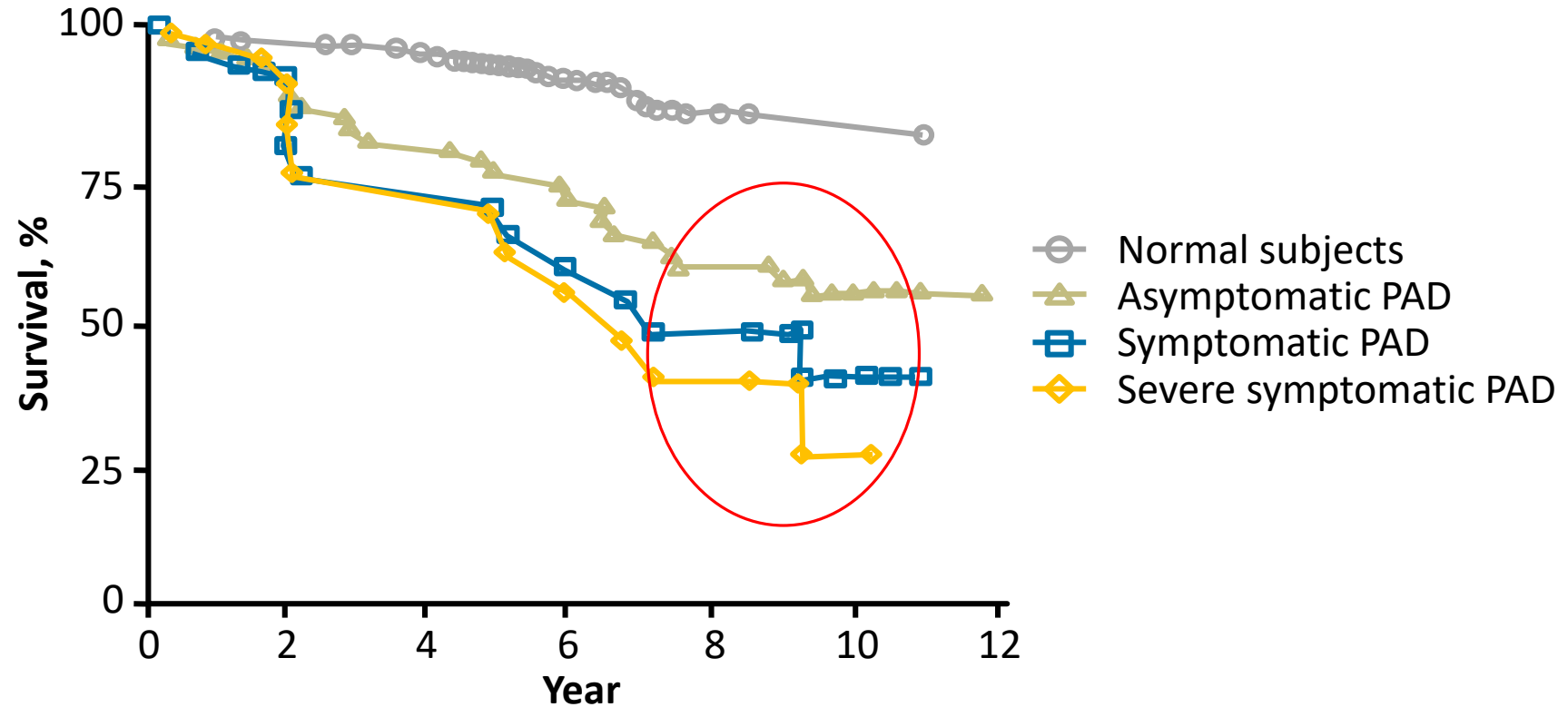
Only 12.5% of projected patient population identified and treated accordingly

150-180,000 amputations occur annually in the US where majority of these amputations may be avoided

Prevalence of PAD



10-Year Survival Rates for Patients with PAD



Why fear PAD ?

Similar characteristics of any **CANCER**

- Progressive
- Asymptomatic
- When identified – usually too late
- Significant morbidity/mortality
- Extremely prevalent and numbers are only on the rise:
 - Aging population
 - Increasing diabetic population (> 30-50% of population by 2050)

CANCER PATIENTS ARE AT-RISK AND NEED TO BE SCREENED

– Pap smear, CXR, and mammography

Why fear PAD ?

We know PAD patients exist – ALL the prevalence data supports such a claim.

PAD is our new number one cardiovascular challenge SO why are we behind ?

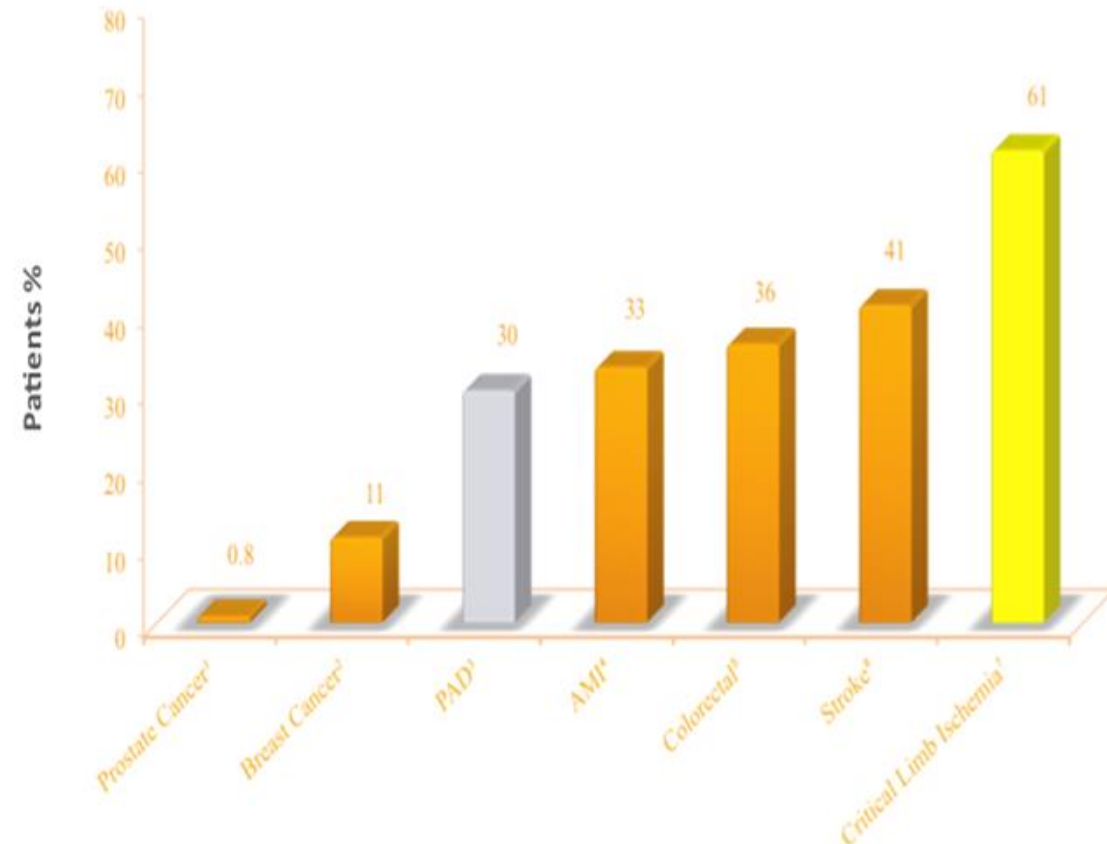
“THE PATIENT NEEDS TO BE EXTRAPOLATED – THIS CAN BE ACHIEVED BY PATIENT SPECIFIC POULATION SCREENING AND PROMOTING AWARENESS TO PHYSICIANS, HEALTHCARE ADMINISTRATORS, AND COMMUNITY”

The Patient Experience

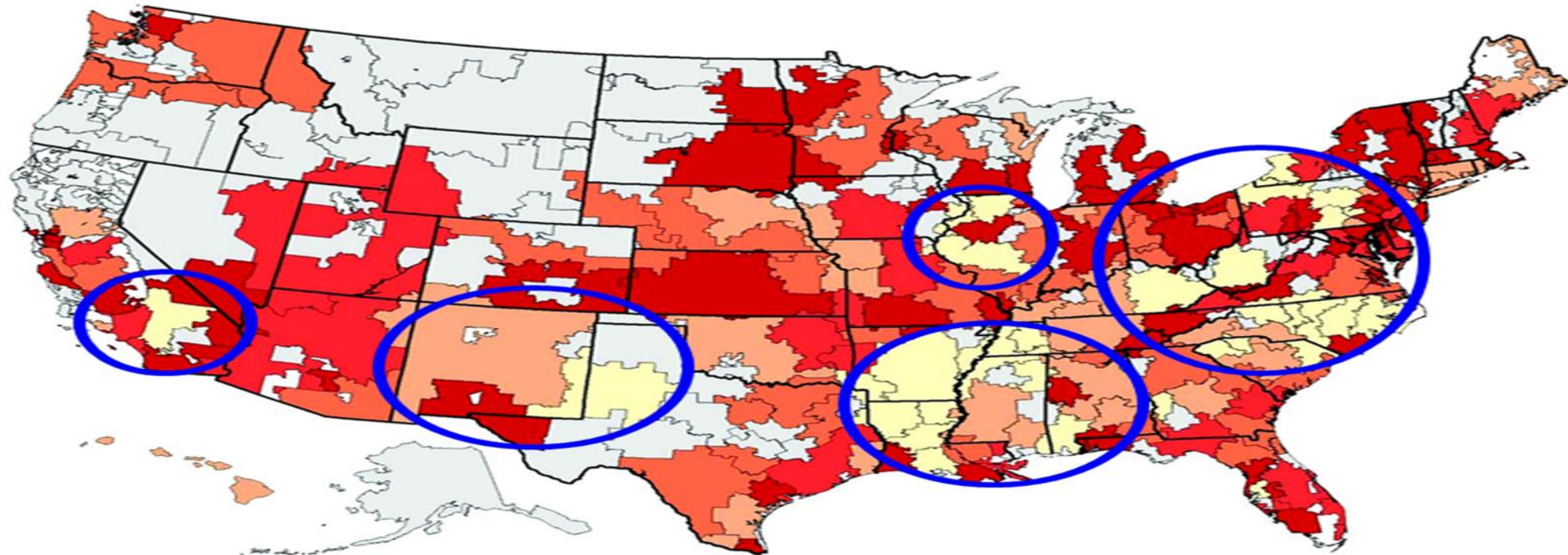
Amputation Lottery: It's not a game

- Probability of major amputation depends on:
 - Who you are and where you live
 - Race/Ethnicity
- Hospital-related costs account for the majority of total costs
- Majority undergoing amputations are Medicaid/Medicare recipients
- Economic burden of PAD / CLI exceeds diabetes and all cancers

5 Year Morality Rates for PAD and CLI



Revascularization Rates Low in Certain Regions



Rate of Revascularization in the Year Prior to Amputation for PAD
by Hospital Referral Region (2003-06)

■ 0.58 or Greater	(68)
■ 0.49-0.58	(34)
■ 0.45-0.49	(40)
■ 0.41-0.45	(35)
■ 0.32-0.41	(32)
■ Insufficient data	(97)
■ Not populated	

How Can Mississippi Amputee Afford \$200,000 / Year?

Early Costs

Annualized Costs



Rank	State	Poverty Rate (by Household Income)
48	Alabama	19.2%
49	Louisiana	19.9%
50	New Mexico	20.6%
51	Mississippi	21.9%

MY SHE-RO

- Ms. Gertrude Campbell
- Lives in Greenville, MS
- Rep B. Thompson district
- First African-American female hired at Greenville post office
- First African-American postmaster in Starkville, MS
- Favorite hobbies are dancing and cooking
- Retired after loss of left leg at age 72
- Unfortunately, I met Gertrude for the first time in March of 2018; she presented at a late stage and limbs were not salvageable





**MARCH – INITIAL
VISIT**

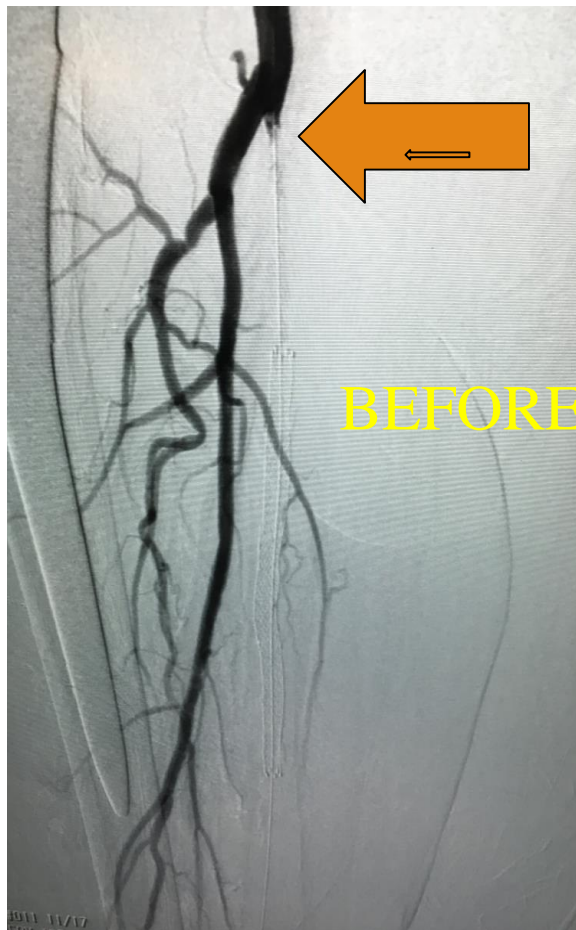


**TWO WEEKS
LATER**

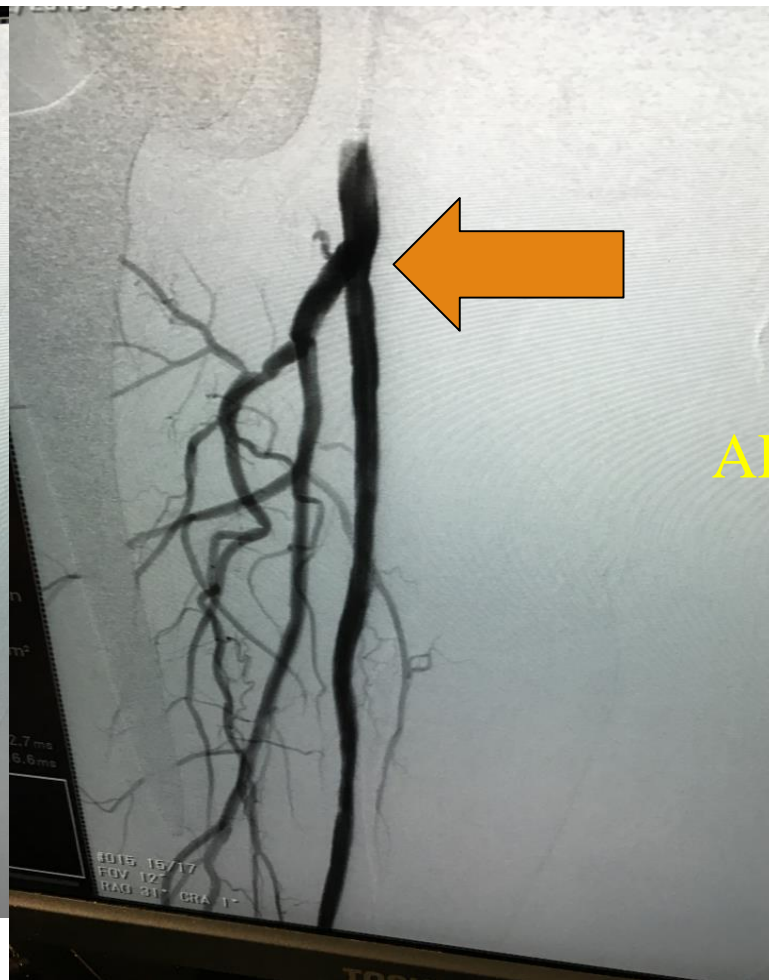
My She-Ro's Best Friend, Gwendolyn

- Ms. Gwendolyn Hughes
- Diagnosed with diabetes and stroke, but wheelchair bound due to undiagnosed PAD.
- Screened by me in August 2017 (despite USPSTF saying not to screen at-risk patients)
- I successfully revascularized her - she walked and danced into my office 2 weeks later.
- **Same disease but different outcomes due to lack of standardized, comprehensive amputation prevention policies**

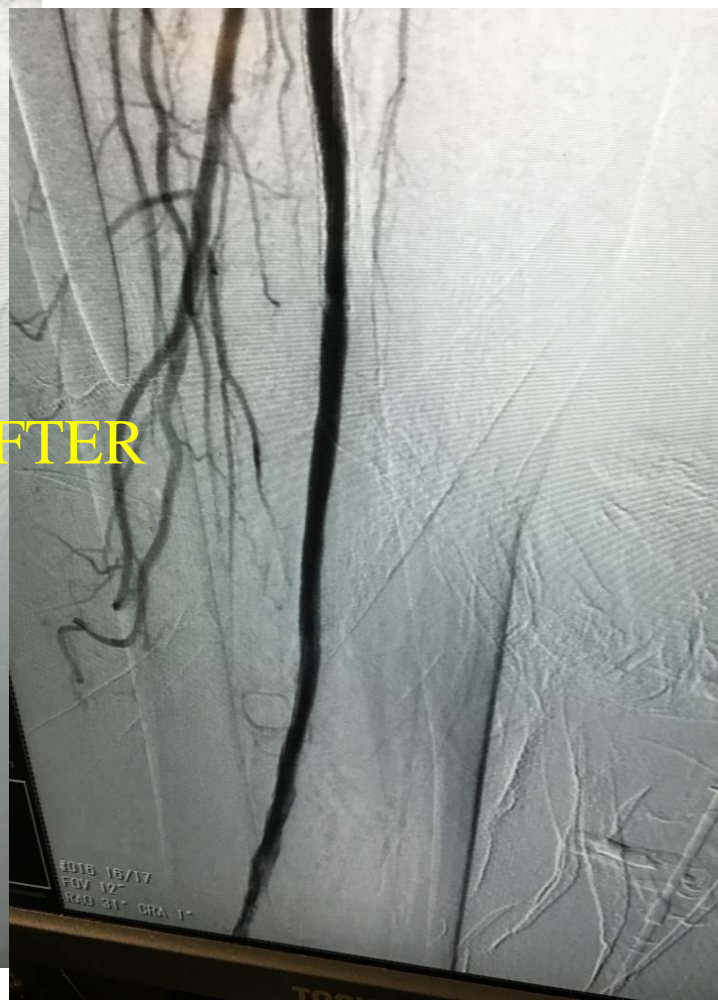




BEFORE



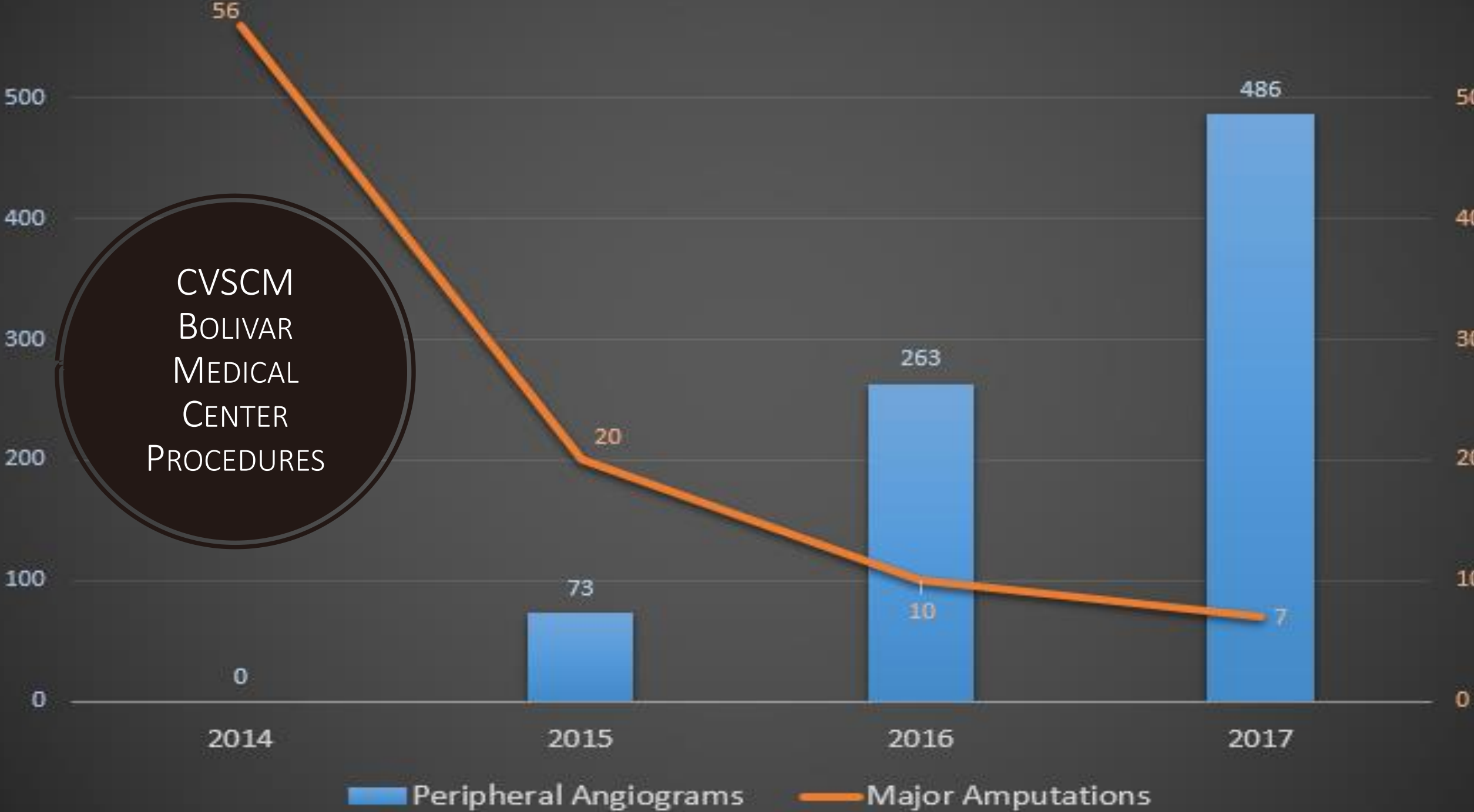
AFTER



My She-Ro's Best Friend, Gwendolyn



CVSCM
BOLIVAR
MEDICAL
CENTER
PROCEDURES



**Department of Veterans Affairs:
Preventing Amputations in Veterans
Everywhere (PAVE)**

Principles of VA's PAVE Program

Principles of VA's PAVE Program

Preventing Amputation in Veterans Everywhere

Established in 1993 by Public Law 102-405

Broad parameters of VA's PAVE program align with Paulsen-Payne letter as three main principles:

- 1. Screening of At-Risk Patients**
- 2. Assessment and Stratification of At-Risk Patients**
- 3. Multidisciplinary Limb Salvage Team**

Screening of At-Risk Patients

- Identify those patients most likely at risk
- At-risk patients include
 - Patients with peripheral artery disease
 - Patients with diabetes
 - Patients with end stage renal disease
 - Patients with any cause sensory neuropathy

Risk Assessment and Referral Algorithm

Risk assessment in primary care:

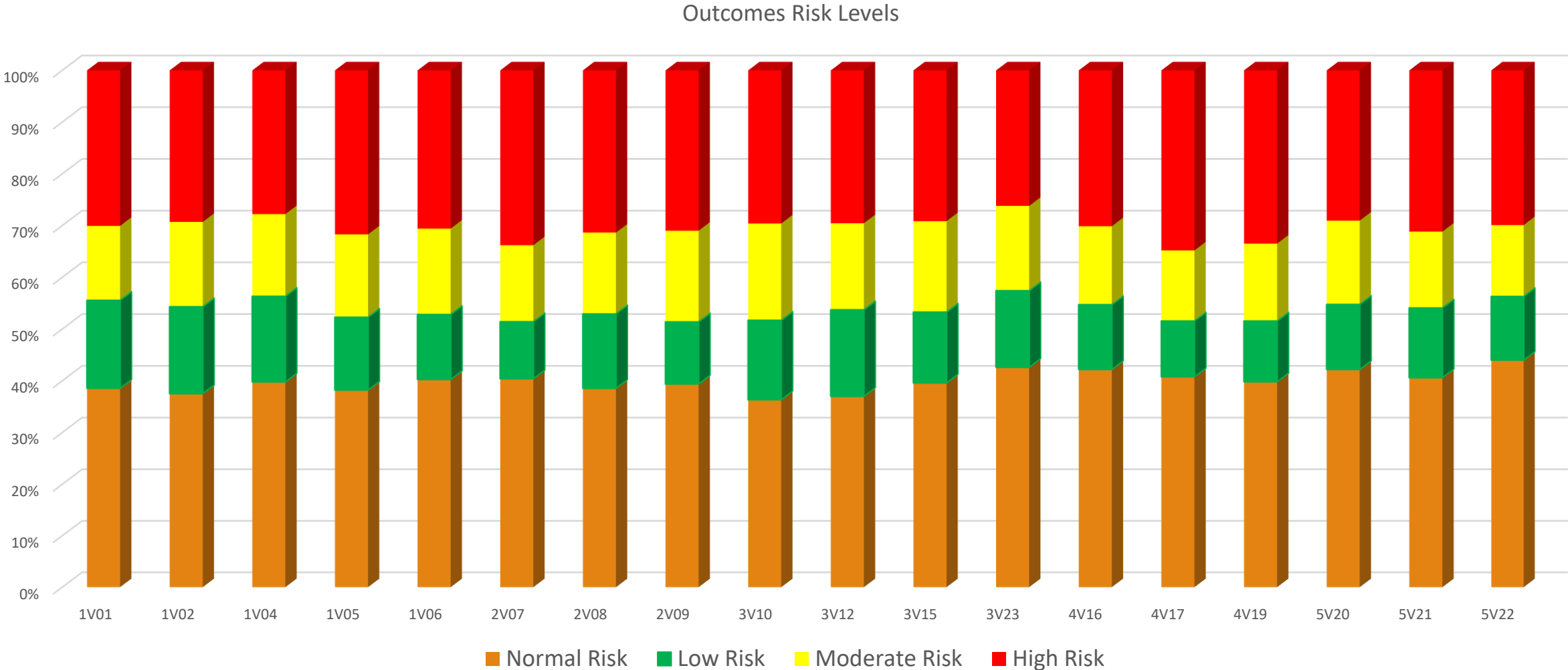
- Inspect for foot deformities
- Palpate pulses
- Monofilament testing

Use of risk assessment tool (Foot Risk Score) to set a risk score

- FRS 0 – Diabetes with no other problems
- FRS 1 – Diabetes and minor deformity
- FRS 2 – Diabetes with diminished circulation (but not diagnosed PAD) and/or sensory neuropathy with or without deformity
- FRS 3 – Diabetes with diagnosed PAD, with or without sensory neuropathy and any patient who has end stage renal disease, diagnosed PAD, Charcot foot, past history of gangrene, foot ulceration or amputation.

Because risk assessment is not a full examination, any patient with a FRS of 2 or 3 requires an examination by a foot care specialist to determine accurate FRS which includes Doppler exam for “diminished pulses” and a NIVT if warranted.

50% of Patients Are Medium or High Risk



Multidisciplinary Limb Salvage Team

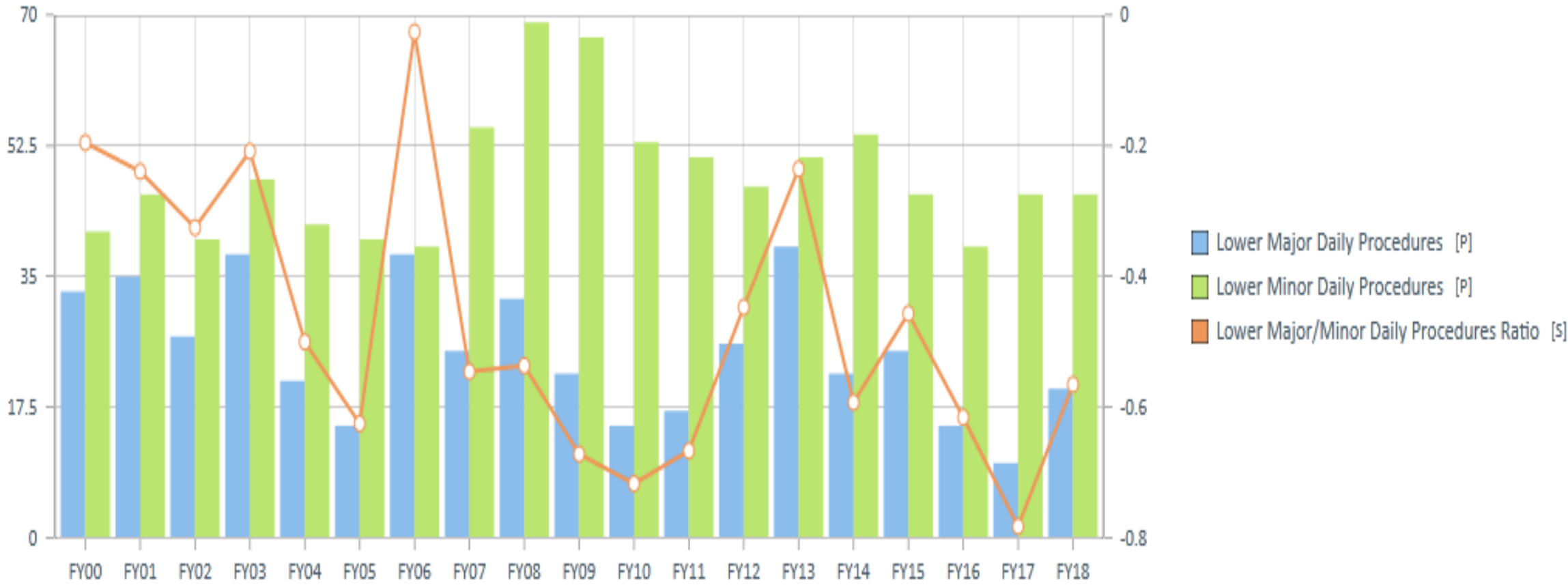
- Once risk assessment is established a referral algorithm is activated for proper referral for acute issues
- Referral algorithm includes a PAVE Team, an interdisciplinary group of clinicians and healthcare specialists utilizing preventive and rehabilitative resources.
- Interventions include revascularization, wound care, limb salvage surgery, etc.

Results from VA's PAVE Program

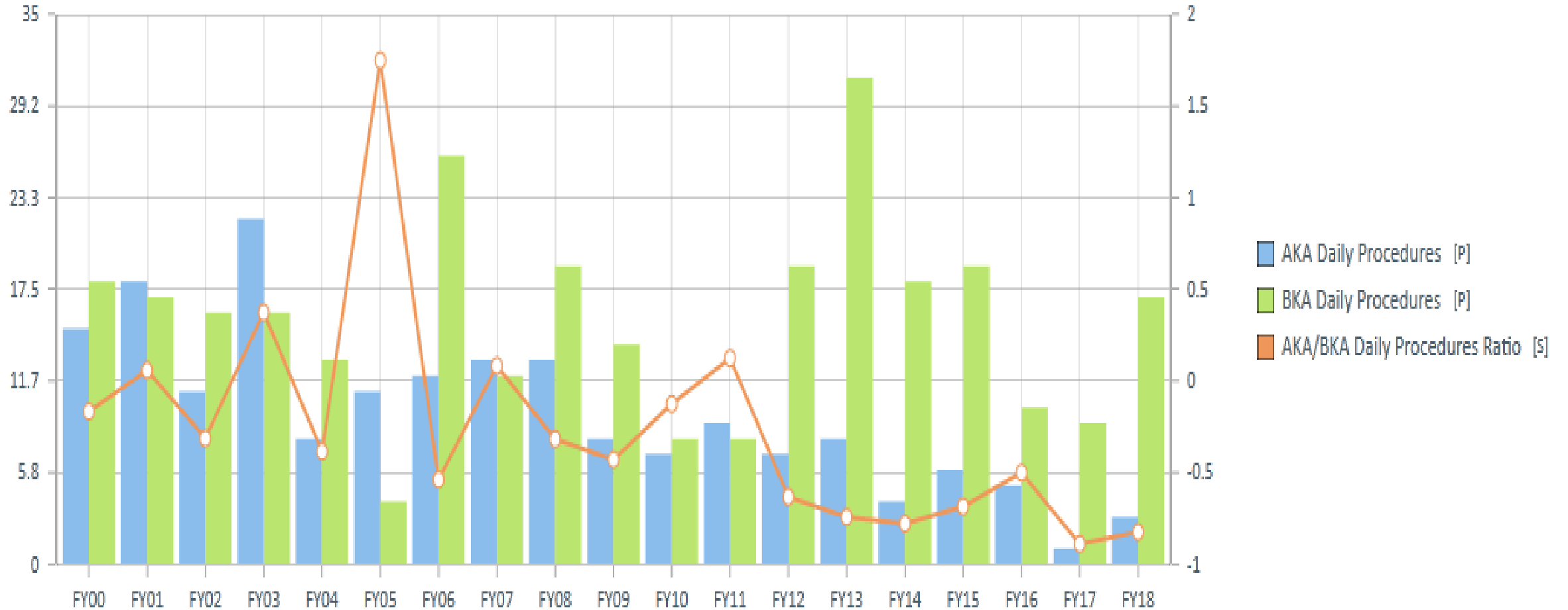
Who Gets Treated in the VA PAVE Program?

- 1.6 million patients in the VA PAVE program
- Average age 69 years
- 568,000 with a known history of peripheral artery disease
- 94,000 with non-healing ulcers
- 57,000 with gangrene

Reduced Major Amputations



Reduced Rates of Above-Knee Amputations



Intragovernmental Workgroup on Amputation Reduction

Intragovernmental Workgroup on Amputation Reduction

- Congress should direct Administration to convene intragovernmental workgroup to develop standardized model for amputation reduction
 - **Screening for At-Risk Patients**
 - HHS should work w/USPSTF to develop screening protocol for at-risk patients
 - **Multidisciplinary care**
 - Interprofessional Internet Consultation Codes in 2019 Physician Fee Schedule could encourage multi-disciplinary teams to provide vascular evaluations to provide risk assessments and referral recommendations
 - **No amputation without vascular evaluation**
 - Provider documentation of vascular evaluation in prior 12 months in cases of non-traumatic, non-emergent amputations
 - Non-payment of amputation without arterial testing