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meaningful in patients with noncompressible ankle-brachial indices (ABI).

Methods: A cohort of patients with peripheral artery disease (PAD) presenting to our vascular center from March 1 to May 1, 2022, underwent TMP measurement concurrent with ABI and toe pressure (TP) measurement using a Parks Industries Flo-Lab 2100-SX machine. Linear and quadratic regression models were used to assess the relation between TMP and TP or ABI. Goodness of fit was assessed with adjusted R^2.

Results: A total of 117 patients who were being followed for PAD and who were able to have toe pressures performed underwent testing. A majority had an active or healed wound (90% of diabetic and 78% of nondiabetic patients). The relation between TP and TMP was best described by a quadratic formula with an R^2 value of 0.46 (Fig). By combining the existing WIfI ischemia ranges defined by TP and the quadratic formula, new ischemia grades were calculated for TMP. Ischemia grade 0, 1, 2, and 3 corresponded to ranges of TMP pressure (mm Hg) of >75, 50 to 74, 35 to 49, and <35 (Table). There were 26 instances where a patient had a noncompressible ABI. None of these patients had a noncompressible TP or TMP. TP ranged from 31 mm Hg to 182 mm Hg (mean, 87 mm Hg) and TMP ranged from 82 mm Hg to 232 mm Hg (mean, 140 mm Hg).

Conclusions: We demonstrated that TMP can be integrated into the WIfI classification. We believe that TMP evaluation may increase reliability, accuracy, and accessibility of CLTI assessment and management.

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Vascular Quality Initiative Compliance With Society for Vascular Surgery Clinical Practice Guidelines for the Treatment of Claudication with Peripheral Vascular Intervention

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Background: Society for Vascular Surgery Clinical Practice Guidelines on the management of intermittent claudication (IC) were released in 2015. Uptake of guidelines into clinical practice is unknown. We hypothesized that guideline aligned practice increased after guideline release.

Methods: The Vascular Quality Initiative (VQI) peripheral vascular intervention (PVI) dataset was queried from 2010 to 2022 for treatment of IC. Only the first procedure was included. The primary end point was compliance with SVS recommendations. Guideline-aligned practice (GAP) from 2010-2015 was compared to after publication (2016-2022). A hierarchical regression controlled for hospital level variation due to changing VQI membership over time.

Results: Within 93,654 included cases, 30.9% were before and 69.1% after guideline release. After controlling for hospital level variation, GAP improved for preoperative nonsmoking status, P2Y Inhibitor if not aspirin, preoperative statin use, postoperative aspirin or P2Y inhibitor, dual antiplatelet, statin and optimal medical therapy (antiplatelet agent, statin, and no smoking status) (Table). Worsening GAP was present in SFA stenting for 5-15 cm lesions and infrapopliteal lesions (Table). Social deprivation measured by area deprivation index was associated with increased odds of smoking and decreased odds of postdischarge OMT (odds ratio, 0.71; 95% confidence interval, 0.65-0.77; $P < .001$).

Conclusions: While GAP for PVI improved for medical management, procedural domains did not with a concerning increase in infrapopliteal PVI for IC. SVS guidelines have had only a modest impact on practice and translation of guidelines to clinical care may be limited by both clinician and patient factors.

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Exploring Outcomes for Hispanic Patients Undergoing Open Bypass in the BEST-CLI Trial

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Table. Clinical Practice Claudication Guideline-Aligned Practice (*GAP*) Practice alignment with 2015 claudication guidelines before and after guideline release.

SVS clinical practice guideline	Short title	Overall GAP	GAP before guidelines (2010-2015)	GAP after guidelines (2016-2022)	*P* value	Adjusted (odds ratio, 95% confidence interval, *P* value)
2.1	Ankle-brachial index performed	71.2%	72.3%	70.8%	<.001	0.93, 0.76-1.13; $P = .442$
4.1	Nonsmoking status	59.6%	56.9%	60.8%	<.001	1.14, 1.05-1.42; $P = .001$
4.2	Preoperative Statin	78.6%	74.0%	80.6%	<.001	1.46, 1.33-1.90, $P < .001$
4.5	Preoperative Aspirin	76.8%	76.9%	76.7%	.717	0.99, 0.90-1.1; $P = .91$
4.6	P2Y inhibitor if no aspirin (25%)	34.4%	32.0%	35.3%	<.001	1.16, 1.05-1.28; $P = .004$
5.5	Stent for aortoiliac disease (45.7%)	65.4%	66.8%	64.7%	<.001	0.91, 0.81-1.02; $P = .110$
5.7	Covered stent for aortoiliac with severe calcification (7.3%)	19.3%	Not available	19.3%	Not available	N/A
5.18	Stent for 5-15 cm lesions	70.0%	73.4%	68.2%	<.001	0.764, 0.65-0.905; $P = .002$
5.20	No infrapopliteal treatment	87.6%	90.3%	86.4%	<.001	0.68, 0.60-0.78, $P < .001$
5.24	After prescription optimal medical therapy (antiplatelet, statin, and nonsmoking)	48.8%	43.7%	51.1%	<.001	1.35, 1.26-1.44, $P < .001$
5.26	Dual antiplatelet at discharge	64.2%	62.0%	65.2%	<.001	1.15, 1.03-1.28; $P = .013$

Table. Demographics

	Study cohort (n = 126)	AMP predict veterans affairs database (n = 200)	Vascular quality initiative database (n = 2055)	AMPREDICT PRO veterans affairs database (n = 357)
Below knee amputation	96 (76%)	111 (56%)	1366 (66%)	266 (75%)
Male sex	90 (71%)	192 (96%)	1370 (67%)	339 (95%)
Non-White race	75 (60%)	48 (24%)	848 (41%)	102 (29%)
Preoperative ambulation	126 (100%)	200 (100%)	1018 (50%)	357 (100%)
Coronary artery disease	68 (54%)	56 (28%)	635 (31%)	190 (53%)
Married	52 (41%)	105 (53%)	-	163 (47%)
Preoperative antiplatelet use	34 (27%)	-	1474 (73%)	-
Diabetes	102 (81%)	156 (78%)	1364 (66%)	322 (90%)
Dialysis	31 (25%)	20 (10%)	307 (15%)	27 (8%)
Smoker	65 (52%)	61 (31%)	1215 (59%)	228 (64%)

Background: Hispanic patients have higher prevalence of peripheral artery disease (PAD) risk factors, undergo revascularization at lower rates, and have higher rates of major amputation. This study compares outcomes after open surgical revascularization within the BEST-CLI Trial between Hispanic and Non-Hispanic White patients.

Methods: In a secondary analysis, cohorts were stratified (cohort 1: suitable single segment GSV, n = 484; cohort 2: lack of suitable single segment GSV, n = 150) by ethnicity and examined for the following 1-year end points: 1) major amputation; 2) major reintervention; 3) major adverse limb events (MALEs, composite of major amputation and major reintervention); and 4) survival by an as-treated analysis. Cox regression models were constructed to determine the association between Hispanic ethnicity and selected end points.

Results: 634 patients underwent open surgical bypass, 528 (83.3%) were Non-Hispanic White and 106 (16.7%) were Hispanic. Compared to White patients, Hispanic patients were younger (64.6 ± 8.6 years vs 68.5 ± 9.6 years; $P < .001$), had a higher proportion of diabetes (91.5% vs 66.3%, $P < .001$), were more never smokers (44.3% vs 16.2%, $P < .001$), and were more often on dialysis (15.1% vs 6.8%; $P = .005$). Preoperative ankle brachial index was higher among Hispanic patients (0.7 ± 0.4 vs 0.5 ± 0.3, $P < .001$). After controlling for age, sex, diabetes, dialysis, smoking history, infrapopliteal disease, WIFI Stage, and previous lower extremity revascularization, Hispanic ethnicity was not significantly associated with major amputation (adjusted hazard ratio [aHR] 0.67; 95% confidence interval [CI], 0.30-1.48), major reintervention (aHR, 0.81; 95% CI, 0.35-1.87), MALE (aHR, 0.64; 95% CI, 0.34-1.21), or survival (aHR, 0.69; 95% CI, 0.42-1.13).

Conclusions: Disparities in limb-related outcomes were not observed for Hispanic patients in the BEST-CLI Trial. Future PAD clinical trials should capture metrics of access to care, and timeliness of care for assessing risk of disparate outcomes among PAD populations.

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Applying Mobility Prediction Models to Real-world Patients With Major Amputations

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Background: Outcome prediction models have become commonplace and are promoted to aid in counseling patients. The aim of this study is to evaluate the performance of existing mobility prediction models for postmajor amputation (MA) patients in a real world, socioeconomically disadvantaged population.

Methods: A retrospective review of patients with MA secondary to peripheral arterial disease from 2016 to 2022 was performed. Patients who were nonambulatory pre-MA or with contralateral MA were excluded. Three published prediction models were investigated: (1) AmpPredict (predicts-1 year mobility), (2) AMPSIMM (predicts degree of mobility with prosthesis at 1 year), both derived from Veteran's Affairs (VA) data, and (3) a Vascular Quality Initiative (VQI) data-derived model (predicts 1-year mobility). Predicted mobility rates vs actual mobility rates were compared.

Results: The study cohort consisted of 126 patients, 71% male, 60% non-White race, with a mean state Area Deprivation Index of 9/10. Baseline characteristics were significantly different between the study and derivation cohorts (Table). Actual mobility at 1 year was 43%. Of the 38 patients with an AmpPredict 1-year mobility of ≥70%, 45% actually achieved mobility. Of 101 patients with a high predicted probability from the VQI score (≥71%), 48% achieved mobility. The mean difference between AmpPredict and VQI for a given patient was 36% (range, 1%-81%). AMPSIMM predicted 87% of patients would be community (vs home) ambulators at 1 year and 32% of patients actually achieved community ambulation (sensitivity of 91%, specificity of 14%, positive predictive value of 33%, negative predictive value of 79%).

Conclusions: Published models dramatically overestimated the likelihood of mobility in our patient cohort. This may be related to demographics/comorbidities of our cohort being significantly different from the derivation cohorts. We recommend caution when applying prediction models to a population with significantly different characteristics from the population used to derive the model.

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Sex Differences in Vascular Ehlers-Danlos Syndrome Aortopathy and Arteriopathy

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Background: Vascular Ehlers-Danlos syndrome (VEDS) is a rare type III collagen disorder caused by pathogenic variants in COL3A1. We sought to delineate sex differences in aortopathy and arteriopathy in this population.

Methods: A cross-sectional analysis of the VEDS Collaborative Natural History Study database was performed to identify individuals with COL3A1 pathogenic variants diagnosed between 1976 and 2022. Demographics, age of genetic diagnosis, comorbid conditions, distribution and age of aortopathy/arteriopathy by vascular bed, aortic and arterial related mortality, and all-cause mortality were compared.

Results: There were 557 individuals with COL3A1 pathogenic variants identified; 248 (44.5%) males and 309 (55.7%) females with males younger than females (mean age, 35.8 years vs 39.2 years; $P = .017$). No sex difference was found in age at time of COL3A1 genetic diagnosis (Table). Males had more inguinal hernias than females (10.9% vs 0.6%, $P < .001$), and spontaneous pneumothorax history (10.5% vs 5.8%; $P = .043$).