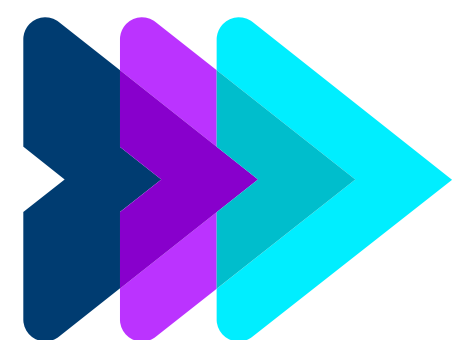




Real-World Costs of Reintervention in Stenting with Femoropopliteal Artery Revascularization

Boston
Scientific

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BACKGROUND

Repeat procedures or reintervention presents a potential economic burden when considering alternative approaches to femoropopliteal artery (FPA) revascularization.

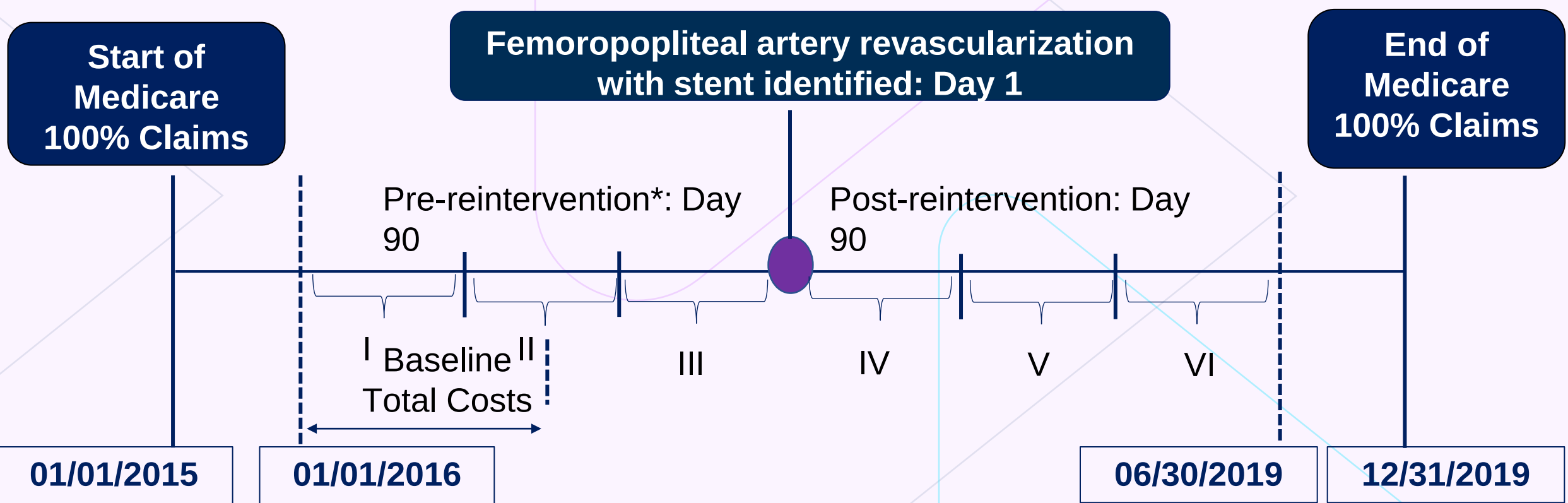
OBJECTIVE

To estimate the cost of reintervention following FPA revascularization with stenting among Medicare beneficiaries.

METHODS

- Database:** 100% Medicare Standard Analytic Files
- Analysis:** ANOVA adjusting for patient baseline clinical and index procedure characteristics

Figure 1. Study Design



- A within-patient “difference analysis” was performed by subtracting the average baseline costs from the costs in each of the four intervals.
- The four cost differences were summed to estimate the total cost of reintervention to Medicare.

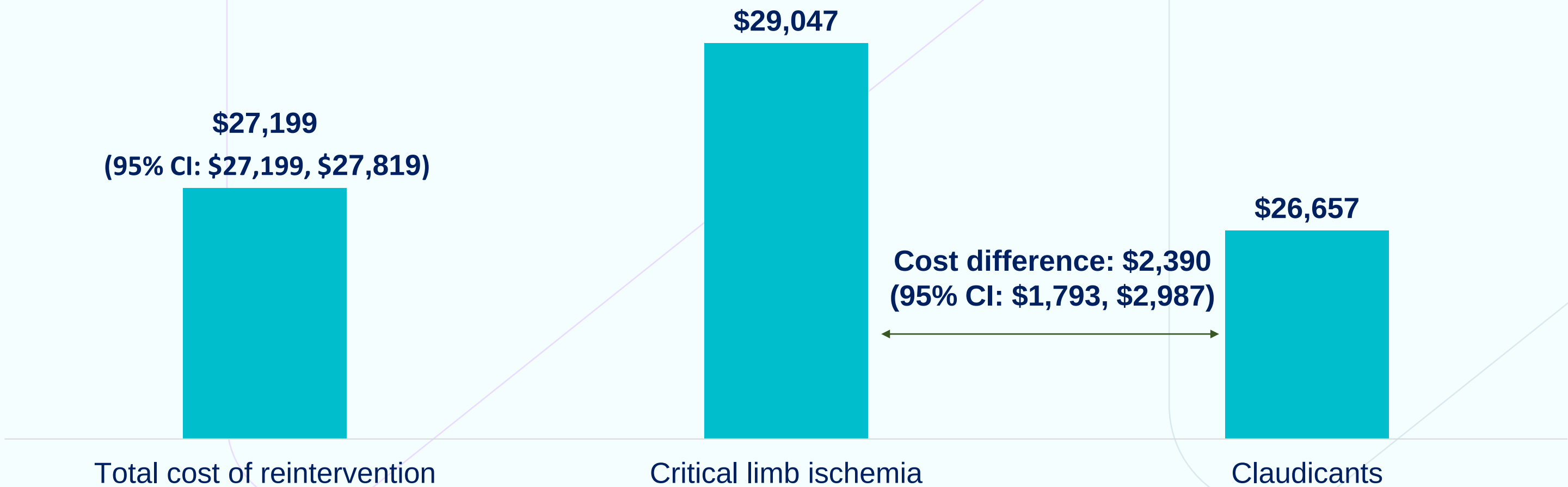
RESULTS

Of 93,146 adult patients with FPA stent placement, 12,397(13.3%) had a reintervention >90 days (mean=353 days) post-index procedure.

Table 1: Patient Characteristics

	Drug Coated Stent (n=4,119)		Bare Metal Stent (n=8,278)		All (n=12,397)		P-value
	n	%	n	%	n	%	
Age at Index Date							
65-69	1,227	29.8	2,322	28.1	3,549	28.6	0.064
70 and above	2,892	70.3	5,956	71.9	8,848	71.3	
Sex							
Female	1,856	45.1	3,980	48.1	5,836	47.1	0.002
Male	2,263	54.9	4,298	51.9	6,561	52.9	
Race							
White	3,604	87.5	7,152	86.4	10,756	86.8	0.187
Black	382	9.3	853	10.3	1,235	10.0	
Other/Unknown	133	3.2	273	3.3	406	3.3	
Census Region							
Midwest	1,016	24.7	2,175	26.3	3,191	25.7	0.13
Northeast	824	20.0	1,539	18.6	2,363	19.1	
South	1,600	38.8	3,260	39.4	4,860	39.2	
West	581	14.1	1,103	13.3	1,684	13.6	
Missing	98	2.4	201	2.4	299	2.4	
Site of Procedure							
Inpatient	1,066	25.9	2,678	32.4	3,744	30.2	0.000
Outpatient	3,053	74.1	5,600	67.6	8,653	69.8	
Critical Limb Ischemia							
Yes	913	22.2	1896	22.9	2809	22.7	0.355
No	3206	77.8	6382	77.1	9588	77.3	
Elixhauser Score							
Mean (SD)	3.69	1.64	3.74	1.62	3.72	1.62	0.645

Figure 2. Medicare Costs of Reintervention in Stenting with Femoropopliteal Artery Revascularization



CONCLUSIONS

- Reintervention following FPA revascularization with stenting poses a substantial cost to Medicare.
- Given the high cost to Medicare, endovascular interventions that prevent reintervention may offer clinical and economic benefits.
- There is a need for additional cost-effectiveness studies on stenting reintervention.

LIMITATIONS

- Observational study design does not allow for randomization of treatment effect.
- Claims data is subject to limitations such as misclassification of codes.
- Only Medicare beneficiaries were included in this study.

DISCLOSURES

This study was supported by Boston Scientific. Abimbola Williams, Alysha M. McGovern, and Robert I. Griffiths are employees of Boston Scientific. Mark Danese is an employee of Outcomes Insights, a healthcare research company that received consulting fees from Boston Scientific.