

eAppendix Table 1. Random Effects Analysis of Implant Costs^a

	Estimate	SE	P
Year			
ACE year 1	0.06262	0.01656	.0002
ACE year 2	0.07069	0.01623	<.0001
ACE year 3	0.05688	0.01599	.0004
BPCI year 1	0.1004	0.01658	<.0001
BPCI year 2	Reference	–	–
Patient characteristics ^b			
Age	–0.00343	0.001614	.0343
Sex ^c	0.02892	0.03043	.3426
Elixhauser Comorbidity Score	–0.00496	0.002774	.0743
Physician characteristics			
Sex ^c	–0.02779	0.1082	.7975
Years of experience	–0.00092	0.002187	.6747
US vs non-US medical school graduate	0.05578	0.09999	.5773
Board certification	–0.08315	0.07754	.2842
Medical degree type ^d	0	–	–
Within-physician variation	0.08708	0.006068	
Between-physician variation	0.01036	0.003194	<.0001 ^e

ACE indicates Acute Care Episode; BPCI, Bundled Payments for Care Improvement; SE, standard error.

^aPhysician-level analysis.

^bGrouped within physician.

^cMale as referent.

^dAll physicians had MD degrees.

^eBased on the residual pseudo-likelihood χ^2 test.

eAppendix Table 2. Random Effects Analysis of PAC Utilization^a

	Estimate	SE	P
Year			
ACE year 1	0.8364	0.126	<.0001
ACE year 2	0.7335	0.1243	<.0001
ACE year 3	0.7905	0.1226	<.0001
BPCI year 1	0.2404	0.1295	.0635
BPCI year 2	Reference	.	.
Patient characteristics			
Age	0.08968	0.005609	<.0001
Sex ^b	0.6747	0.08669	<.0001
Elixhauser Comorbidity Score	0.05128	0.009105	<.0001
Number of readmissions	0.6886	0.1613	<.0001
Number of ED visits	-0.2593	0.14	.064
Physician characteristics			
Sex ^b	0.3749	0.6059	.5361
Years of experience	-0.01301	0.01282	.3103
US vs non-US medical school graduate	-0.8698	0.5893	.14
Board certification	-0.1459	0.4564	.7491
Medical degree type ^c	0	—	—
Within-physician variation ^d			
Between-physician variation	0.3067	0.1097	<.0001 ^e

ACE indicates Acute Care Episode; BPCI, Bundled Payments for Care Improvement; ED, emergency department; PAC, post acute care; SE, standard error.

^aPatient-level analysis.

^bMale as referent.

^cAll physicians had MD degrees.

^dCalculated using the linear threshold method.

^eBased on the residual pseudo-likelihood χ^2 test.

eAppendix Table 3. Random Effects Analysis of Total Episode Payments^a

	Estimate	SE	P
Year			
ACE year 1	0.2237	0.01226	<.0001
ACE year 2	0.2275	0.01204	<.0001
ACE year 3	0.2012	0.01188	<.0001
BPCI year 1	0.01765	0.01238	.154
BPCI year 2	Reference	–	–
Patient characteristics			
Age	0.009169	0.000498	<.0001
Sex ^b	0.07339	0.008257	<.0001
Elixhauser Comorbidity Score	0.008678	0.000903	<.0001
Number of readmissions	0.4085	0.01582	<.0001
Number of ED visits	0.01969	0.01318	.1353
Physician characteristics			
Sex ^b	0.1024	0.06823	.1336
Years of experience	–0.00182	0.001416	.1995
US vs non-US medical school graduate	–0.1059	0.06538	.1053
Board certification	–0.05341	0.05053	.2905
Medical degree type ^c	0	–	–
Within-physician variation	0.05479	0.001296	
Between-physician variation	0.003986	0.001332	<.0001 ^d

ACE indicates Acute Care Episode; BPCI, Bundled Payments for Care Improvement; ED, emergency department; SE, standard error.

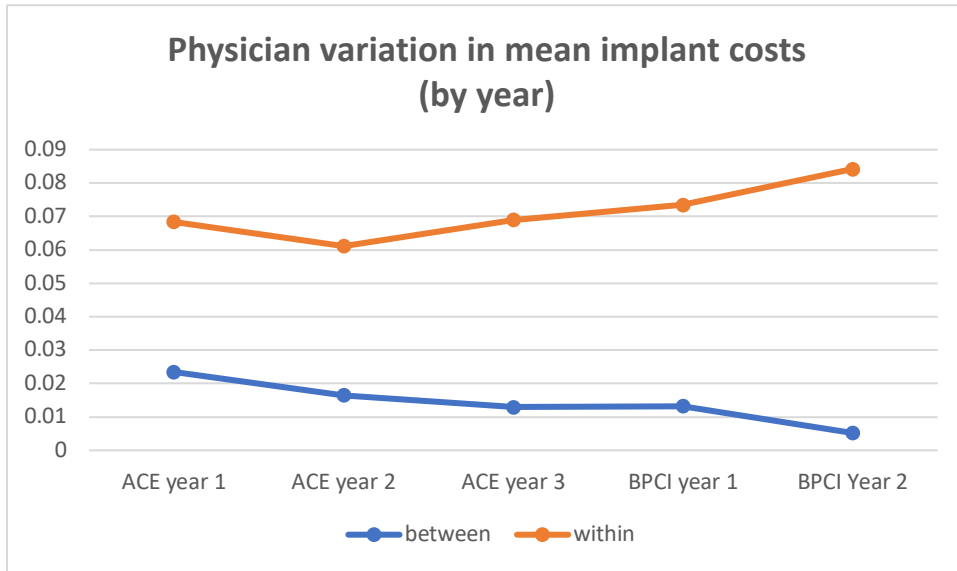
^aPatient-level analysis.

^bMale as referent.

^cAll physicians had MD degrees.

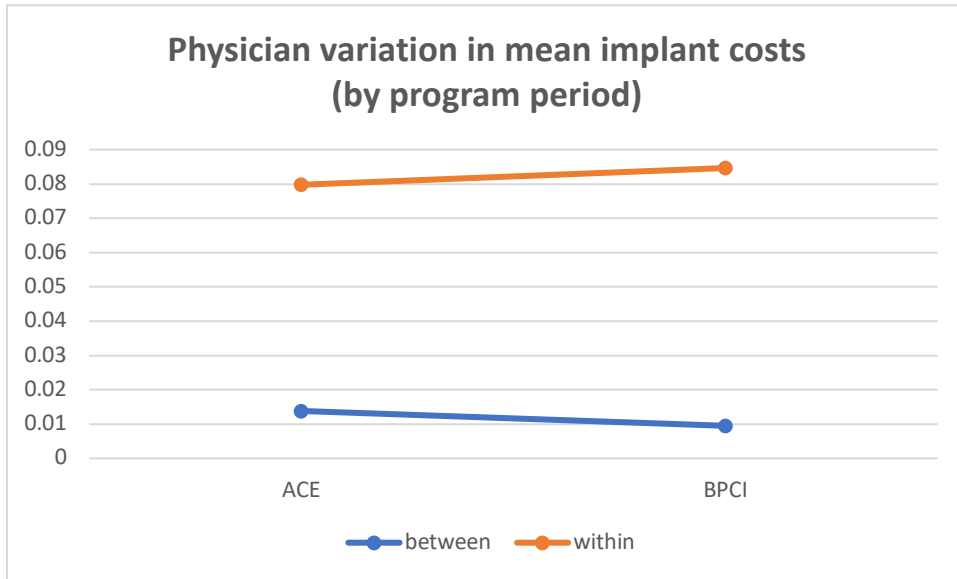
^dBased on the residual pseudo-likelihood χ^2 test.

eAppendix Figure 1. Physician Variation in Mean Implant Costs (by year)



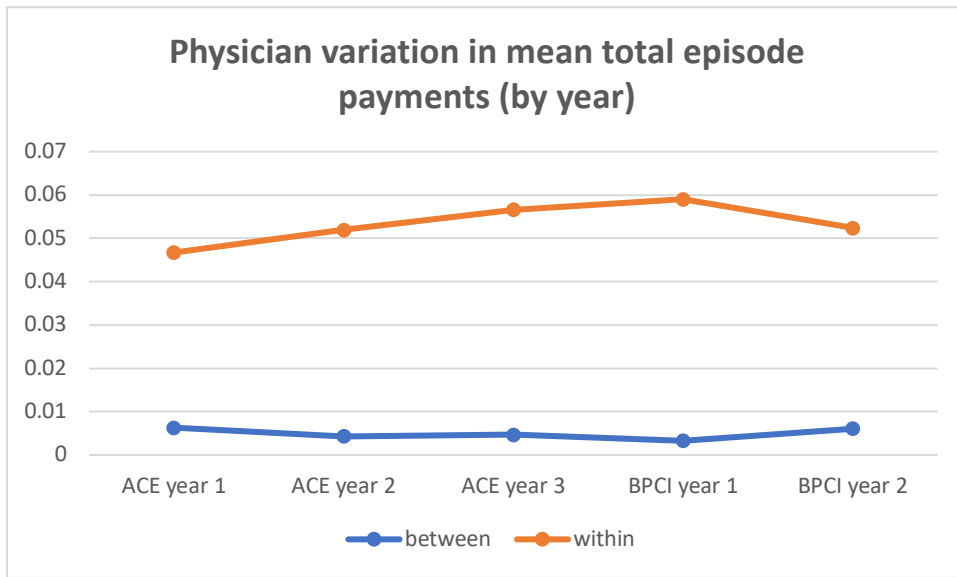
ACE indicates Acute Care Episode; BPCI, Bundled Payments for Care Improvement.

eAppendix Figure 2. Physician Variation in Mean Implant Costs (by program period)



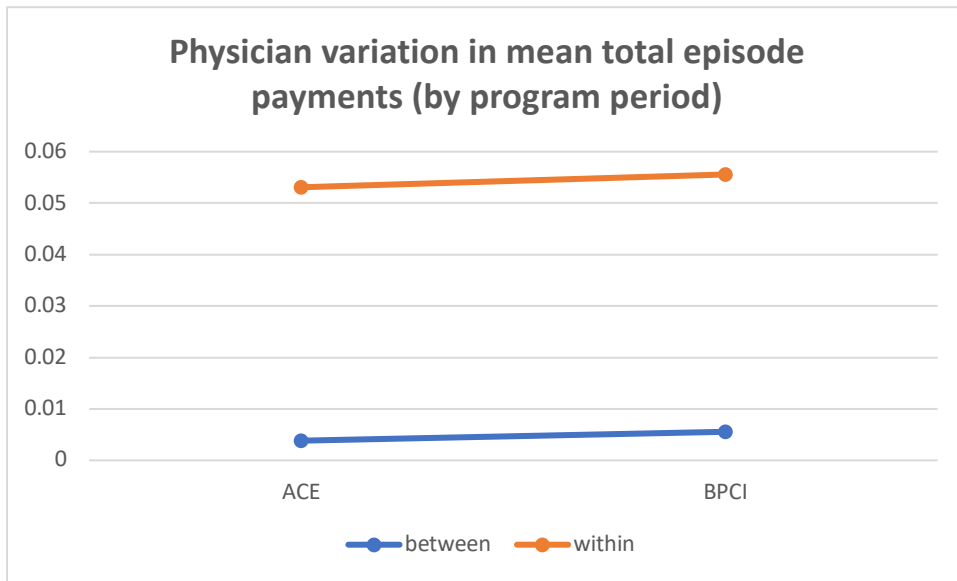
ACE indicates Acute Care Episode; BPCI, Bundled Payments for Care Improvement.

eAppendix Figure 3. Physician Variation in Mean Total Episode Payments (by year)



ACE indicates Acute Care Episode; BPCI, Bundled Payments for Care Improvement.

eAppendix Figure 4. Physician Variation in Mean Total Episode Payments (by program period)



ACE indicates Acute Care Episode; BPCI, Bundled Payments for Care Improvement.