

## **SUPPLEMENTAL MATERIAL**

**Table S1. ICD 10 codes used for the study**

<b>Variables</b>	<b>ICD-10-codes</b>
<b>Transcatheter Aortic Valve Implantation</b>	02RF3
<b>Coronary Artery Disease</b>	I251, I257, I258, I259, I255
<b>Congestive heart failure</b>	I09.9, I11.0, I13.0, I13.2, I25.5, I42.0, I42.5–I42.9, I43.x, I50.x, P29.0
<b>Peripheral vascular Disease</b>	I70.x, I71.x, I73.1, I73.8, I73.9, I77.1, I79.0, I79.2, K55.1, K55.8, K55.9, Z95.8, Z95.9
<b>Cerebrovascular disease</b>	G45.x, G46.x, H34.0, I60.x–I69.x
<b>Chronic pulmonary disease</b>	I27.8, I27.9, J40.x–J47.x, J60.x–J67.x, J68.4, J70.1, J70.3
<b>Diabetes Mellitus</b>	E10.0, E10.1, E10.6, E10.8, E10.9, E11.0, E11.1, E11.6, E11.8, E11.9, E12.0, E12.1, E12.6, E12.8, E12.9, E13.0, E13.1, E13.6, E13.8, E13.9, E14.0, E14.1, E14.6, E14.8, E14.9
<b>Chronic Kidney Disease</b>	N18
<b>End-Stage Renal Disease</b>	Z992, N186
<b>Pulmonary circulation disorders</b>	I26.x, I27.x, I28.0, I28.8, I28.9
<b>Peripheral vascular disorders</b>	I70.x, I71.x, I73.1, I73.8, I73.9, I77.1, I79.0, I79.2, K55.1, K55.8, K55.9, Z95.8, Z95.9
<b>Hypertension</b>	I10.x
<b>Liver disease</b>	B18.x, I85.x, I86.4, I98.2, K70.x, K71.1, K71.3–K71.5, K71.7, K72.x–K74.x, K76.0, K76.2–K76.9, Z94.4
<b>Coagulopathy</b>	D65–D68.x, D69.1, D69.3–D69.6
<b>Obesity</b>	E66.x
<b>Weight loss</b>	E40.x–E46.x, R63.4, R64
<b>Atrial fibrillation</b>	I48
<b>Mitral stenosis</b>	I342, I1050
<b>Prior MI</b>	I252
<b>Prior CABG</b>	Z951
<b>Prior Pacemaker</b>	Z950
<b>Prior Stroke</b>	I69, Z8673
<b>Prior PCI</b>	Z955

Abbreviations: ICD=International Classification of Disease, MI=Myocardial Infarction, PCI=Percutaneous coronary intervention, CABG=Coronary artery bypass graft surgery

**Table S2. Baseline Characteristics of the study population**

	<b>Without Readmission (148,329)</b>	<b>30-Day HF Readmission (5962)</b>	<b>P value*</b>	<b>30-day non- HF readmission (13054)</b>	<b>P value†</b>	<b>P value‡</b>
<b>Age (median [IQR])</b>	81(75-86)	83(76-87)	<0.01	82(75-87)	0.06	<0.01
<b>Age Categories</b>			<0.01		0.01	<0.01
<b>&lt;=64</b>	7512(5.1)	239(4.0)		703(5.4)		
<b>65-74</b>	26974(18.2)	1020(17.1)		2279(17.5)		
<b>75-84</b>	62842(42.4)	2321(38.9)		5429(41.6)		
<b>&gt;=85</b>	51001(34.4)	2382(40.0)		4644(35.6)		
<b>Charlson Comorbidity Index (median [IQR])</b>	7(6-8)	8(7-9)	<0.01	7(6-8)	<0.01	<0.01
<b>Charlson Comorbidity Index Score &gt;8</b>	57915(39.0)	3415(57.3)	<0.01	4850(37.2)	<0.01	<0.01
<b>Elective Index Admission</b>	120366(81.4)	4037(68.0)	<0.01	9907(76.2)	<0.01	<0.01
<b>Female Sex</b>	67678(45.6)	2766(46.4)	0.25	6043(46.3)	0.14	0.21
<b>Primary Payer</b>			<0.01		<0.01	<0.01
<b>Medicare</b>	134856(90.9)	5527(92.7)		12006(92.0)		
<b>Medicaid</b>	1588(1.1)	52(0.9)		149(1.1)		
<b>Private Insurance</b>	8613(5.8)	274(4.6)		679(5.2)		
<b>Self-Pay</b>	534(0.4)	22(0.4)		42(0.3)		
<b>Other<sup>  </sup></b>	2561(1.7)	79(1.3)		168(1.3)		
<b>Others/Missing<sup>#</sup></b>	177(0.1)	<11(0.18) <sup>§</sup>		<11(<0.08) <sup>§</sup>		
<b>Median Quartile of Income</b>			0.36		0.66	0.55
<b>0-25<sup>th</sup> Percentile</b>	30144(20.3)	1247(20.9)		2681(20.5)		
<b>25 to 50<sup>th</sup> Percentile</b>	40254(27.1)	1574(26.4)		3555(27.2)		
<b>50 to 75<sup>th</sup> Percentile</b>	40177(27.1)	1645(27.6)		3477(26.6)		
<b>75 to 100<sup>th</sup> Percentile</b>	35869(24.2)	1413(23.7)		3194(24.5)		
<b>Others/Missing<sup>#</sup></b>	1885(1.3)	84(1.4)		147(1.1)		
<b>Hospital Size</b>			0.21		0.59	0.36
<b>Small</b>	6699(4.5)	243(4.1)		611(4.7)		
<b>Medium</b>	30564(20.6)	1257(21.1)		2658(20.4)		
<b>Large</b>	111066(74.9)	4462(74.8)		9785(75.0)		

<b>Hospital Teaching</b>			0.17		0.06	0.06
<b>Metropolitan Non-Teaching</b>	15961(10.8)	607(10.2)		1426(10.9)		
<b>Metropolitan Teaching</b>	130993(88.3)	5290(88.7)		11480(87.9)		
<b>Non-Metropolitan Hospital</b>	1375(0.9)	65(1.1)		147(1.1)		
<b>Anemias</b>	6034(4.1)	548(9.2)	<0.01	826(6.3)	<0.01	<0.01
<b>Alcohol Use</b>	94(0.1)	1(0.0)	0.16	7(0.1)	0.67	0.34
<b>Hypertension</b>	132235(89.1)	5391(90.4)	<0.01	11311(86.6)	<0.01	<0.01
<b>Diabetes Mellitus</b>	25956(17.5)	929(15.6)	<0.01	2188(16.8)	0.03	<0.01
<b>Coronary Artery Disease</b>	104023(70.1)	4141(69.5)	0.27	8123(62.2)	<0.01	<0.01
<b>Cerebrovascular Disease</b>	16403(11.1)	543(9.1)	<0.01	1819(13.9)	<0.01	<0.01
<b>COPD</b>	42845(28.9)	2162(36.3)	<0.01	3780(29.0)	0.86	<0.01
<b>Pulmonary Circulation Disorder</b>	28272(19.1)	1404(23.6)	<0.01	1518(11.6)	<0.01	<0.01
<b>Obesity</b>	28406(19.2)	945(15.9)	<0.01	1707(13.1)	<0.01	<0.01
<b>Prior MI</b>	18723(12.6)	803(13.5)	0.05	1498(11.5)	<0.01	<0.01
<b>Prior PCI</b>	29895(20.2)	1156(19.4)	0.15	2496(19.1)	0.01	0.01
<b>Prior CABG</b>	27210(18.3)	1123(18.8)	0.34	2167(16.6)	<0.01	<0.01
<b>Preexisting Pacemaker</b>	14949(10.1)	1265(21.2)	<0.01	1992(15.3)	<0.01	<0.01
<b>Pacemaker Implanted During Index Hospitalization</b>	14747(9.9)	831(13.9)	<0.01	1368(10.5)	0.05	<0.01
<b>Complete Heart Block During Index Hospitalization</b>	13648(9.2)	785(13.2)	<0.01	1311(10.0)	0.01	<0.01
<b>Prior ICD</b>	3854(2.6)	13(0.2)	<0.01	4(0.0)	0.11	<0.01
<b>Weight Loss</b>	4576(3.1)	518(8.7)	<0.01	822(6.3)	<0.01	<0.01
<b>Peripheral Vascular Disease</b>	31157(21.0)	935(15.7)	<0.01	1936(14.8)	<0.01	<0.01
<b>Atrial Fibrillation</b>	59545(40.1)	3562(59.7)	<0.01	6065(46.5)	<0.01	<0.01
<b>Liver Disease</b>	4480(3.0)	259(4.3)	<0.01	512(3.9)	<0.01	<0.01
<b>Chronic Kidney Disease</b>	32721(22.1)	2140(35.9)	<0.01	2723(20.9)	<0.01	<0.01

<b>End-Stage Renal Disease</b>	5826(3.9)	402(6.7)	<0.01	1159(8.9)	<0.01	<0.01
<b>Paravalvular Regurgitation</b>	613(0.4)	57(1.0)	<0.01	57(0.4)	0.69	<0.01
<b>Mitral Stenosis</b>	1327(0.9)	84(1.4)	<0.01	109(0.8)	0.49	<0.01
<b>Mitral Regurgitation</b>	10476(7.1)	522(8.8)	<0.01	593(4.5)	<0.01	<0.01
<b>Heart Failure with Reduced EF</b>	18265(12.3)	1550(26.0)	<0.01	1153(8.8)	<0.01	<0.01
<b>Heart Failure with Preserved EF</b>	64057(43.2)	3383(56.7)	<0.01	2884(22.1)	<0.01	<0.01
<b>Length of Stay &gt; 4 days During Index Hospitalization</b>	51076(34.4)	3531(59.2)	<0.01	5905(45.2)	<0.01	<0.01
<b>Non-Home/Facility Discharge During Index Hospitalization</b>	54641(36.8)	112(3363)	<0.01	6141(47.0)	<0.01	<0.01

Abbreviations: HF=Heart Failure, IQR=Interquartile range, MI=Myocardial Infarction, PCI=Percutaneous coronary intervention, CABG=Coronary artery bypass graft surgery, ICD=Implantable cardioverter defibrillator, HF=Heart failure, EF=ejection fraction

\* P value compares Index cases that did not get readmitted with index cases that got readmitted for HF

† P value compares Index cases that did not get readmitted with index cases that got readmitted for non-HF causes

‡ P value compares difference among the three groups: 1-Index cases that did not get readmitted 2- index cases that got readmitted for HF, 3: index cases that got readmitted for non-HF causes

§Observations <11 are not reported per HCUP guidelines

|| “Other” variable includes Worker's Compensation and other government programs.

#The missing values were recoded as “Others/Missing”

Descriptive statistics and regression model are based on weighted data.

**Table S3. Baseline Characteristics of the patients with and without HF readmissions**

Variables	Crude Analysis			1:1 Propensity Matching		
	Without HF Readmission (12,864)	With HF Readmission (5,962)	Standardized Mean Difference	Without HF Readmission (5,962)	With HF Readmission (5,962)	Standardized Mean Difference
<b>Age (median [IQR])</b>	81(75-87)	83(76-87)	0.1091	82(76-87)	82(76-87)	0.0085
<b>Age Categories</b>						
<b>&lt;=64</b>	695(5.4)	239(4.0)		222(3.7)	239(4.0)	
<b>65-74</b>	2263(17.6)	1020(17.1)		949(15.9)	1020(17.1)	
<b>75-84</b>	5361(41.7)	2321(38.9)		2490(41.8)	2321(38.9)	
<b>&gt;=85</b>	4545(35.3)	2382(40.0)		2301(38.6)	2382(40.0)	
<b>Elective Readmission</b>	910(7.1)	0(0.0)	-0.0784	0(0)	0(0)	0.0000
<b>Female Sex</b>	5963(46.4)	2766(46.4)	0.0006	2739(45.9)	2766(46.4)	0.0088
<b>Primary Payer</b>			0.0123			0.0260
<b>Medicare</b>	11825(91.9)	5527(92.7)		5557(93.2)	5527(92.7)	
<b>Medicaid</b>	149(1.2)	52(0.9)		52(0.9)	52(0.9)	
<b>Private Insurance</b>	670(5.2)	274(4.6)		248(4.2)	274(4.6)	
<b>Self-Pay</b>	42(0.3)	22(0.4)		22(0.4)	22(0.4)	
<b>Other<sup>†</sup></b>	167(1.3)	79(1.3)		78(1.3)	79(1.3)	
<b>Others/Missing<sup>‡</sup></b>	11(0.1)	<11(<0.2) *		<11(<0.1) *	<11(<0.3) *	
<b>Median Quartile of Income</b>			0.0219			0.0044
<b>0-25<sup>th</sup> Percentile</b>	2635(20.5)	1247(20.9)		1145(19.2)	1247(20.9)	
<b>25 to 50<sup>th</sup> Percentile</b>	3497(27.2)	1574(26.4)		1649(27.7)	1574(26.4)	
<b>50 to 75<sup>th</sup> Percentile</b>	3435(26.7)	1645(27.6)		1606(26.9)	1645(27.6)	
<b>75 to 100<sup>th</sup> Percentile</b>	3149(24.5)	1413(23.7)		1483(24.9)	1413(23.7)	

<b>Others/Missing<sup>‡</sup></b>	147(1.1)	84(1.4)		79(1.3)	84(1.4)	
<b>Hospital Size</b>			0.0116			-0.0098
<b>Small</b>	605(4.7)	243(4.1)		262(4.4)	243(4.1)	
<b>Medium</b>	2631(20.5)	1257(21.1)		1188(19.9)	1257(21.1)	
<b>Large</b>	9628(74.8)	4462(74.8)		4512(75.7)	4462(74.8)	
<b>Hospital Teaching</b>			0.0189			-0.0351
<b>Metropolitan Non-Teaching</b>	1396(10.9)	607(10.2)		549(9.2)	607(10.2)	
<b>Metropolitan Teaching</b>	11321(88.0)	5290(88.7)		5338(89.5)	5290(88.7)	
<b>Non-Metropolitan Hospital</b>	147(1.1)	65(1.1)		75(1.3)	65(1.1)	
<b>Anemias</b>	816(6.3)	548(9.2)	0.0989	537(9.0)	548(9.2)	0.0065
<b>Alcohol Use</b>	<11(<0.05)	<11(<0.2)	-0.0207	<11(<0.2)	<11(<0.2)	-0.0246
<b>Hypertension</b>	11138(86.6)	5391(90.4)	0.1303	5397(90.5)	5391(90.4)	-0.0036
<b>Diabetes Mellitus</b>	2157(16.8)	929(15.6)	-0.0328	946(15.9)	929(15.6)	-0.0078
<b>Coronary Artery Disease</b>	7989(62.1)	4141(69.5)	0.1597	4075(68.3)	4141(69.5)	0.0242
<b>Cerebrovascular Disease</b>	1799(14.0)	543(9.1)	-0.1696	558(9.4)	543(9.1)	-0.0089
<b>Chronic Obstructive Pulmonary Disease</b>	3710(28.8)	2162(36.3)	0.1544	2160(36.2)	2162(36.3)	0.0007
<b>Pulmonary Circulation Disorder</b>	1471(11.4)	1404(23.6)	0.2855	1175(19.7)	1404(23.6)	0.0905
<b>Obesity</b>	1676(13.0)	945(15.9)	0.0773	921(15.4)	945(15.9)	0.0112
<b>Prior MI</b>	1473(11.4)	803(13.5)	0.0592	822(13.8)	803(13.5)	-0.0093
<b>Prior PCI</b>	2461(19.1)	1156(19.4)	0.0064	1171(19.6)	1156(19.4)	-0.0066
<b>Prior CABG</b>	2125(16.5)	1123(18.8)	0.0593	1139(19.1)	1123(18.8)	-0.0067
<b>Preexisting Pacemaker</b>	1959(15.2)	1265(21.2)	0.1463	1170(19.6)	1265(21.2)	0.0387

<b>Prior ICD</b>	364(2.8)	296(5.0)	0.0981	295(5.0)	296(5.0)	0.0001
<b>Smoking</b>	474(3.7)	196(3.3)	-0.0220	186(3.1)	196(3.3)	0.0097
<b>Electrolyte Abnormalities</b>	4019(31.2)	2228(37.4)	0.1267	2236(37.5)	2228(37.4)	-0.0028
<b>Lymphoma</b>	110(0.9)	45(0.8)	-0.0114	48(0.8)	45(0.8)	-0.0060
<b>Solid Organ Tumors</b>	535(4.2)	145(2.4)	-0.1123	166(2.8)	145(2.4)	-0.0232
<b>Weight Loss</b>	801(6.2)	518(8.7)	0.0872	486(8.1)	518(8.7)	0.0192
<b>Peripheral Vascular Disease</b>	1893(14.7)	935(15.7)	0.0268	903(15.2)	935(15.7)	0.0146
<b>Atrial Fibrillation</b>	5947(46.2)	3562(59.7)	0.2757	3556(59.6)	3562(59.7)	0.0021
<b>Liver Disease</b>	508(3.9)	259(4.3)	0.0197	236(4.0)	259(4.3)	0.0188
<b>Chronic Kidney Disease</b>	2642(20.5)	2140(35.9)	0.3201	2015(33.8)	2140(35.9)	0.0437
<b>End-Stage Renal Disease</b>	1149(8.9)	402(6.7)	-0.0877	460(7.7)	402(6.7)	-0.0390
<b>Paravalvular Regurgitation</b>	53(0.4)	57(1.0)	0.0561	40(0.7)	57(1.0)	0.0299
<b>Mitral Stenosis</b>	100(0.8)	84(1.4)	0.0537	85(1.4)	84(1.4)	-0.0007
<b>Mitral Regurgitation</b>	563(4.4)	522(8.8)	0.1548	418(7.0)	522(8.8)	0.0616

Abbreviations: IQR=Interquartile range, MI=Myocardial Infarction, PCI=Percutaneous coronary intervention, CABG=Coronary artery bypass graft surgery, ICD=Implantable cardioverter defibrillator, HF=Heart failure, EF=ejection fraction

\*Observations <11 are not reported per HCUP guidelines

† “Other” variable includes Worker's Compensation and other government programs.

‡The missing values were recoded as “Others/Missing”

Descriptive statistics and regression model are based on weighted data.



**Table S4. Baseline Characteristics of the patients of low volume (<50 TAVRs), medium volume (51-100 TAVRs) and high volume (>100 TAVRs) annual discharge hospitals in 2018**

<b>Variables</b>	<b>Low volume (3371)</b>	<b>Medium Volume (9653)</b>	<b>High Volume (21716)</b>	<b>P value</b>
Age (median [IQR])	81(75-86)	81(75-86)	81(75-86)	0.36
Age Categories				0.01
<=64	138(4.1)	502(5.2)	1149(5.3)	
65-74	667(19.8)	1788(18.5)	4033(18.6)	
75-84	1464(43.4)	4241(43.9)	9255(42.6)	
>=85	1102(32.7)	3122(32.3)	7279(33.5)	
Charlson Comorbidity Index (median [IQR])	7(6-8)	7(6-8)	7(6-8)	<0.01
Charlson Index Score >8	1156(34.3)	3441(35.6)	8320(38.3)	<0.01
Elective Index Admission	2923(86.8)	8254(85.6)	17026(78.4)	<0.01
Female Sex	1591(47.2)	4392(45.5)	9923(45.7)	0.21
Primary Payer				<0.01
Medicare	3101(92.0)	8738(90.5)	19512(89.9)	
Medicaid	70(2.1)	105(1.1)	252(1.2)	
Private Insurance	123(3.6)	531(5.5)	1524(7.0)	
Self-Pay	8(0.2)	31(0.3)	74(0.3)	
Other <sup>†</sup>	67(2.0)	246(2.5)	324(1.5)	
Others/Missing <sup>‡</sup>	<11(<0.3) *	<11(<0.01) *	30(0.1)	
Median Quartile of Income				<0.01
0-25 <sup>th</sup> Percentile	852(25.3)	2204(22.8)	3542(16.3)	
25 to 50 <sup>th</sup> Percentile	1011(30.0)	2856(29.6)	5109(23.5)	
50 to 75 <sup>th</sup> Percentile	909(27.0)	2565(26.6)	6013(27.7)	
75 to 100 <sup>th</sup> Percentile	550(16.3)	1891(19.6)	6807(31.3)	
Others/Missing <sup>‡</sup>	49(1.4)	137(1.4)	245(1.1)	
Hospital Size				<0.01
Small	339(10.1)	925(9.6)	148(0.7)	
Medium	1310(38.9)	1852(19.2)	4474(20.6)	
Large	1722(51.1)	6876(71.2)	17094(78.7)	
Hospital Teaching				<0.01
Metropolitan Non-Teaching	731(21.7)	1603(16.6)	1260(5.8)	
Metropolitan Teaching	2614(77.5)	7878(81.6)	20456(94.2)	
Non-Metropolitan	26(0.8)	172(1.8)	0(0.0)	
Anemias	139(4.1)	413(4.3)	963(4.4)	0.64
Alcohol Use	<11(<0.3)*	<11(<0.1)*	<11(<0.1)*	0.48
Hypertension	3056(90.7)	8650(89.6)	19544(90)	0.21
Diabetes Mellitus	543(16.1)	1395(14.5)	3086(14.2)	0.01
Coronary Artery Disease	2287(67.8)	6467(67.0)	14928(68.7)	0.01

Cerebrovascular Disease	394(11.7)	990(10.3)	2352(10.8)	0.06
COPD	956(28.4)	2754(28.5)	5888(27.1)	0.02
Pulmonary Circulation Disorder	545(16.2)	1536(15.9)	3748(17.3)	0.01
Obesity	675(20.0)	1882(19.5)	4137(19.1)	0.33
Prior MI	428(12.7)	1168(12.1)	2709(12.5)	0.55
Prior PCI	752(22.3)	1867(19.3)	4252(19.6)	<0.01
Prior CABG	631(18.7)	1638(17.0)	3351(15.4)	<0.01
Prior Pacemaker	355(10.5)	1017(10.5)	2295(10.6)	0.91
Prior ICD	85(2.5)	234(2.4)	531(2.4)	0.95
Electrolyte Abnormalities	526(15.6)	1500(15.5)	3645(16.8)	0.01
Lymphoma	25(0.7)	59(0.6)	179(0.8)	0.13
Solid Organ Tumors	75(2.2)	252(2.6)	589(2.7)	0.26
Weight Loss	112(3.3)	288(3.0)	752(3.5)	0.09
Peripheral Vascular Disease	595(17.7)	1735(18.0)	4069(18.7)	0.13
Atrial Fibrillation	1370(40.6)	3840(39.8)	8932(41.1)	0.08
Weight Loss	112(3.3)	288(3.0)	752(3.5)	0.09
Peripheral Vascular Disease	595(17.7)	1735(18.0)	4069(18.7)	0.13
Liver Disease	88(2.6)	309(3.2)	761(3.5)	0.02
Chronic Kidney	648(19.2)	2008(20.8)	4926(22.7)	<0.01
End-Stage Renal	166(4.9)	454(4.7)	939(4.3)	0.14
Paravalvular Regurgitation	16(0.5)	35(0.4)	93(0.4)	0.61
Mitral Stenosis	28(0.8)	89(0.9)	229(1.1)	0.33
Mitral Regurgitation	221(6.6)	586(6.1)	1615(7.4)	<0.01
Heart Failure with Reduced EF	431(12.8)	1169(12.1)	2591(11.9)	0.36
Heart Failure with Preserved EF	1345(39.9)	4039(41.8)	9805(45.2)	<0.01
Length of Stay During Index Hospitalization	877(26.0)	2538(26.3)	6615(30.5)	<0.01
Routine Home Discharge (Index Admission)	2372(70.4)	6868(71.1)	13656(62.9)	<0.01
Non- Home/Facility Discharge (Index Admission)	999(29.6)	2,785(17.6)	8060(37.1)	

Abbreviations: IQR=Interquartile range, MI=Myocardial Infarction, PCI=Percutaneous coronary intervention, CABG=Coronary artery bypass graft surgery, ICD=Implantable cardioverter defibrillator, HF=Heart failure, EF=ejection fraction

\*Observations <11 are not reported per HCUP guidelines

† “Other” variable includes Worker's Compensation and other government programs.

‡The missing values were recoded as “Others/Missing”

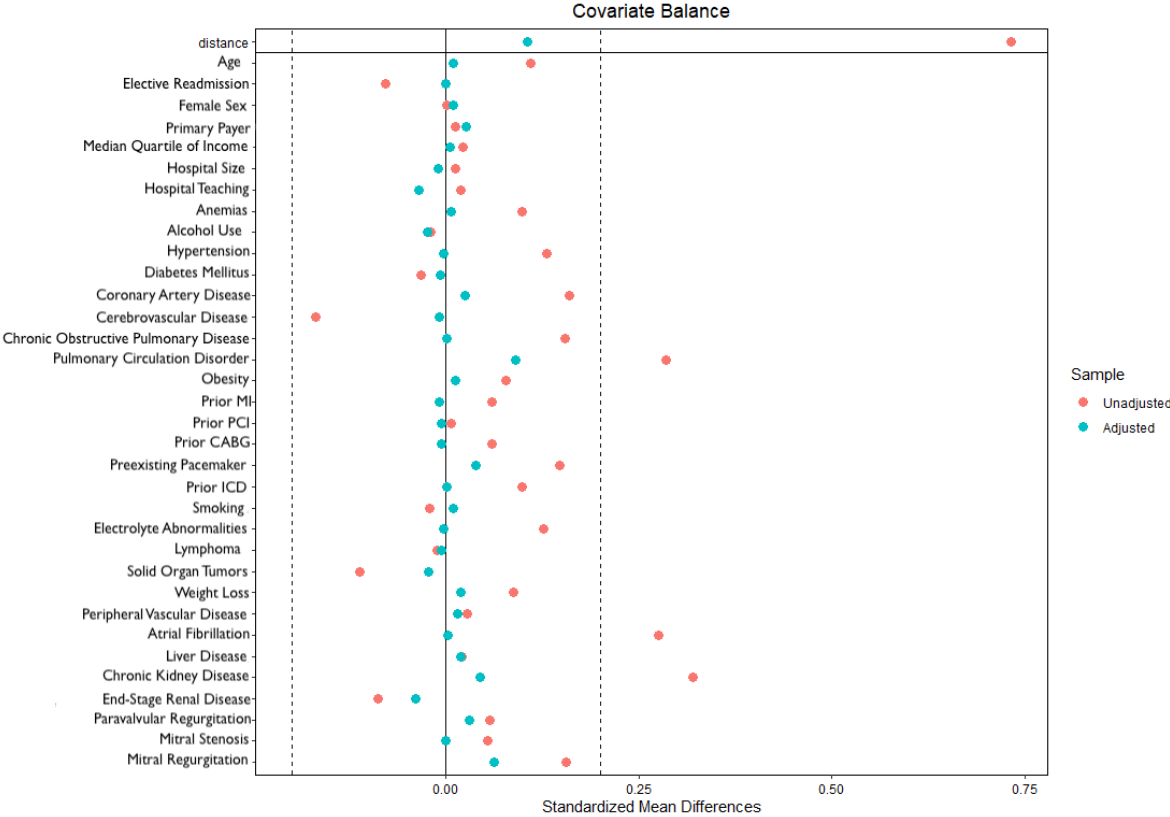
Descriptive statistics are based on non-weighted data

**Table S5. Adjusted odds for all-cause readmissions, HF readmissions, all-cause readmission mortality and HF readmission mortality for High Volume (>100 TAVRs) and Medium Volume Centers (50-100 TAVRs) compared with Low Volume Hospitals (<50 TAVRs)**

<b>Variable</b>	<b>All-Cause Readmissions</b>	<b>HF Readmission Mortality</b>	<b>All-Cause Readmission Mortality</b>	<b>HF Readmission Mortality</b>
<b>Medium-Volume Hospitals</b>	1.04(0.92-1.19)	0.94(0.76-1.18)	1.37(0.64-2.90)	1.22(0.38-3.87)
<b>High-Volume Hospitals</b>	0.97(0.86-1.10)	0.83(0.67-1.03)	1.56(0.77-3.21)	1.60(0.54-4.78)

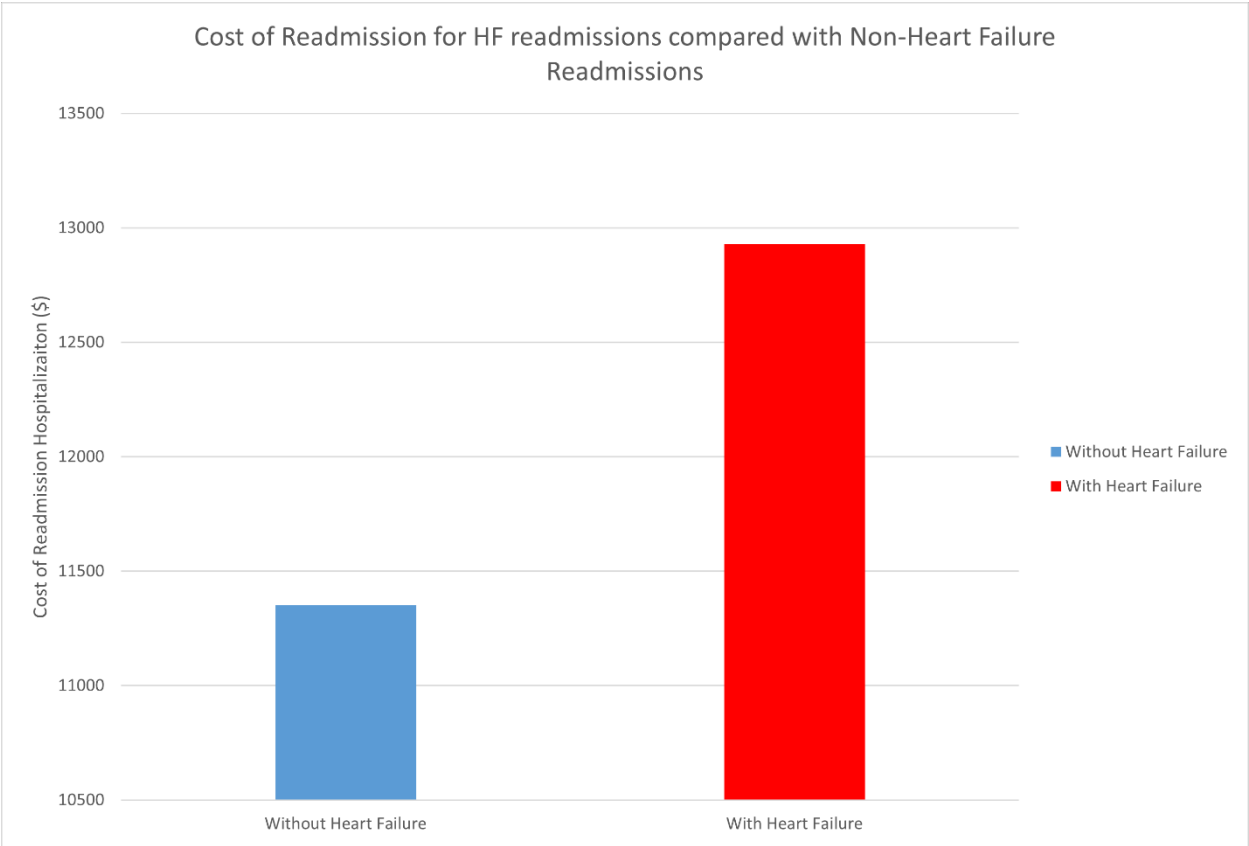
Regression model is based on non-weighted data

**Figure S1. Co-Variate Balance Before and After Propensity Matching for patients with and without HF**



Abbreviations: MI=Myocardial Infarction, PCI=Percutaneous coronary intervention, CABG=Coronary artery bypass graft surgery, ICD=Implantable cardioverter defibrillator

**Figure S2. Cost of Readmission for HF readmissions compared with Non-Heart Failure Readmissions**



Abbreviations: HF=Heart Failure