

SUPPLEMENTAL MATERIAL

Table S1. Year wise utilization of cardiac valve replacement surgery in hospitalizations stratified by sex.

Year	Cardiac valve replacement in females	No cardiac valve replacement in females	Cardiac valve replacement in males	No cardiac valve replacement in males
2004	963	14205	2072	15547
2005	858	13367	1967	16089
2006	960	15209	2182	16428
2007	802	14604	1860	15758
2008	1098	16294	2339	17724
2009	1201	15489	2382	17520
2010	972	14334	2226	17484
2011	1000	15621	2401	18387
2012	1210	12764	2455	16365
2013	1250	12925	2620	17115
2014	1155	12495	2765	16585
2015 Sep	1000	9815	2150	13265

Table S2. Year wise utilization of aortic valve replacement in hospitalizations stratified by sex.

Year	Aortic valve replacement in females	No aortic valve replacement in females	Aortic valve replacement in males	No aortic valve replacement in males
2004	437	14732	1388	16231
2005	358	13868	1329	16727
2006	445	15724	1538	17071
2007	370	15036	1350	16270
2008	562	16830	1698	18365
2009	605	16085	1699	18203
2010	454	14852	1564	18147
2011	533	16088	1722	19067
2012	590	13385	1645	17175
2013	605	13570	1830	17905
2014	560	13090	1880	17470
2015 Sep	445	10370	1470	13945

Table S3. Year wise utilization of mitral valve replacement in hospitalizations stratified by sex.

Year	Mitral valve replacement in females	No mitral valve replacement in females	Mitral valve replacement in males	No mitral valve replacement in males
2004	644	14524	965	16654
2005	614	13611	888	17169
2006	654	15514	1028	17582
2007	548	14858	867	16750
2008	717	16675	998	19065
2009	737	15953	1125	18777
2010	647	14658	1129	18581
2011	627	15994	1037	19751
2012	810	13164	1135	17685
2013	845	13329	1175	18560
2014	770	12880	1275	18075
2015 Sep	640	10175	995	14420

Table S4. Year wise utilization of combined aortic + mitral valve replacement in hospitalizations stratified by sex.

Year	Combined AVR + MVR in females	No combined AVR+ MVR in females	Combined AVR + MVR in males	No combined AVR+ MVR in males
2004	103	15064	272	17347
2005	93	14132	274	17783
2006	100	16068	365	18244
2007	89	15317	226	17281
2008	145	17246	329	19734
2009	164	16525	406	19496
2010	137	15169	433	19277
2011	128	16493	337	20451
2012	140	13834	325	18495
2013	170	14004	370	19364
2014	175	13475	370	18980
2015 Sep	110	10705	300	15115

Table S5. Year wise Mortality in hospitalizations undergoing valve replacement surgery stratified by sex.

Year	Mortality in hospitalizations undergoing valve replacement surgery, females	No mortality in hospitalizations undergoing valve replacement surgery, females	Mortality in hospitalizations undergoing valve replacement surgery, males	No mortality in hospitalizations undergoing valve replacement surgery, males
2004	148	815	194	1873
2005	72	771	171	1786
2006	130	825	215	1966
2007	135	655	141	1719
2008	152	945	169	2171
2009	95	1100	179	2203
2010	115	857	154	2058
2011	62	934	152	2235
2012	100	1110	130	2315
2013	85	1165	145	2475
2014	65	1090	135	2625
2015 Sep	75	925	125	2020

Table S6. Year wise mortality in infective endocarditis hospitalizations stratified by sex.

Year	Mortality in IE hospitalizations, females	No mortality in IE hospitalizations, females	Mortality in IE hospitalizations, males	No mortality in IE hospitalizations, males
2004	1189	13970	1450	16130
2005	1024	13150	1353	16683
2006	1073	15063	1421	17179
2007	947	1443	1159	16446
2008	1311	16062	1460	18578
2009	972	15713	1281	18613
2010	935	14366	1166	18495
2011	990	15582	1207	19535
2012	690	13280	1020	17780
2013	620	13544	1040	18670
2014	630	13005	1005	18330
2015 Sep	540	10270	755	14645

Table S7. Predictors of cardiac valve replacement surgery in patients hospitalized with infective endocarditis from 2004-2015.

Characteristics (%)	Unadjusted	p-value	Adjusted	p-value
Mean age, years	0.978 (0.977-9.979)	<0.001	0.973 (0.971-0.974)	<0.001
Elective admission	1.354 (1.276-1.436)	<0.001	2.009 (1.866-2.164)	<0.001
Female	0.540 (0.514-0.568)	<0.001	0.586 (0.552-0.622)	<0.001
<i>Organisms/Microbiology</i>				
<i>Staphylococcus endocarditis</i>	0.858 (0.813-0.905)	<0.001	0.755 (0.704-0.810)	<0.001
<i>Streptococcus endocarditis</i>	1.737 (1.653-1.825)	<0.001	1.583 (1.472-1.701)	<0.001
<i>Gram negative endocarditis</i>	1.370 (1.258-1.490)	<0.001	0.996 (0.888-1.116)	0.941
<i>Enterococcus endocarditis</i>	0.964 (0.849-1.089)	0.56		
<i>Fungus endocarditis</i>	1.708 (1.366-2.114)	<0.001	1.279 (0.969-1.669)	0.076
<i>Risk factors and co-morbidities</i>				
Drug abuse	1.132 (1.068-1.199)	<0.001	0.955 (0.885-1.030)	0.232
Congenital heart disease	3.758 (3.474-4.061)	<0.001	2.046 (1.846-2.265)	<0.001
Hepatitis C	0.934 (0.868-1.003)	0.061		
Chronic rheumatic heart disease	2.405 (2.257-2.562)	<0.001	1.986 (1.834-2.150)	<0.001
Infection of cardiac device/implant	1.805 (1.676-1.943)	<0.001	1.548 (1.409-1.698)	<0.001
Prior valve replacement	0.244 (0.205-0.288)	<0.001	0.303 (0.250-0.363)	<0.001
Prior PCI	0.438 (0.350-0.540)	<0.001	0.622 (0.480-0.795)	<0.001
Prior CABG	0.274 (0.229-0.325)	<0.001	0.376 (0.306-0.458)	<0.001
Congestive heart failure	1.917 (1.830-2.009)	<0.001	1.917 (1.803-2.037)	<0.001
Cardiac arrhythmias	1.524 (1.454-1.597)	<0.001	1.805 (1.697-1.919)	<0.001
Atrial fibrillation	1.046 (0.989-1.106)	0.114		
Coronary artery disease	0.741 (0.697-0.787)	<0.001	1.264 (1.163-1.372)	<0.001
Liver cirrhosis	0.636 (0.542-0.744)	<0.001	0.500 (0.413-0.600)	<0.001

Coagulopathy	2.245 (2.114-2.383)	<0.001	1.609 (1.490-1.736)	<0.001
DM controlled	0.569 (0.530-0.612)	<0.001	0.807 (0.739-0.881)	<0.001
DM uncontrolled	0.575 (0.507-0.650)	<0.001	0.672 (0.579-0.776)	<0.001
HTN controlled	0.565 (0.534-0.597)	<0.001	0.975 (0.907-1.049)	0.500
HTN uncontrolled	0.864 (0.812-0.919)	<0.001	0.816 (0.751-0.885)	<0.001
Peripheral vascular disease	0.878 (0.793-0.970)	0.011	1.215 (1.075-1.370)	0.001
Smoking	0.925 (0.830-1.027)	0.150		
Solid tumor without metastasis	0.358 (0.285-0.442)	<0.001	0.525 (0.400-0.678)	<0.001
Metastatic cancer	0.301 (0.210-0.417)	<0.001	0.368 (0.235-0.553)	<0.001
Malnutrition disorder	1.926 (1.792-2.069)	<0.001	1.513 (1.381-1.656)	<0.001
Cardiogenic shock	14.242 (12.659-16.035)	<0.001	7.811 (6.738-9.060)	<0.001
Myocardial infarction	1.800 (1.628-1.986)	<0.001	1.247 (1.096-1.415)	<0.001
Mechanical ventilation	4.773 (4.397-5.179)	<0.001	2.502 (2.248-2.783)	<0.001
Blood transfusion	3.655 (3.480-3.838)	<0.001	3.336 (3.141-3.544)	<0.001
Acute stroke	2.228 (2.077-2.389)	<0.001	2.143 (1.959-2.341)	<0.001
Race	1.053 (1.030-1.077)	<0.001	0.990 (0.964-1.016)	0.456
Hospital bed size	1.836 (1.765-1.911)	<0.001	1.747 (1.667-1.832)	<0.001
Hospital region	1.001 (0.979-1.024)	0.903		

Figure S1. Trends in the mean length of stay for patients hospitalized with infective endocarditis stratified by sex.

