Online Table 1. Patient Characteristics

	All Patients (N=67,161)
Age	74.51 (13.7)
Sex	
Female	25,189 (49.7%)
Male	25,548 (50.4%)
Index year	
2011	18,286 (36.0%)
2012	17,693 (34.9%)
2013	14,758 (29.1%)
Heart failure type	
With preserved ejection fraction	16,422 (32.4%)
With reduced ejection fraction	17,089 (33.7%)
Mixed/unspecified	17,226 (34.0%)
Cardiovascular characteristics	
Coronary artery disease	23,026 (45.4%)
Hypertension	41,336 (81.5%)
Hyperlipidemia	21,760 (42.9%)

Diabetes	22,391 (44.1%)
Smoking	4,986 (9.8%)
Prior stroke	4,999 (9.9%)
Peripheral arterial disease	10,342 (20.4%)
Major arrhythmia	5,421 (10.7%)
Non-major arrhythmia	29,130 (57.4%)
Comorbid conditions	
Renal disease	24,122 (47.5%)
Chronic obstructive pulmonary disease	20,810 (41.0%)
Malignancy	9,205 (18.1%)
Dementia	3,199 (6.3%)

Online Table 2. Ischemic CAD Testing and Revascularization

	No CAD (n=27,711)	CAD (n=23,062)	All Patients (N=50,737)	p-value
Non-invasive assessment for ischemia				
During index hospitalization	2,351 (8.5%)	2,170 (9.4%)	4,521 (8.9%)	0.0002
Within 90 days post-index	4,293 (15.5%)	3,706 (16.1%)	7,999 (15.8%)	0.06
Invasive assessment for ischemia				
During index hospitalization	2,696 (9.7%)	3,125 (13.6%)	5,821 (11.5%)	<0.0001
Within 90 days post-index	4,288 (15.5%)	4,235 (18.4%)	8,523 (16.8%)	<0.0001
Invasive or non-invasive assessment for ischemia				
During index hospitalization	4,743 (17.1%)	4,739 (20.6%)	9,482 (18.7%)	<0.0001
Within 90 days post-index	7,659 (27.6%)	6,852 (29.8%)	14,511 (28.6%)	<0.0001
Neither invasive nor non-invasive assessment for ischemia				

During index hospitalization	22,968 (82.9%)	18,287 (79.4%)	41,255 (81.3%)	<0.0001
Within 90 days post-index	20,052 (72.4%)	16,174 (70.2%)	36,226 (71.4%)	<0.0001
With revascularization during index hospitalization	129 (0.5%)	851 (3.7%)	980 (1.9%)	<0.0001
Percutaneous coronary intervention only	102 (0.4%)	606 (2.6%)	708 (1.4%)	
Coronary artery bypass grafting only	27 (0.1%)	237 (1.0%)	264 (0.5%)	
Hybrid revascularization	0 (0.0%)	8 (0.0%)	8 (0.0%)	
With revascularization within 90 days post-index	572 (2.1%)	1,486 (6.5%)	2,058 (4.1%)	<0.0001
Percutaneous coronary intervention only	363 (1.3%)	1,000 (4.3%)	1,363 (2.7%)	
Coronary artery bypass grafting only	206 (0.7%)	466 (2.0%)	672 (1.3%)	
Hybrid revascularization	3 (0.0%)	20 (0.1%)	23 (0.1%)	

Online Table 3. Supplemental Multivariable Analyses

	Non-invasive Testing		Adjusted Odds Ratio		Invasive Testing		Adjusted Odds Ratio	
	No (n=61,838)	Yes (n=5,323)	(95% Confidence Interval)	p Value	No (n=59,735)	Yes (n=7,426)	(95% Confidence Interval)	p Value
Age group								
18-70	15,750 (34.1%)	2,176 (48.1%)	Reference group		14,108 (31.4%)	3,818 (65.6%)	Reference group	
71-85	18,102 (39.2%)	1,854 (41.0%)	0.82 (0.763-0.877)	<0.0001	18,201 (40.5%)	1,755 (30.2%)	0.40 (0.374-0.428)	<0.0001
85+	12,364 (26.8%)	491 (10.9%)	0.33 (0.296-0.367)	<0.0001	12,607 (28.1%)	248 (4.3%)	0.08 (0.073-0.096)	<0.0001
Sex								
Female	23,153 (50.1%)	2,036 (45.0%)	Reference group		22,853 (50.9%)	2,336 (40.1%)	Reference group	
Male	23,063 (49.9%)	2,485 (55.0%)	1.07 (1.006-1.145)	0.03	22,063 (49.1%)	3,485 (59.9%)	1.04 (0.981-1.109)	0.18
Index year								
2011	16,666 (36.1%)	1,620 (35.8%)	Reference group		16,298 (36.3%)	1,988 (34.2%)	Reference group	
2012	16,093 (34.8%)	1,600 (35.4%)	1.02 (0.952-1.103)	0.51	15,655 (34.9%)	2,038 (35.0%)	1.08 (1.006-1.157)	0.03
2013	13,457 (29.1%)	1,301 (28.8%)	1.00 (0.929-1.085)	0.92	12,963 (28.9%)	1,795 (30.8%)	1.21 (1.125-1.301)	<0.0001
Heart failure type								
Preserved ejection fraction	15,005 (32.5%)	1,417 (31.3%)	Reference group		15,532 (34.6%)	890 (15.3%)	Reference group	
Reduced ejection fraction	15,378 (33.3%)	1,711 (37.9%)	1.37 (1.259-1.484)	<0.0001	14,006 (31.2%)	3,083 (53.0%)	1.92 (1.782-2.066)	<0.0001
Mixed/unspecified	15,833 (34.3%)	1,393 (30.8%)	1.32 (1.211-1.446)	<0.0001	15,378 (34.2%)	1,848 (31.8%)	0.71 (0.642-0.775)	<0.0001

Cardiovascular characteristics								
Coronary artery disease	20,856 (45.1%)	2,170 (48.0%)	1.24 (1.157-1.323)	<0.0001	19,901 (44.3%)	3,125 (53.7%)	2.06 (1.930-2.193)	<0.0001
Hypertension	37,640 (81.4%)	3,696 (81.8%)	1.10 (1.010-1.197)	0.03	36,904 (82.2%)	4,432 (76.1%)	0.90 (0.836-0.969)	0.005
Hyperlipidemia	19,722 (42.7%)	2,038 (45.1%)	1.08 (1.010-1.154)	0.03	19,337 (43.1%)	2,423 (41.6%)	0.96 (0.898-1.020)	0.18
Diabetes	20,187 (43.7%)	2,204 (48.8%)	1.06 (0.996-1.135)	0.07	19,955 (44.4%)	2,436 (41.9%)	0.77 (0.723-0.819)	<0.0001
Smoking	4,456 (9.6%)	530 (11.7%)	1.07 (0.969-1.184)	0.18	4,112 (9.2%)	874 (15.0%)	1.19 (1.088-1.294)	<0.0001
Prior Stroke	4,684 (10.1%)	315 (7.0%)	0.76 (0.670-0.854)	<0.0001	4,665 (10.4%)	334 (5.7%)	0.71 (0.630-0.802)	<0.0001
Peripheral arterial disease	9,556 (20.7%)	786 (17.4%)	0.91 (0.838-0.991)	0.03	9,502 (21.2%)	840 (14.4%)	0.87 (0.798-0.943)	0.001
Major arrhythmia	4,960 (10.7%)	461 (10.2%)	0.86 (0.770-0.950)	0.003	4,583 (10.2%)	838 (14.4%)	1.03 (0.948-1.128)	0.45
Non-major arrhythmia	26,922 (58.3%)	2,208 (48.8%)	0.79 (0.740-0.842)	<0.0001	26,483 (59.0%)	2,647 (45.5%)	0.75 (0.706-0.797)	<0.0001
Comorbid conditions								
Renal disease	22,105 (47.8%)	2,017 (44.6%)	0.87 (0.815-0.928)	<0.0001	22,122 (49.3%)	2,000 (34.4%)	0.59 (0.550-0.624)	<0.0001
Chronic obstructive pulmonary disease	19,213 (41.6%)	1,597 (35.3%)	0.75 (0.702-0.801)	<0.0001	18,771 (41.8%)	2,039 (35.0%)	0.77 (0.727-0.823)	<0.0001
Malignancy	8,460 (18.3%)	745 (16.5%)	0.97 (0.890-1.053)	0.45	8,408 (18.7%)	797 (13.7%)	0.87 (0.804-0.950)	0.002
Dementia	3,070 (6.6%)	129 (2.9%)	0.60 (0.501-0.723)	<0.0001	3,129 (7.0%)	70 (1.2%)	0.37 (0.289-0.472)	<0.0001