















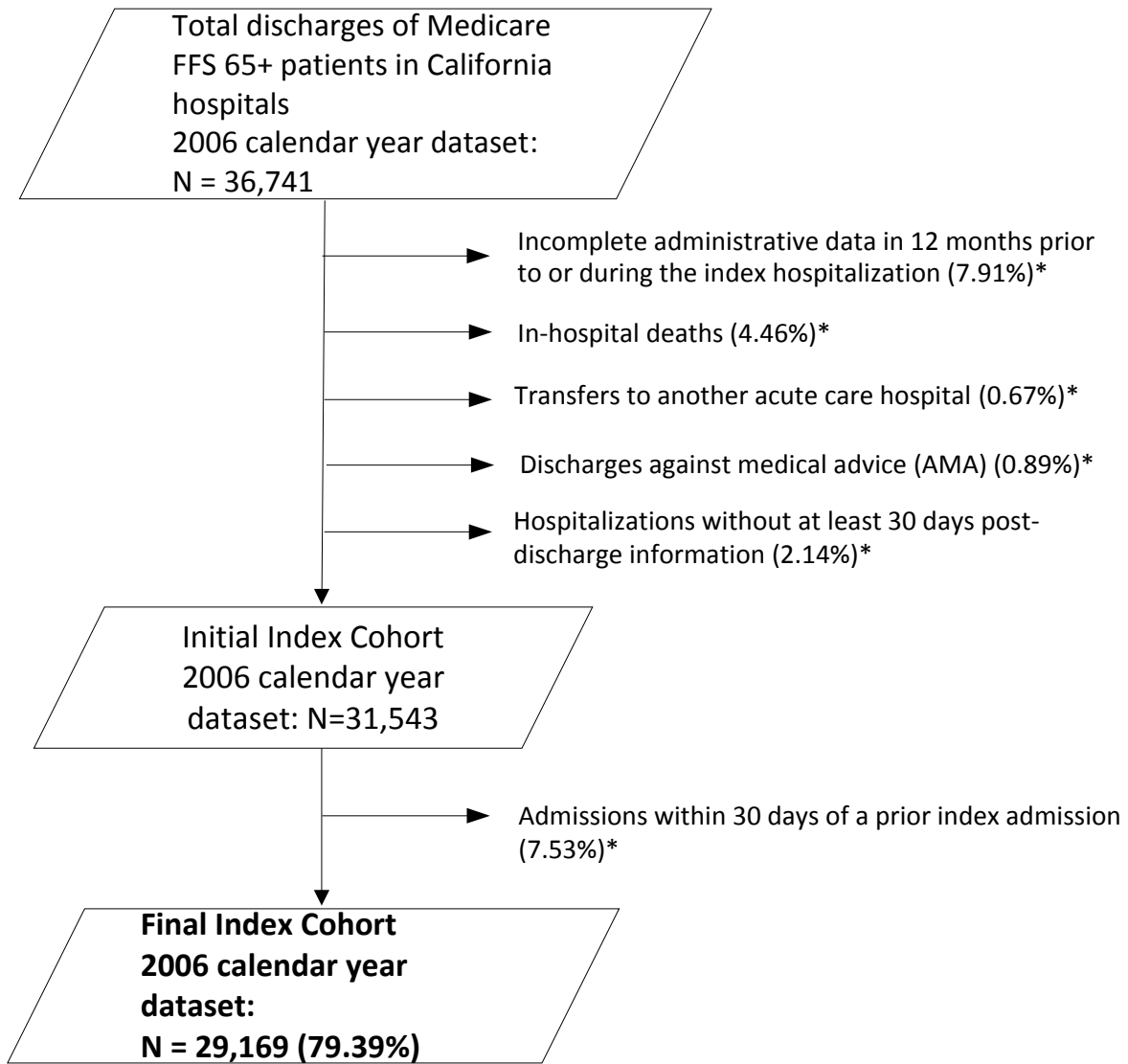








**Figure 1c. 2006 HF Readmission Cohort Using CMS Medicare Claims Data for FFS Patients 65+ Admitted to California Hospitals**



\* These categories are not mutually exclusive.



















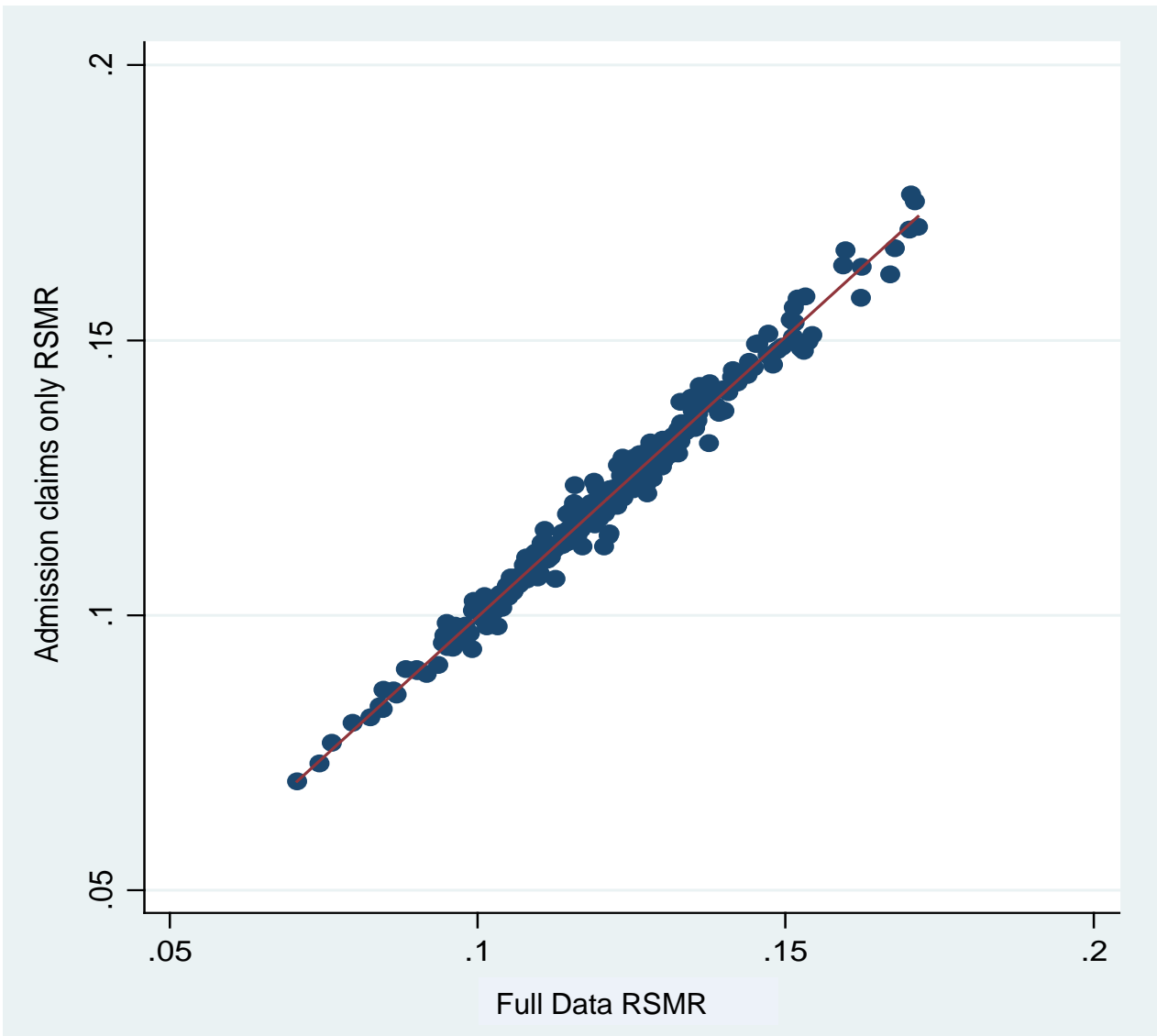




**Table 4b. Performance of HF Mortality Models With Full Data\* and With Only Admission Claims Data**  
**Data Source: 2006 CMS Medicare Claims Data for FFS Patients 65+ Admitted to California Hospitals**

	GLM model with full data	GLM model with admission claims data
C-statistic	0.681	0.684

**Figure 2b. Scatterplot of HF 30-day Risk-Standardized Mortality Rates (RSMR30) from Model Using Full Data\* and from Model Using Only Admission Claims Data (N=330 Hospitals)**  
**Data Source: 2006 CMS Medicare Claims Data for FFS Patients 65+ Admitted to California Hospitals**



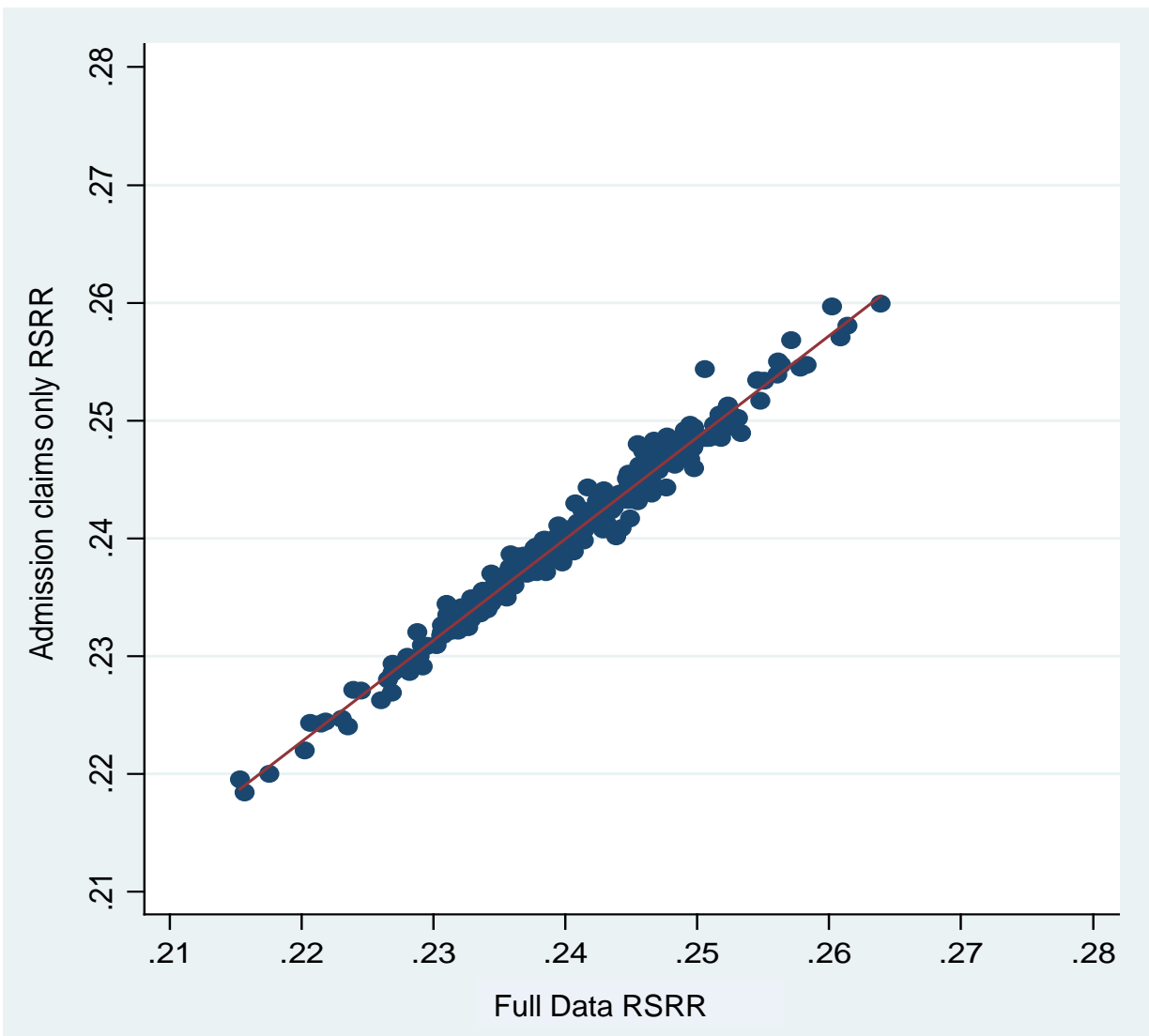
Correlation Coefficients (Weighted by Hospital Volume): 0.993

\* Including Part B, hospital outpatient, and hospital inpatient data.

**Table 4c. Performance of HF Readmission Models With Full Data\* and With Only Admission Claims Data**  
**Data Source: 2006 CMS Medicare Claims Data for FFS Patients 65+ Admitted to California Hospitals**

	GLM model with full data	GLM model with admission claims data
C-statistic	0.610	0.611

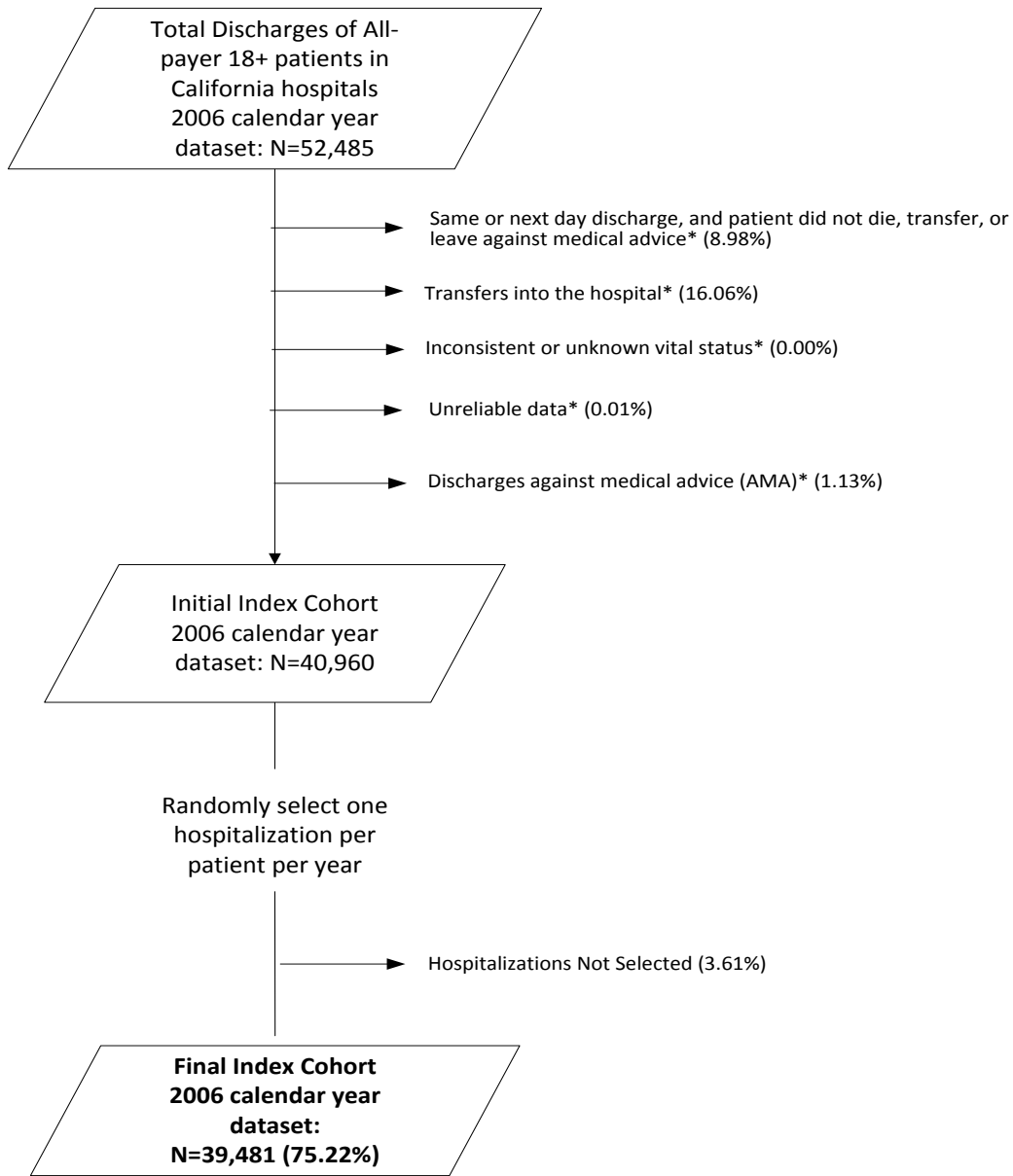
**Figure 2c. Scatterplot of HF 30-day Risk-Standardized Readmission Rates (RSRR30) from Model Using Full Data\* and from Model Using Only Admission Claims Data (N=335 Hospitals)**  
**Data Source: 2006 CMS Medicare Claims Data for FFS Patients 65+ Admitted to California Hospitals**



Correlation Coefficients (Weighted by Hospital Volume): 0.986

\* Including Part B, hospital outpatient, and hospital inpatient data.

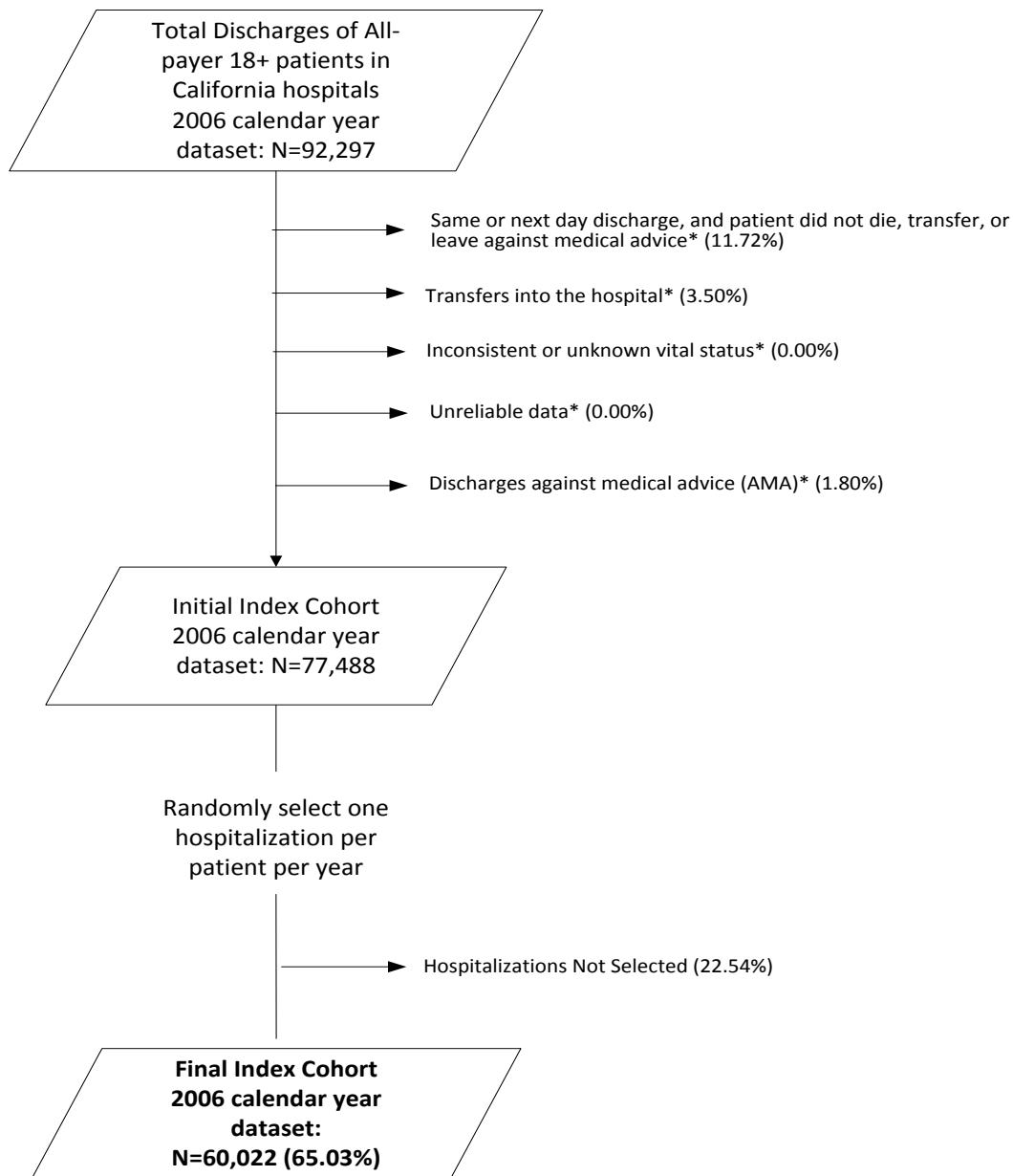
**Figure 3a. 2006 AMI Mortality Cohort Using California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**



\*Categories are not mutually exclusive

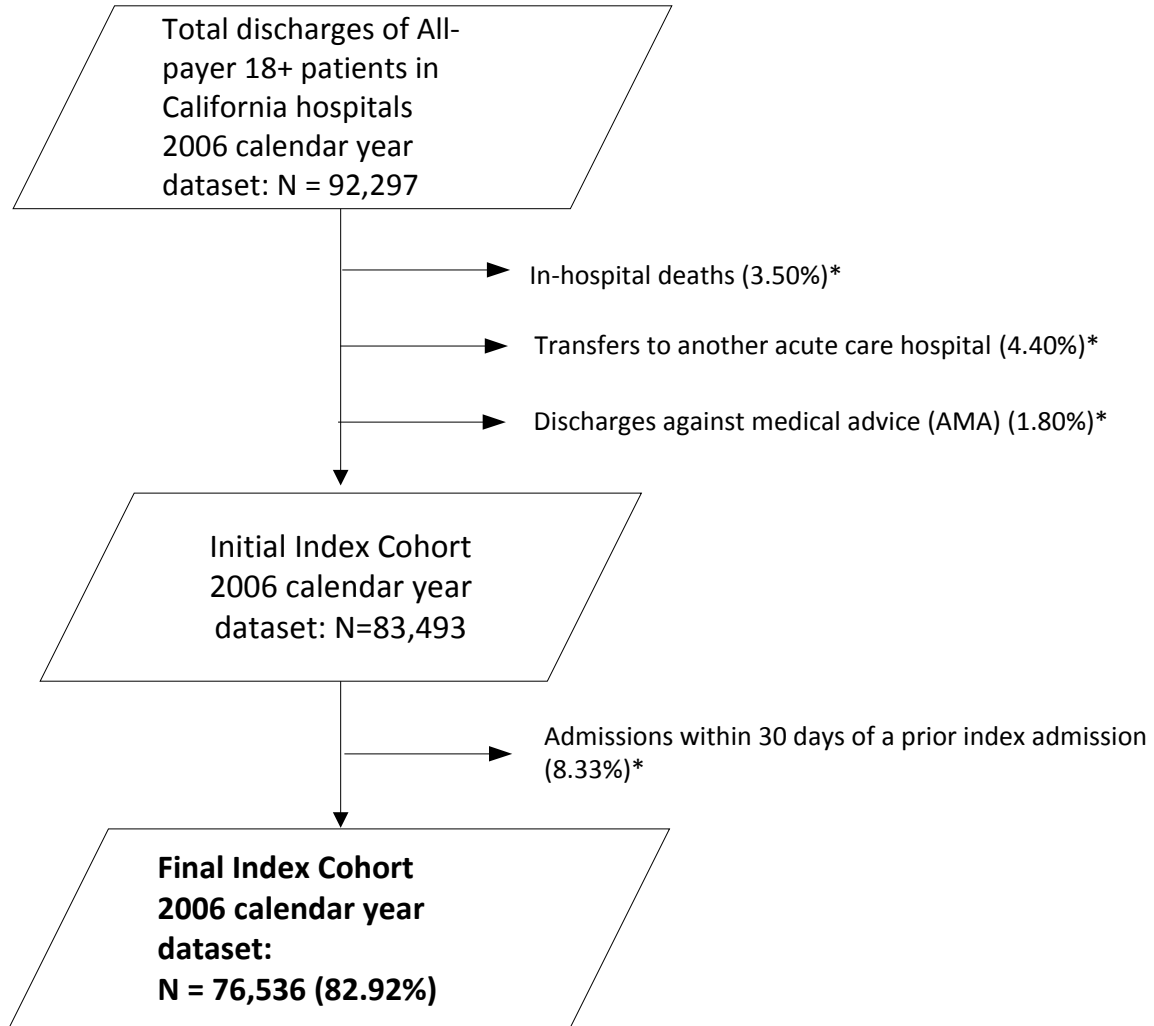


**Figure 3b. 2006 HF Mortality Cohort Using California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**



\*Categories are not mutually exclusive

**Figure 3c. 2006 HF Readmission Cohort Using California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**



\* These categories are not mutually exclusive.

**Table 5a. Prevalence of Risk Factors in AMI Mortality Model for All Patients Aged 18+ Years, FFS 65+ Patients, Non-FFS 65+ Patients, and All 18-64 Years Patients; Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>All 18+ (TOTAL) # (%)</b>	<b>FFS 65+ # (%)</b>	<b>Non-FFS 65+ # (%)</b>	<b>All 18-64 # (%)</b>	<b>P-value</b>
All	39,481 (100)	13,347 (100)	11,214 (100)	14,920 (100)	
<b>Demographics</b>					
Age: Mean (SD)	69 (14)	79 (8)	78 (8)	54 (8)	0.0000
Male	23,977 (61)	6,682 (50)	6,099 (54)	11,196 (75)	0.0000
<b>Cardiovascular</b>					
Percutaneous Transluminal Coronary Angioplasty	4,637 (12)	1,594 (12)	1,290 (12)	1,753 (12)	0.5670
Coronary Artery Bypass Graft Surgery	3,490 (9)	1,406 (11)	1,337 (12)	747 (5)	0.0000
Congestive Heart failure (CC 80)	4,829 (12)	2,214 (17)	1,646 (15)	969 (6)	0.0000
Acute Myocardial Infarction (CC 81)	2,084 (5)	797 (6)	739 (7)	548 (4)	0.0000
Unstable Angina (CC82)	1,412 (4)	533 (4)	435 (4)	444 (3)	0.0000
Anterior Myocardial Infarction (ICD9 410.00-410.19)	5,773 (15)	1,800 (13)	1,280 (11)	2,693 (18)	0.0000
Other Location of Myocardial Infarction (ICD9 410.20-410.69)	7,715 (20)	2,111 (16)	1,682 (15)	3,922 (26)	0.0000
Chronic atherosclerosis (CC 83 or 84)	29,221 (74)	10,109 (76)	8,158 (73)	10,954 (73)	0.0000
Cardio-respiratory failure and shock (CC 79)	1,143 (3)	499 (4)	358 (3)	286 (2)	0.0000
Valvular or Rheumatic Heart Disease (CC 86)	5,746 (15)	2,733 (20)	2,014 (18)	999 (7)	0.0000
<b>Comorbidity</b>					
Hypertension (CC 89, 91)	24,388 (62)	8,503 (64)	7,437 (66)	8,448 (57)	0.0000
Stroke (CC 95 or 96)	618 (2)	279 (2)	229 (2)	110 (1)	0.0000
Cerebrovascular Disease (CC 97 to 99, 103)	1,698 (4)	817 (6)	621 (6)	260 (2)	0.0000
Renal Failure (CC 131)	3,378 (9)	1,409 (11)	1,176 (10)	793 (5)	0.0000
Chronic Obstructive Pulmonary Disease (CC 108)	7,181 (18)	3,175 (24)	2,283 (20)	1,723 (12)	0.0000
Pneumonia (CC 111 to 113)	4,865 (12)	2,265 (17)	1,657 (15)	943 (6)	0.0000
Diabetes and DM Complications (CC 15 to 20, 120)	14,462 (37)	5,062 (38)	4,375 (39)	5,025 (34)	0.0000
Protein-Calorie Malnutrition (CC 21)	1,015 (3)	537 (4)	325 (3)	153 (1)	0.0000
Dementia and Senility (CC 49 or 50)	3,641 (9)	2,145 (16)	1,359 (12)	137 (1)	0.0000
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	1,230 (3)	527 (4)	387 (3)	316 (2)	0.0000
Vascular or Circulatory Disease (CC 104, 105)	2,475 (6)	1,102 (8)	849 (8)	524 (4)	0.0000
Metastatic Cancer and Acute Leukemia (CC 7, 8)	775 (2)	367 (3)	265 (2)	143 (1)	0.0000
Trauma (CC 154 to 156, 158 to 162)	1,835 (5)	875 (7)	627 (6)	333 (2)	0.0000
Major Psych Disorders (CC 54 to 56)	1,030 (3)	379 (3)	235 (2)	416 (3)	0.0003
Liver and Biliary Disease (CC 25 to 27)	634 (2)	152 (1)	112 (1)	370 (2)	0.0000
<b>Outcome</b>					
Death within 30-days of admission	4,667 (12)	2,257 (17)	1,736 (15)	674 (5)	0.0000

FFS is defined as payer category=Medicare and payer type of coverage=Traditional.

**Table 5b. Prevalence of Risk Factors in HF Mortality Model with All 18+ Years Patients, FFS 65+ Years Patients, Non-FFS 65+ Years Patients, and All 18-64 Years Patients; Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>All 18+ (TOTAL) # (%)</b>	<b>FFS 65+ # (%)</b>	<b>Non-FFS 65+ # (%)</b>	<b>All 18-64 # (%)</b>	<b>P-value</b>
All	60,022 (100)	27,977 (100)	16,447 (100)	15,598 (100)	
<b>Demographics</b>					
Age: Mean (SD)	73 (15)	81 (8)	80 (8)	53 (9)	0.0000
Male	29,241 (49)	12,120 (43)	7,640 (46)	9,481 (61)	0.0000
<b>Cardiovascular</b>					
Percutaneous Transluminal Coronary Angioplasty	5,720 (10)	2,937 (10)	1,553 (9)	1,230 (8)	0.0000
Coronary Artery Bypass Graft Surgery	10,026 (17)	5,435 (19)	3,105 (19)	1,486 (10)	0.0000
Congestive Heart failure (CC 80)	27,013 (45)	12,826 (46)	7,307 (44)	6,880 (44)	0.0005
Acute Myocardial Infarction (CC 81)	4,546 (8)	2,056 (7)	1,530 (9)	960 (6)	0.0000
Unstable Angina (CC82)	2,829 (5)	1,283 (5)	813 (5)	733 (5)	0.2285
Chronic atherosclerosis (CC 83, 84)	34,945 (58)	17,884 (64)	10,103 (61)	6,958 (45)	0.0000
Cardio-respiratory failure and shock (CC 79)	5,696 (9)	2,680 (10)	1,409 (9)	1,607 (10)	0.0000
Valvular or Rheumatic Heart Disease (CC 86)	17,416 (29)	8,874 (32)	5,252 (32)	3,290 (21)	0.0000
<b>Comorbidity</b>					
Hypertension (CC 89, 91)	36,660 (61)	17,174 (61)	10,485 (64)	9,001 (58)	0.0000
Stroke (CC 95, 96)	1,455 (2)	763 (3)	365 (2)	327 (2)	0.0000
Renal Failure (CC 131)	15,039 (25)	6,835 (24)	4,320 (26)	3,884 (25)	0.0001
Chronic Obstructive Pulmonary Disease (CC 108)	21,633 (36)	10,944 (39)	5,722 (35)	4,967 (32)	0.0000
Pneumonia (CC 111 to 113)	16,146 (27)	7,993 (29)	4,500 (27)	3,653 (23)	0.0000
Diabetes and DM Complications (CC 15 to 20, 120)	28,208 (47)	12,713 (45)	7,511 (46)	7,984 (51)	0.0000
Protein-Calorie Malnutrition (CC 21)	3,043 (5)	1,569 (6)	857 (5)	617 (4)	0.0000
Dementia and Senility (CC 49, 50)	7,463 (12)	4,871 (17)	2,342 (14)	250 (2)	0.0000
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	3,407 (6)	1,619 (6)	826 (5)	962 (6)	0.0000
Vascular or Circulatory Disease (CC 104, 105)	7,843 (13)	3,845 (14)	2,276 (14)	1,722 (11)	0.0000
Metastatic Cancer and Acute Leukemia (CC 7, 8)	1,369 (2)	741 (3)	412 (3)	216 (1)	0.0000
Trauma (CC 154 to 156, 158 to 162)	4,714 (8)	2,573 (9)	1,365 (8)	776 (5)	0.0000
Major Psych Disorders (CC 54 to 56)	2,646 (4)	1,107 (4)	467 (3)	1,072 (7)	0.0000
Liver and Biliary Disease (CC 25 to 27)	2,344 (4)	646 (2)	377 (2)	1,321 (8)	0.0000
<b>Outcome</b>					
Death within 30-days of admission	5,802 (10)	3,176 (11)	2,009 (12)	617 (4)	0.0000

FFS is defined as "Payer category is Medicare and Payer type of coverage is Traditional".

**Table 5c. Prevalence of Risk Factors in HF Readmission Model with All 18+ Years Patients, FFS 65+ Years Patients, Non-FFS 65+ Years Patients, and All 18-64 Years Patients; Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>All 18+ (TOTAL) # (%)</b>	<b>FFS 65+ # (%)</b>	<b>Non-FFS 65+ # (%)</b>	<b>All 18-64 # (%)</b>	<b>P-value</b>
All	76,536 (100)	33,784 (100)	20,989 (100)	21,763 (100)	
<b>Demographics</b>					
Age: Mean (SD)	72 (15)	80 (8)	80 (8)	53 (9)	0.0000
Male	37,918 (50)	14,833 (44)	9,777 (47)	13,308 (61)	0.0000
<b>Cardiovascular</b>					
Coronary Artery Bypass Graft Surgery	13,314 (17)	6,913 (20)	4,201 (20)	2,200 (10)	0.0000
Congestive Heart failure (CC 80)	37,883 (49)	16,853 (50)	10,029 (48)	11,001 (51)	0.0000
Acute coronary syndrome (CC 81, 82)	8,991 (12)	3,882 (11)	2,743 (13)	2,366 (11)	0.0000
Arrhythmias (CC 92, 93)	25,928 (34)	13,006 (38)	7,603 (36)	5,319 (24)	0.0000
Cardio-respiratory failure and shock (CC 79)	7,985 (10)	3,507 (10)	1,967 (9)	2,511 (12)	0.0000
Valvular or Rheumatic Heart Disease (CC 86)	22,138 (29)	10,905 (32)	6,609 (31)	4,624 (21)	0.0000
Vascular or Circulatory Disease (CC 104, 105, 106)	16,245 (21)	7,459 (22)	4,546 (22)	4,240 (19)	0.0000
Chronic atherosclerosis (CC 83, 84)	45,749 (60)	22,260 (66)	13,229 (63)	10,260 (47)	0.0000
Other and unspecified heart disease (CC 94)	5,633 (7)	2,302 (7)	1,538 (7)	1,793 (8)	0.0000
<b>Comorbidity</b>					
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	4,535 (6)	2,028 (6)	1,099 (5)	1,408 (6)	0.0000
Stroke (CC 95, 96)	1,868 (2)	916 (3)	489 (2)	463 (2)	0.0000
Renal Failure (CC 131)	20,819 (27)	9,066 (27)	5,819 (28)	5,934 (27)	0.0732
Chronic Obstructive Pulmonary Disease (CC 108)	27,939 (37)	13,334 (39)	7,337 (35)	7,268 (33)	0.0000
Diabetes and DM Complications (CC 15 to 20, 119, 120)	36,663 (48)	15,813 (47)	9,703 (46)	11,147 (51)	0.0000
Disorders of fluid/electrolyte/acid-base (CC22, 23)	21,763 (28)	10,090 (30)	5,359 (26)	6,314 (29)	0.0000
Other urinary tract disorders (CC 136)	16,267 (21)	7,823 (23)	4,379 (21)	4,065 (19)	0.0000
Decubitus ulcer or chronic skin ulcer (CC 148, 149)	4,988 (7)	2,035 (6)	1,331 (6)	1,622 (7)	0.0000
Other gastrointestinal disorders (CC 36)	26,683 (35)	12,767 (38)	7,274 (35)	6,642 (31)	0.0000
Peptic ulcer, hemorrhage, other specified gastrointestinal disorders (CC 34)	6,600 (9)	3,286 (10)	1,831 (9)	1,483 (7)	0.0000
Severe hematological disorders (CC 44)	1,325 (2)	648 (2)	328 (2)	349 (2)	0.0019
Nephritis (CC132)	4,955 (6)	1,602 (5)	1,403 (7)	1,950 (9)	0.0000
Dementia and Senility (CC 49, 50)	8,678 (11)	5,519 (16)	2,801 (13)	358 (2)	0.0000
Metastatic Cancer and Acute Leukemia (CC 7)	1,001 (1)	520 (2)	292 (1)	189 (1)	0.0000
Cancer (CC 8 to 12)	5,967 (8)	3,080 (9)	1,850 (9)	1,037 (5)	0.0000
Liver and biliary disease (CC 25 to 30)	6,737 (9)	2,031 (6)	1,235 (6)	3,471 (16)	0.0000
End-stage renal disease or dialysis (CC 129, 130)	3,925 (5)	1,392 (4)	750 (4)	1,783 (8)	0.0000
Asthma (CC 110)	5,423 (7)	1,813 (5)	1,105 (5)	2,505 (12)	0.0000
Iron deficiency and other/unspecified anemias and blood disease (CC 47)	35,339 (46)	16,765 (50)	9,653 (46)	8,921 (41)	0.0000

**Table 5c. Prevalence of Risk Factors in HF Readmission Model with All 18+ Years Patients, FFS 65+ Years Patients, Non-FFS 65+ Years Patients, and All 18-64 Years Patients; Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>All 18+ (TOTAL) # (%)</b>	<b>FFS 65+ # (%)</b>	<b>Non-FFS 65+ # (%)</b>	<b>All 18-64 # (%)</b>	<b>P-value</b>
Pneumonia (CC 111 to 113)	20,276 (26)	9,390 (28)	5,547 (26)	5,339 (25)	0.0000
Drug/alcohol abuse/dependence/psychosis (CC 51 to 53)	15,223 (20)	3,653 (11)	2,288 (11)	9,282 (43)	0.0000
Major psych disorders (CC 54 to 56)	3,566 (5)	1,291 (4)	629 (3)	1,646 (8)	0.0000
Depression (CC 58)	10,059 (13)	4,223 (13)	2,535 (12)	3,301 (15)	0.0000
Other psychiatric disorders (CC 60)	5,329 (7)	2,186 (6)	1,278 (6)	1,865 (9)	0.0000
Fibrosis of lung and other chronic lung disorders (CC 109)	2,945 (4)	1,526 (5)	886 (4)	533 (2)	0.0000
Protein-Calorie Malnutrition (CC 21)	3,531 (5)	1,752 (5)	938 (4)	841 (4)	0.0000
<b>Outcome</b>					
Readmission within one month of discharge	17,938 (23)	7,922 (23)	4,668 (22)	5,348 (25)	0.0000

FFS is defined as "Payer category is Medicare and Payer type of coverage is Traditional".

**Table 6a. Odds Ratios for Risk Factors in AMI Mortality Measure for All Patients 18+ Years (GLM, N=39,481, C-Statistic=0.765)**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>OR (95% CI)</b>	<b>P-value</b>
Intercept		0.0000
<b>Demographics</b>		
Age	1.05 (1.05-1.06)	0.0000
Male	1.12 (1.05-1.20)	0.0008
<b>Cardiovascular</b>		
Percutaneous Transluminal Coronary Angioplasty	0.81 (0.72-0.92)	0.0007
Coronary Artery Bypass Graft Surgery	1.16 (1.04-1.30)	0.0076
Congestive Heart failure (CC 80)	1.54 (1.38-1.71)	0.0000
Acute Myocardial Infarction (CC 81)	1.08 (0.94-1.24)	0.2920
Unstable Angina (CC82)	0.76 (0.63-0.92)	0.0042
Anterior Myocardial Infarction (ICD9 410.00-410.19)	1.74 (1.59-1.91)	0.0000
Other Location of Myocardial Infarction (ICD9 410.20-410.69)	1.42 (1.30-1.56)	0.0000
Chronic atherosclerosis (CC 83 or 84)	0.57 (0.53-0.61)	0.0000
Cardio-respiratory failure and shock (CC 79)	0.88 (0.74-1.04)	0.1322
Valvular or Rheumatic Heart Disease (CC 86)	1.18 (1.09-1.28)	0.0001
<b>Comorbidity</b>		
Hypertension (CC 89, 91)	0.70 (0.66-0.75)	0.0000
Stroke (CC 95 or 96)	1.26 (1.01-1.57)	0.0382
Cerebrovascular Disease (CC 97 to 99, 103)	1.24 (1.09-1.42)	0.0016
Renal Failure (CC 131)	1.19 (1.06-1.34)	0.0027
Chronic Obstructive Pulmonary Disease (CC 108)	1.10 (1.02-1.20)	0.0155
Pneumonia (CC 111 to 113)	1.60 (1.47-1.74)	0.0000
Diabetes and DM Complications (CC 15 to 20, 120)	1.27 (1.18-1.36)	0.0000
Protein-Calorie Malnutrition (CC 21)	1.60 (1.38-1.86)	0.0000
Dementia and Senility (CC 49 or 50)	1.51 (1.38-1.65)	0.0000
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	1.25 (1.06-1.48)	0.0084
Vascular or Circulatory Disease (CC 104, 105)	1.12 (0.99-1.27)	0.0733
Metastatic Cancer and Acute Leukemia (CC 7, 8)	3.08 (2.61-3.62)	0.0000
Trauma (CC 154 to 156, 158 to 162)	1.12 (0.98-1.27)	0.0872
Major Psych Disorders (CC 54 to 56)	1.09 (0.90-1.31)	0.3774
Liver and Biliary Disease (CC 25 to 27)	2.25 (1.81-2.80)	0.0000

**Table 6b. Odds Ratios of Risk Factors in HF Mortality Measure for All Patients 18+ Years (GLM, N=60,022, C-Statistic=0.718)**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>OR (95% CI)</b>	<b>P-value</b>
Intercept		0.0000
<b>Demographics</b>		
Age	1.04 (1.04-1.05)	0.0000
Male	1.27 (1.20-1.35)	0.0000
<b>Cardiovascular</b>		
Percutaneous Transluminal Coronary Angioplasty	0.72 (0.64-0.80)	0.0000
Coronary Artery Bypass Graft Surgery	0.91 (0.84-0.98)	0.0168
Congestive Heart failure (CC 80)	1.31 (1.22-1.40)	0.0000
Acute Myocardial Infarction (CC 81)	1.34 (1.21-1.48)	0.0000
Unstable Angina (CC82)	0.81 (0.70-0.93)	0.0028
Chronic atherosclerosis (CC 83, 84)	1.03 (0.96-1.10)	0.4432
Cardio-respiratory failure and shock (CC 79)	1.05 (0.96-1.16)	0.2778
Valvular or Rheumatic Heart Disease (CC 86)	1.17 (1.10-1.24)	0.0000
<b>Comorbidity</b>		
Hypertension (CC 89, 91)	0.70 (0.66-0.75)	0.0000
Stroke (CC 95, 96)	1.14 (0.97-1.35)	0.1150
Renal Failure (CC 131)	1.11 (1.03-1.19)	0.0061
Chronic Obstructive Pulmonary Disease (CC 108)	1.12 (1.06-1.19)	0.0001
Pneumonia (CC 111 to 113)	1.30 (1.22-1.38)	0.0000
Diabetes and DM Complications (CC 15 to 20, 120)	0.89 (0.84-0.95)	0.0002
Protein-Calorie Malnutrition (CC 21)	1.90 (1.72-2.09)	0.0000
Dementia and Senility (CC 49, 50)	1.53 (1.42-1.64)	0.0000
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	1.04 (0.92-1.18)	0.4939
Vascular or Circulatory Disease (CC 104, 105)	1.07 (0.98-1.16)	0.1323
Metastatic Cancer and Acute Leukemia (CC 7, 8)	2.84 (2.49-3.25)	0.0000
Trauma (CC 154 to 156, 158 to 162)	1.29 (1.18-1.41)	0.0000
Major Psych Disorders (CC 54 to 56)	0.93 (0.81-1.07)	0.3259
Liver and Biliary Disease (CC 25 to 27)	1.44 (1.25-1.66)	0.0000



**Table 6c. Odds Ratios of Risk Factors in HF Readmission Measure for All Patients 18+ Years (GLM, N=76,536, C-Statistic=0.638)**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>OR (95% CI)</b>	<b>P-value</b>
Intercept		0.0000
<b>Demographics</b>		
Age	1.00 (1.00-1.00)	0.0372
Male	1.02 (0.99-1.06)	0.1943
<b>Cardiovascular</b>		
Coronary Artery Bypass Graft Surgery	0.97 (0.92-1.01)	0.1613
Congestive Heart failure (CC 80)	1.22 (1.16-1.27)	0.0000
Acute coronary syndrome (CC 81, 82)	1.04 (0.99-1.10)	0.1150
Arrhythmias (CC 92, 93)	1.09 (1.05-1.14)	0.0000
Cardio-respiratory failure and shock (CC 79)	1.10 (1.04-1.16)	0.0007
Valvular or Rheumatic Heart Disease (CC 86)	1.08 (1.04-1.12)	0.0001
Vascular or Circulatory Disease (CC 104, 105, 106)	1.06 (1.01-1.11)	0.0177
Chronic atherosclerosis (CC 83, 84)	1.14 (1.10-1.19)	0.0000
Other and unspecified heart disease (CC 94)	1.03 (0.97-1.10)	0.3223
<b>Comorbidity</b>		
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	1.07 (1.00-1.15)	0.0594
Stroke (CC 95, 96)	1.05 (0.94-1.16)	0.4159
Renal Failure (CC 131)	1.13 (1.08-1.18)	0.0000
Chronic Obstructive Pulmonary Disease (CC 108)	1.13 (1.09-1.18)	0.0000
Diabetes and DM Complications (CC 15 to 20, 119, 120)	1.12 (1.08-1.16)	0.0000
Disorders of fluid/electrolyte/acid-base (CC22, 23)	1.20 (1.15-1.25)	0.0000
Other urinary tract disorders (CC 136)	1.15 (1.10-1.20)	0.0000
Decubitus ulcer or chronic skin ulcer (CC 148, 149)	1.12 (1.05-1.20)	0.0006
Other gastrointestinal disorders (CC 36)	1.10 (1.06-1.14)	0.0000
Peptic ulcer, hemorrhage, other specified gastrointestinal disorders (CC 34)	1.02 (0.96-1.08)	0.5994
Severe hematological disorders (CC 44)	1.23 (1.09-1.39)	0.0007
Nephritis (CC132)	0.99 (0.93-1.07)	0.8744
Dementia and Senility (CC 49, 50)	0.97 (0.92-1.03)	0.3283
Metastatic Cancer and Acute Leukemia (CC 7)	1.16 (1.00-1.35)	0.0482
Cancer (CC 8 to 12)	1.02 (0.96-1.09)	0.5434
Liver and biliary disease (CC 25 to 30)	1.20 (1.13-1.27)	0.0000
End-stage renal disease or dialysis (CC 129, 130)	1.39 (1.29-1.50)	0.0000
Asthma (CC 110)	1.05 (0.98-1.12)	0.1539
Iron deficiency and other/unspecified anemias and blood disease (CC 47)	1.18 (1.13-1.23)	0.0000
Pneumonia (CC 111 to 113)	1.06 (1.02-1.11)	0.0027
Drug/alcohol abuse/dependence/psychosis (CC 51 to 53)	1.12 (1.07-1.17)	0.0000
Major psych disorders (CC 54 to 56)	1.28 (1.18-1.38)	0.0000
Depression (CC 58)	1.06 (1.01-1.11)	0.0237
Other psychiatric disorders (CC 60)	1.18 (1.10-1.25)	0.0000
Fibrosis of lung and other chronic lung disorders (CC 109)	1.13 (1.04-1.23)	0.0047
Protein-Calorie Malnutrition (CC 21)	1.04 (0.96-1.13)	0.2912

**Table 7a. AMI Mortality Model Performance for Models with All 18+ Patients and by Subgroups of Patients\***  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Model with</b>	<b>N</b>	<b>C-statistic</b>	<b>SE</b>	<b>Lower</b>	<b>Upper</b>	<b>Predictive ability, % (lowest decile – highest decile)</b>
All 65+	24,561	0.714	0.004	0.705	0.722	(0.00%, 34.77%)
FFS, 65+	13,347	0.712	0.006	0.701	0.723	(0.00%, 35.20%)
Non-FFS, 65+	11,214	0.715	0.007	0.702	0.728	(0.00%, 34.11%)
All 18-64	14,920	0.728	0.01	0.708	0.748	(1.47%, 31.15%)
<b>All 18+ (overall)</b>	<b>39,481</b>	<b>0.765</b>	<b>0.004</b>	<b>0.758</b>	<b>0.772</b>	<b>(1.47%, 34.71%)</b>

\*Note that a single overall model for all 18+ is applied to the subgroups of patients

**Table 7b. HF Mortality Model Performance for Models with All 18+ Patients and with Subgroups of Patients\***  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Model with	N	C-statistic	SE	Lower	Upper	Predictive ability <sup>#</sup> , % (lowest decile – highest decile)
All 65+	44,424	0.690	0.004	0.683	0.698	(2.31%, 25.26%)
FFS, 65+	27,977	0.690	0.005	0.681	0.700	(0.00%, 24.17%)
Non-FFS, 65+	16,447	0.693	0.006	0.680	0.705	(5.17%, 27.41%)
All 18-64	15,598	0.663	0.011	0.641	0.685	(1.96%, 14.06%)
<b>All 18+ (overall)</b>	<b>60,022</b>	<b>0.718</b>	<b>0.003</b>	<b>0.712</b>	<b>0.725</b>	<b>(1.97%, 25.14%)</b>

\*Note that a single overall model for all 18+ is applied to the subgroups of patients

<sup>#</sup>Mean observation mortality in the lowest and the highest decile of the predicted mortality.

**Table 7c. HF Readmission Model Performance for Models with All 18+ Patients and with Subgroups of Patients\***  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Model with	N	C-statistic	SE	Lower	Upper	Predictive ability <sup>#</sup> , % (lowest decile – highest decile)
All 65+	54,773	0.616	0.003	0.610	0.622	(13.89%, 39.14%)
FFS, 65+	33,784	0.617	0.004	0.610	0.624	(14.15%, 39.42%)
Non-FFS, 65+	20,989	0.614	0.005	0.604	0.623	(13.53%, 38.58%)
All 18-64	21,763	0.687	0.004	0.679	0.695	(9.93%, 49.41%)
<b>All 18+ (overall)</b>	<b>76,536</b>	<b>0.638</b>	<b>0.002</b>	<b>0.633</b>	<b>0.642</b>	<b>(13.03%, 43.20%)</b>

\*Note that a single overall model for all 18+ is applied to the subgroups of patients

<sup>#</sup>Mean observation mortality in the lowest and the highest decile of the predicted mortality.

**Table 8a. Distribution of Pearson Chi-Square Residuals for AMI Mortality Model by Patient Subgroups**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

	All 18+ (TOTAL)	All 65+	FFS 65+	Non-FFS 65+	All 18-64
N	39,481	24,561	13,347	11,214	14,920
Mean	-0.005	-0.002	-0.004	-0.001	-0.009
Std Deviation	0.978	0.994	0.994	0.995	0.950
100% Max	9.705	6.159	5.454	6.159	9.705
99%	4.088	3.512	3.418	3.566	5.062
95%	2.334	2.415	2.407	2.428	-0.089
90%	1.365	1.761	1.759	1.762	-0.122
75% Q3	-0.174	-0.245	-0.245	-0.244	-0.154
50% Median	-0.260	-0.335	-0.341	-0.329	-0.190
25% Q1	-0.379	-0.453	-0.464	-0.436	-0.231
10%	-0.527	-0.601	-0.617	-0.580	-0.282
5%	-0.640	-0.718	-0.739	-0.692	-0.321
1%	-0.902	-0.990	-1.025	-0.934	-0.446
0% Min	-2.385	-2.385	-2.385	-2.088	-1.683
Residual < -2	2 (0.01%)	2 (0.01%)	1 (0.01%)	1 (0.01%)	0 (0.00%)
-2 <= Residual < 0	34,812 (88.17%)	20,566 (83.73%)	11,809 (83.08%)	9,477 (84.51%)	14,246 (95.48%)
0 <= Residual < 2	2,089 (5.29%)	2,054 (8.36%)	1,219 (9.13%)	835 (7.45%)	35 (0.23%)
Residual >= 2	2,578 (6.53%)	1,939 (7.89%)	1,038 (7.78%)	901 (9.03%)	639 (4.28%)

**Table 8b. Distribution of Pearson Chi-Square Residual for HF Mortality Models by Patient Subgroups**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

	All 18+ (TOTAL)	All 65+	FFS 65+	Non-FFS 65+	All 18-64
N	60,022	44,424	27,977	16,447	15,598
Mean	-0.0016	-0.0051	-0.0209	0.0219	0.0082
Std Deviation	0.9949	0.9844	0.9646	1.0168	1.0242
100% Max	13.3990	6.7464	5.9748	6.7464	13.3990
99%	4.2042	3.7393	3.6917	3.8302	5.7434
95%	2.5427	2.6158	2.5493	2.7077	-0.0954
90%	-0.0974	1.7596	1.6668	1.8785	-0.1183
75% Q3	-0.1880	-0.2410	-0.2427	-0.2370	-0.1478
50% Median	-0.2686	-0.3066	-0.3102	-0.3015	-0.1780
25% Q1	-0.3559	-0.3860	-0.3914	-0.3762	-0.2138
10%	-0.4508	-0.4796	-0.4870	-0.4656	-0.2593
5%	-0.5206	-0.5508	-0.5582	-0.5368	-0.2962
1%	-0.7020	-0.7395	-0.7493	-0.7223	-0.4051
0% Min	-1.6798	-1.6798	-1.6798	-1.6685	-0.7087
Residual < -2	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
-2 <= Residual < 0	54,220 (90.33%)	39,239 (88.33%)	24,801 (88.65%)	14,438 (87.79%)	14,981 (96.04%)
0 <= Residual < 2	1,275 (2.12%)	1,269 (2.86%)	811 (2.90%)	458 (2.78%)	6 (0.04%)
Residual >= 2	4,527 (7.54%)	3,916 (8.82%)	2,365 (8.45%)	1,551 (9.43%)	611 (3.92%)

**Table 8c. Distribution of Pearson Chi-Square Residual for HF Readmission Models by Patient Subgroups**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

	All 18+ (TOTAL)	All 65+	FFS 65+	Non-FFS 65+	All 18-64
N	76,536	54,773	33,784	20,989	21,763
Mean	0.0000	0.0022	0.0065	-0.0047	-0.0055
Std Deviation	1.0000	1.0085	1.0112	1.0042	0.9782
100% Max	2.7554	2.7554	2.7554	2.7469	2.6472
99%	2.5027	2.5181	2.5123	2.5260	2.4500
95%	2.1716	2.1958	2.1894	2.2098	2.0945
90%	1.8238	1.8582	1.8512	1.8707	1.7320
75% Q3	-0.3777	-0.3769	-0.3755	-0.3792	-0.3798
50% Median	-0.4541	-0.4552	-0.4569	-0.4520	-0.4512
25% Q1	-0.5695	-0.5695	-0.5738	-0.5627	-0.5696
10%	-0.6948	-0.6883	-0.6936	-0.6778	-0.7128
5%	-0.7727	-0.7613	-0.7683	-0.7497	-0.8072
1%	-0.9336	-0.9071	-0.9132	-0.8979	-0.9902
0% Min	-1.5081	-1.4771	-1.2495	-1.4771	-1.5081
Residual < -2	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
-2 <= Residual < 0	58,598 (76.56%)	42,183 (77.01%)	25,862 (76.55%)	16,321 (77.76%)	16,415 (75.43%)
0 <= Residual < 2	12,263 (16.02%)	8,266 (15.09%)	5,323 (15.76%)	2,943 (14.02%)	3,997 (18.37%)
Residual >= 2	5,675 (7.41%)	4,324 (7.89%)	2,599 (7.69%)	1,725 (8.22%)	1,351 (6.21%)

**Table 9a. Odds Ratios for Risk Factors in AMI Mortality Measure -- Stratified Results for FFS 65+ Patients, Non-FFS 65+ Patients, All 65+ Patients, and All 18-64 Patients**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Risk Factor	All 65+ (N=24,561, C-Statistic=0.714)		FFS 65+ (N=13,347, C-Statistic=0.713)		Non-FFS 65+ (N= 11,214, C-Statistic=0.719)		All 18-64 (N=14,920, C-Statistic=0.753)	
	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value
Intercept		0.000		0.000		0.000		0.000
<b>Demographics</b>								
Age	1.06 (1.05-1.06)	0.000	1.06 (1.05-1.06)	0.000	1.06 (1.05-1.07)	0.000	1.04 (1.02-1.05)	0.000
Male	1.16 (1.08-1.25)	0.000	1.17 (1.06-1.29)	0.002	1.16 (1.04-1.30)	0.008	1.06 (0.88-1.27)	0.560
<b>Cardiovascular</b>								
Percutaneous Transluminal Coronary Angioplasty	0.80 (0.70-0.91)	0.001	0.77 (0.65-0.92)	0.004	0.82 (0.68-1.00)	0.055	0.86 (0.65-1.15)	0.310
Coronary Artery Bypass Graft Surgery	1.15 (1.03-1.30)	0.016	1.24 (1.06-1.45)	0.007	1.05 (0.88-1.26)	0.556	1.16 (0.82-1.65)	0.402
Congestive Heart failure (CC 80)	1.58 (1.41-1.77)	0.000	1.70 (1.46-1.96)	0.000	1.42 (1.19-1.70)	0.000	1.24 (0.90-1.71)	0.186
Acute Myocardial Infarction (CC 81)	1.04 (0.89-1.21)	0.613	1.00 (0.81-1.23)	0.971	1.09 (0.87-1.36)	0.458	1.37 (0.94-2.01)	0.104
Unstable Angina (CC82)	0.79 (0.65-0.97)	0.024	0.90 (0.70-1.17)	0.449	0.67 (0.49-0.93)	0.015	0.63 (0.39-1.03)	0.068
Anterior Myocardial Infarction (ICD9 410.00-410.19)	1.71 (1.54-1.90)	0.000	1.67 (1.46-1.92)	0.000	1.81 (1.54-2.12)	0.000	1.96 (1.59-2.41)	0.000
Other Location of Myocardial Infarction (ICD9 410.20-410.69)	1.50 (1.36-1.66)	0.000	1.53 (1.34-1.76)	0.000	1.47 (1.26-1.72)	0.000	1.29 (1.05-1.59)	0.017
Chronic atherosclerosis (CC 83 or 84)	0.60 (0.55-0.65)	0.000	0.54 (0.49-0.61)	0.000	0.68 (0.60-0.77)	0.000	0.44 (0.37-0.53)	0.000
Cardio-respiratory failure and shock (CC 79)	0.86 (0.71-1.04)	0.110	0.89 (0.69-1.13)	0.330	0.83 (0.62-1.12)	0.219	0.92 (0.61-1.40)	0.695
Valvular or Rheumatic Heart Disease (CC 86)	1.12 (1.03-1.23)	0.009	1.01 (0.90-1.14)	0.826	1.29 (1.13-1.48)	0.000	1.79 (1.39-2.29)	0.000
<b>Comorbidity</b>								
Hypertension (CC 89, 91)	0.71 (0.65-0.76)	0.000	0.69 (0.63-0.76)	0.000	0.72 (0.65-0.81)	0.000	0.71 (0.60-0.84)	0.000
Stroke (CC 95 or 96)	1.31 (1.04-1.65)	0.021	1.08 (0.78-1.49)	0.641	1.63 (1.16-2.28)	0.005	0.91 (0.45-1.85)	0.787
Cerebrovascular Disease (CC 97 to 99, 103)	1.27 (1.11-1.47)	0.001	1.39 (1.16-1.67)	0.000	1.13 (0.91-1.42)	0.269	1.12 (0.69-1.80)	0.646
Renal Failure (CC 131)	1.11 (0.98-1.25)	0.106	1.20 (1.02-1.41)	0.032	0.99 (0.82-1.20)	0.954	1.70 (1.23-2.35)	0.001
Chronic Obstructive Pulmonary Disease (CC 108)	1.10 (1.01-1.20)	0.031	1.05 (0.94-1.18)	0.376	1.15 (1.01-1.32)	0.034	1.17 (0.93-1.46)	0.182
Pneumonia (CC 111 to 113)	1.53 (1.39-1.68)	0.000	1.54 (1.37-1.74)	0.000	1.52 (1.32-1.75)	0.000	2.08 (1.63-2.66)	0.000
Diabetes and DM Complications (CC 15 to 20, 120)	1.19 (1.10-1.28)	0.000	1.24 (1.12-1.37)	0.000	1.14 (1.02-1.28)	0.025	1.73 (1.46-2.06)	0.000
Protein-Calorie Malnutrition (CC 21)	1.53 (1.31-1.80)	0.000	1.28 (1.04-1.57)	0.022	2.05 (1.59-2.65)	0.000	2.05 (1.32-3.17)	0.001
Dementia and Senility (CC 49 or 50)	1.51 (1.38-1.66)	0.000	1.43 (1.27-1.62)	0.000	1.64 (1.42-1.89)	0.000	1.63 (0.94-2.84)	0.082
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	1.23 (1.03-1.48)	0.023	1.21 (0.95-1.54)	0.116	1.26 (0.96-1.67)	0.101	1.06 (0.70-1.62)	0.771
Vascular or Circulatory Disease (CC 104, 105)	1.07(0.94-1.22)	0.325	0.97 (0.81-1.16)	0.721	1.24 (1.01-1.52)	0.043	1.47 (1.04-2.08)	0.027
Metastatic Cancer and Acute Leukemia (CC 7, 8)	3.06 (2.56-3.64)	0.000	3.04 (2.41-3.84)	0.000	3.11 (2.37-4.08)	0.000	3.27 (2.09-5.10)	0.000
Trauma (CC 154 to 156, 158 to 162)	1.07 (0.93-1.22)	0.351	0.94 (0.78-1.12)	0.492	1.26 (1.03-1.54)	0.026	1.63 (1.12-2.38)	0.012
Major Psych Disorders (CC 54 to 56)	1.03 (0.84-1.28)	0.761	1.11 (0.85-1.46)	0.432	0.93 (0.65-1.32)	0.691	1.13 (0.76-1.67)	0.547
Liver and Biliary Disease (CC 25 to 27)	1.65 (1.22-2.23)	0.001	1.92 (1.31-2.82)	0.001	1.31 (0.80-2.15)	0.291	2.68 (1.94-3.69)	0.000



**Table 9b. Odds Ratios for Risk Factors in HF Mortality Measure -- Stratified Results for FFS 65+ Patients, Non-FFS 65+ Patients, All 65+ Patients, and All 18-64 Patients**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Risk Factor	All 65+ (N=44,424, C-statistic=0.690)		FFS 65+ (N=27,977, C-statistic=0.691)		Non-FFS 65+ (N= 16,447, C-statistic=0.694)		All 18-64 (N=15,598, C-Statistic=0.687)	
	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value
Intercept		0.0000		0.0000		0.0000		0.0000
<b>Demographics</b>								
Age	1.05 (1.04-1.05)	0.0000	1.05 (1.05-1.06)	0.0000	1.04 (1.04-1.05)	0.0000	1.02 (1.01-1.03)	0.0024
Male	1.32 (1.24-1.40)	0.0000	1.26 (1.17-1.37)	0.0000	1.39 (1.26-1.53)	0.0000	1.04 (0.88-1.23)	0.6533
<b>Cardiovascular</b>								
Percutaneous Transluminal Coronary Angioplasty	0.69 (0.62-0.78)	0.0000	0.67 (0.58-0.78)	0.0000	0.74 (0.62-0.90)	0.0023	0.96 (0.71-1.31)	0.8185
Coronary Artery Bypass Graft Surgery	0.92 (0.84-1.00)	0.0436	0.92 (0.82-1.02)	0.1071	0.93 (0.81-1.06)	0.2815	0.87 (0.66-1.16)	0.3408
Congestive Heart failure (CC 80)	1.26 (1.17-1.36)	0.0000	1.18 (1.07-1.29)	0.0006	1.43 (1.27-1.61)	0.0000	1.70 (1.38-2.09)	0.0000
Acute Myocardial Infarction (CC 81)	1.34 (1.20-1.49)	0.0000	1.43 (1.25-1.65)	0.0000	1.16 (0.99-1.38)	0.0739	1.35 (1.01-1.81)	0.0442
Unstable Angina (CC82)	0.80 (0.69-0.93)	0.0046	0.77 (0.63-0.94)	0.0119	0.84 (0.66-1.07)	0.1563	0.84 (0.58-1.22)	0.3553
Chronic atherosclerosis (CC 83, 84)	1.04 (0.97-1.11)	0.3230	1.04 (0.95-1.13)	0.4485	1.05 (0.93-1.18)	0.4192	1.01 (0.83-1.22)	0.9518
Cardio-respiratory failure and shock (CC 79)	1.03 (0.93-1.14)	0.5366	1.03 (0.91-1.17)	0.6248	1.06 (0.89-1.25)	0.5123	1.21 (0.96-1.54)	0.1124
Valvular or Rheumatic Heart Disease (CC 86)	1.15 (1.08-1.23)	0.0000	1.13 (1.05-1.23)	0.0023	1.18 (1.06-1.30)	0.0017	1.38 (1.15-1.66)	0.0005
<b>Comorbidity</b>								
Hypertension (CC 89, 91)	0.72 (0.67-0.76)	0.0000	0.73 (0.67-0.79)	0.0000	0.68 (0.62-0.76)	0.0000	0.64 (0.54-0.76)	0.0000
Stroke (CC 95, 96)	1.15 (0.96-1.38)	0.1249	1.26 (1.01-1.58)	0.0385	0.96 (0.69-1.32)	0.7871	1.23 (0.80-1.90)	0.3530
Renal Failure (CC 131)	1.11 (1.03-1.20)	0.0059	1.07 (0.97-1.18)	0.1768	1.16 (1.02-1.31)	0.0229	1.06 (0.86-1.31)	0.5594
Chronic Obstructive Pulmonary Disease (CC 108)	1.14 (1.07-1.21)	0.0000	1.18 (1.09-1.28)	0.0001	1.11 (1.00-1.23)	0.0524	1.09 (0.91-1.31)	0.3389
Pneumonia (CC 111 to 113)	1.33 (1.24-1.42)	0.0000	1.41 (1.30-1.54)	0.0000	1.20 (1.08-1.34)	0.0009	1.01 (0.83-1.22)	0.9522
Diabetes and DM Complications (CC 15 to 20, 120)	0.90 (0.84-0.96)	0.0010	0.90 (0.83-0.98)	0.0116	0.90 (0.81-1.00)	0.0445	1.03 (0.86-1.24)	0.7143
Protein-Calorie Malnutrition (CC 21)	1.91 (1.72-2.12)	0.0000	1.84 (1.62-2.10)	0.0000	2.03 (1.71-2.40)	0.0000	1.80 (1.35-2.41)	0.0001
Dementia and Senility (CC 49, 50)	1.52 (1.42-1.64)	0.0000	1.47 (1.35-1.62)	0.0000	1.65 (1.46-1.86)	0.0000	0.97 (0.59-1.62)	0.9201
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	0.94 (0.82-1.08)	0.3602	0.95 (0.80-1.13)	0.5482	0.92 (0.74-1.16)	0.4968	1.67 (1.27-2.21)	0.0003
Vascular or Circulatory Disease (CC 104, 105)	1.05 (0.96-1.15)	0.2817	1.03 (0.92-1.15)	0.6411	1.09 (0.94-1.25)	0.2589	1.17 (0.92-1.49)	0.1884
Metastatic Cancer and Acute Leukemia (CC 7, 8)	2.79 (2.42-3.21)	0.0000	2.80 (2.34-3.34)	0.0000	2.85 (2.26-3.59)	0.0000	3.96 (2.66-5.90)	0.0000
Trauma (CC 154 to 156, 158 to 162)	1.30 (1.19-1.43)	0.0000	1.30 (1.16-1.46)	0.0000	1.31 (1.12-1.53)	0.0006	1.12 (0.82-1.53)	0.4862
Major Psych Disorders (CC 54 to 56)	0.92 (0.78-1.07)	0.2718	0.99 (0.82-1.19)	0.9220	0.78 (0.58-1.05)	0.1007	0.96 (0.72-1.30)	0.8140
Liver and Biliary Disease (CC 25 to 27)	1.31 (1.09-1.58)	0.0042	1.24 (0.98-1.58)	0.0774	1.47 (1.10-1.98)	0.0096	1.71 (1.35-2.15)	0.0000

**Table 9c. Odds Ratios for Risk Factors in HF Readmission Measure -- Stratified Results for FFS 65+ Patients, Non-FFS 65+ Patients, All 65+ Patients, and All 18-64 Patients**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Risk Factor	All 65+ (N=54,773, C-statistic=0.617)		FFS 65+ (N=33,784, C-Statistic=0.619)		Non-FFS 65+ (N=20,989, C-Statistic=0.617)		All 18-64 (N=21,763, C-Statistic=0.689)	
	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value
Intercept		0.0000		0.0000		0.0000		0.0000
<b>Demographics</b>								
Age	1.00 (1.00-1.00)	0.8059	1.00 (1.00-1.00)	0.8997	1.00 (1.00-1.01)	0.8947	0.99 (0.99-1.00)	0.0007
Male	1.03 (0.99-1.08)	0.1615	1.01 (0.96-1.07)	0.7059	1.07 (1.00-1.15)	0.0627	1.02 (0.95-1.10)	0.5663
<b>Cardiovascular</b>								
Coronary Artery Bypass Graft Surgery	0.98 (0.93-1.03)	0.3807	0.96 (0.89-1.02)	0.2055	1.01 (0.92-1.10)	0.8365	0.94 (0.84-1.05)	0.2486
Congestive Heart failure (CC 80)	1.18 (1.11-1.24)	0.0000	1.19 (1.11-1.28)	0.0000	1.16 (1.06-1.27)	0.0013	1.31 (1.21-1.43)	0.0000
Acute coronary syndrome (CC 81, 82)	1.03 (0.97-1.10)	0.3025	0.99 (0.91-1.07)	0.8301	1.11 (1.00-1.22)	0.0468	1.09 (0.99-1.21)	0.0948
Arrhythmias (CC 92, 93)	1.05 (1.00-1.11)	0.0375	1.05 (0.98-1.12)	0.1507	1.06 (0.98-1.15)	0.1434	1.24 (1.14-1.35)	0.0000
Cardio-respiratory failure and shock (CC 79)	1.08 (1.01-1.16)	0.0218	1.04 (0.95-1.13)	0.3941	1.17 (1.04-1.30)	0.0075	1.13 (1.02-1.25)	0.0174
Valvular or Rheumatic Heart Disease (CC 86)	1.09 (1.04-1.13)	0.0003	1.08 (1.02-1.14)	0.0051	1.09 (1.01-1.17)	0.0196	1.06 (0.98-1.15)	0.1376
Vascular or Circulatory Disease (CC 104, 105, 106)	1.02 (0.97-1.08)	0.3845	1.04 (0.97-1.11)	0.2402	1.00 (0.91-1.09)	0.9450	1.18 (1.08-1.29)	0.0003
Chronic atherosclerosis (CC 83, 84)	1.11 (1.06-1.17)	0.0000	1.15 (1.08-1.22)	0.0000	1.04 (0.96-1.13)	0.3077	1.21 (1.12-1.31)	0.0000
Other and unspecified heart disease (CC 94)	1.02 (0.95-1.11)	0.5560	1.02 (0.93-1.13)	0.6405	1.02 (0.90-1.16)	0.7306	1.02 (0.91-1.14)	0.7295
<b>Comorbidity</b>								
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	1.13 (1.03-1.23)	0.0072	1.16 (1.05-1.30)	0.0052	1.06 (0.91-1.22)	0.4667	0.95 (0.84-1.09)	0.4903
Stroke (CC 95, 96)	1.04 (0.92-1.18)	0.4979	1.00 (0.85-1.17)	0.9737	1.13 (0.92-1.40)	0.2455	1.04 (0.85-1.29)	0.6887
Renal Failure (CC 131)	1.16 (1.10-1.23)	0.0000	1.17 (1.09-1.25)	0.0000	1.14 (1.04-1.25)	0.0046	1.09 (0.99-1.20)	0.0668
Chronic Obstructive Pulmonary Disease (CC 108)	1.12 (1.07-1.17)	0.0000	1.11 (1.05-1.18)	0.0002	1.12 (1.04-1.20)	0.0034	1.19 (1.11-1.29)	0.0000
Diabetes and DM Complications (CC 15 to 20, 119, 120)	1.16 (1.11-1.21)	0.0000	1.13 (1.07-1.19)	0.0000	1.20 (1.11-1.29)	0.0000	1.07 (0.99-1.15)	0.0764
Disorders of fluid/electrolyte/acid-base (CC22, 23)	1.16 (1.10-1.22)	0.0000	1.14 (1.07-1.22)	0.0000	1.17 (1.07-1.27)	0.0005	1.30 (1.19-1.41)	0.0000
Other urinary tract disorders (CC 136)	1.17 (1.11-1.22)	0.0000	1.18 (1.11-1.26)	0.0000	1.14 (1.05-1.24)	0.0018	1.10 (1.01-1.19)	0.0305
Decubitus ulcer or chronic skin ulcer (CC 148, 149)	1.17 (1.08-1.26)	0.0002	1.18 (1.07-1.31)	0.0015	1.14 (1.00-1.30)	0.0489	1.02 (0.90-1.15)	0.7965
Other gastrointestinal disorders (CC 36)	1.06 (1.02-1.11)	0.0077	1.07 (1.01-1.13)	0.0182	1.05 (0.97-1.13)	0.2193	1.21 (1.13-1.31)	0.0000
Peptic ulcer, hemorrhage, other specified gastrointestinal disorders (CC 34)	1.02 (0.95-1.09)	0.6025	1.11 (1.01-1.20)	0.0214	0.88 (0.78-0.99)	0.0311	1.08 (0.96-1.22)	0.2189

**Table 9c. Odds Ratios for Risk Factors in HF Readmission Measure -- Stratified Results for FFS 65+ Patients, Non-FFS 65+ Patients, All 65+ Patients, and All 18-64 Patients**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Risk Factor	All 65+ (N=54,773, C-statistic=0.617)		FFS 65+ (N=33,784, C-Statistic=0.619)		Non-FFS 65+ (N=20,989, C-Statistic=0.617)		All 18-64 (N=21,763, C-Statistic=0.689)	
	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value	OR (95% CI)	P-value
Severe hematological disorders (CC 44)	1.25 (1.09-1.44)	0.0016	1.16 (0.98-1.39)	0.0868	1.44 (1.13-1.83)	0.0028	1.17 (0.93-1.48)	0.1849
Nephritis (CC132)	1.00 (0.91-1.09)	0.9597	0.98 (0.88-1.11)	0.7869	1.03 (0.91-1.18)	0.6085	0.97 (0.86-1.09)	0.5911
Dementia and Senility (CC 49, 50)	1.00 (0.94-1.06)	0.9592	1.00 (0.93-1.07)	0.9984	0.99 (0.90-1.10)	0.9089	0.78 (0.61-0.99)	0.0382
Metastatic Cancer and Acute Leukemia (CC 7)	1.15 (0.98-1.36)	0.0961	1.22 (1.00-1.50)	0.0541	1.03 (0.78-1.37)	0.8211	1.31 (0.93-1.84)	0.1287
Cancer (CC 8 to 12)	1.05 (0.98-1.13)	0.1617	1.00 (0.91-1.09)	0.9424	1.16 (1.03-1.30)	0.0141	0.95 (0.81-1.10)	0.4834
Liver and biliary disease (CC 25 to 30)	1.12 (1.03-1.21)	0.0064	1.07 (0.97-1.19)	0.1909	1.20 (1.06-1.37)	0.0058	1.22 (1.12-1.33)	0.0000
End-stage renal disease or dialysis (CC 129, 130)	1.40 (1.27-1.54)	0.0000	1.45 (1.28-1.63)	0.0000	1.32 (1.11-1.56)	0.0013	1.27 (1.12-1.44)	0.0001
Asthma (CC 110)	0.98 (0.90-1.07)	0.6641	0.97 (0.87-1.08)	0.5890	1.00 (0.86-1.16)	0.9926	1.07 (0.97-1.18)	0.1917
Iron deficiency and other/unspecified anemias and blood disease (CC 47)	1.15 (1.09-1.20)	0.0000	1.12 (1.06-1.19)	0.0001	1.18 (1.10-1.28)	0.0000	1.28 (1.19-1.38)	0.0000
Pneumonia (CC 111 to 113)	1.06 (1.01-1.11)	0.0226	1.05 (0.99-1.12)	0.0833	1.07 (0.98-1.15)	0.1142	1.07 (0.99-1.15)	0.1033
Drug/alcohol abuse/dependence/psychosis (CC 51 to 53)	1.05 (0.99-1.13)	0.1182	1.06 (0.97-1.15)	0.1944	1.05 (0.94-1.17)	0.4079	1.13 (1.05-1.22)	0.0010
Major psych disorders (CC 54 to 56)	1.09 (0.98-1.21)	0.1173	1.13 (0.99-1.28)	0.0605	1.00 (0.83-1.21)	0.9722	1.48 (1.32-1.65)	0.0000
Depression (CC 58)	1.03 (0.97-1.10)	0.2727	1.06 (0.98-1.15)	0.1318	1.00 (0.90-1.10)	0.9662	1.08 (0.98-1.18)	0.1088
Other psychiatric disorders (CC 60)	1.14 (1.06-1.24)	0.0010	1.11 (1.00-1.23)	0.0407	1.19 (1.05-1.36)	0.0086	1.21 (1.08-1.35)	0.0006
Fibrosis of lung and other chronic lung disorders (CC 109)	1.14 (1.03-1.25)	0.0077	1.11 (0.99-1.25)	0.0802	1.18 (1.01-1.37)	0.0421	1.16 (0.95-1.40)	0.1399
Protein-Calorie Malnutrition (CC 21)	1.02 (0.93-1.12)	0.6763	1.04 (0.93-1.16)	0.4801	0.98 (0.84-1.15)	0.8365	1.14 (0.98-1.33)	0.1011

**Table 10a. AMI Mortality Model with Interaction Terms -- GLM (N=39,481, C-Statistic=0.767)**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-Square</b>	<b>P-value</b>	<b>OR</b>	<b>LOR</b>	<b>UOR</b>
Intercept	-6.047	0.173	1221.388	0.0000			
<b>Demographics</b>							
Age	0.053	0.002	529.957	0.0000	1.05	1.05	1.06
Male	0.067	0.093	0.521	0.4704	1.07	0.89	1.28
<b>Cardiovascular</b>							
Percutaneous Transluminal Coronary Angioplasty	-0.155	0.145	1.135	0.2868	0.86	0.64	1.14
Coronary Artery Bypass Graft Surgery	0.123	0.178	0.477	0.4899	1.13	0.80	1.60
Congestive Heart failure (CC 80)	0.226	0.163	1.906	0.1674	1.25	0.91	1.73
Acute Myocardial Infarction (CC 81)	0.328	0.195	2.817	0.0933	1.39	0.95	2.04
Unstable Angina (CC82)	-0.445	0.250	3.170	0.0750	0.64	0.39	1.05
Anterior Myocardial Infarction (ICD9 410.00-410.19)	0.686	0.106	41.646	0.0000	1.99	1.61	2.44
Other Location of Myocardial Infarction (ICD9 410.20-410.69)	0.263	0.106	6.107	0.0135	1.30	1.06	1.60
Chronic atherosclerosis (CC 83 or 84)	-0.834	0.090	86.492	0.0000	0.43	0.36	0.52
Cardio-respiratory failure and shock (CC 79)	-0.086	0.213	0.162	0.6873	0.92	0.60	1.39
Valvular or Rheumatic Heart Disease (CC 86)	0.574	0.128	20.239	0.0000	1.78	1.38	2.28
<b>Comorbidity</b>							
Hypertension (CC 89, 91)	-0.360	0.084	18.156	0.0000	0.70	0.59	0.82
Stroke (CC 95 or 96)	-0.092	0.363	0.064	0.8007	0.91	0.45	1.86
Cerebrovascular Disease (CC 97 to 99, 103)	0.097	0.243	0.160	0.6894	1.10	0.68	1.77
Renal Failure (CC 131)	0.535	0.165	10.574	0.0011	1.71	1.24	2.36
Chronic Obstructive Pulmonary Disease (CC 108)	0.125	0.114	1.187	0.2759	1.13	0.91	1.42
Pneumonia (CC 111 to 113)	0.731	0.126	33.862	0.0000	2.08	1.62	2.66
Diabetes and DM Complications (CC 15 to 20, 120)	0.538	0.089	36.653	0.0000	1.71	1.44	2.04
Protein-Calorie Malnutrition (CC 21)	0.725	0.224	10.449	0.0012	2.06	1.33	3.20
Dementia and Senility (CC 49 or 50)	0.479	0.283	2.863	0.0907	1.61	0.93	2.81
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	0.065	0.215	0.090	0.7642	1.07	0.70	1.63
Vascular or Circulatory Disease (CC 104, 105)	0.377	0.176	4.598	0.0320	1.46	1.03	2.06
Metastatic Cancer and Acute Leukemia (CC 7, 8)	1.140	0.227	25.247	0.0000	3.13	2.00	4.88
Trauma (CC 154 to 156, 158 to 162)	0.496	0.194	6.552	0.0105	1.64	1.12	2.40
Major Psych Disorders (CC 54 to 56)	0.137	0.202	0.459	0.4979	1.15	0.77	1.70
Liver and Biliary Disease (CC 25 to 27)	1.007	0.164	37.763	0.0000	2.74	1.99	3.78
Older (Age>=65)	0.105	0.143	0.543	0.4611	1.11	0.84	1.47

**Interactions**

**Table 10a. AMI Mortality Model with Interaction Terms -- GLM (N=39,481, C-Statistic=0.767)**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-Square</b>	<b>P-value</b>	<b>OR</b>	<b>LOR</b>	<b>UOR</b>
Older and Male	0.076	0.100	0.577	0.4474	1.08	0.89	1.31
<b>Cardiovascular</b>							
Older and Percutaneous Transluminal Coronary Angioplasty	-0.074	0.160	0.213	0.6441	0.93	0.68	1.27
Older and Coronary Artery Bypass Graft Surgery	0.021	0.188	0.012	0.9129	1.02	0.71	1.47
Older and Congestive Heart failure (CC 80)	0.234	0.173	1.821	0.1772	1.26	0.90	1.77
Older and Acute Myocardial Infarction (CC 81)	-0.286	0.210	1.860	0.1726	0.75	0.50	1.13
Older and Unstable Angina (CC82)	0.213	0.270	0.623	0.4298	1.24	0.73	2.10
Older and Anterior Myocardial Infarction (ICD9 410.00-410.19)	-0.150	0.119	1.599	0.2061	0.86	0.68	1.09
Older and Other Location of Myocardial Infarction (ICD9 410.20-410.69)	0.139	0.118	1.372	0.2415	1.15	0.91	1.45
Older and Chronic atherosclerosis (CC 83 or 84)	0.323	0.099	10.642	0.0011	1.38	1.14	1.68
Older and Cardio-respiratory failure and shock (CC 79)	-0.071	0.234	0.093	0.7601	0.93	0.59	1.47
Older and Valvular or Rheumatic Heart Disease (CC 86)	-0.452	0.135	11.206	0.0008	0.64	0.49	0.83
<b>Comorbidity</b>							
Older and Hypertension (CC 89, 91)	0.011	0.092	0.014	0.9068	1.01	0.84	1.21
Older and Stroke (CC 95 or 96)	0.363	0.382	0.904	0.3416	1.44	0.68	3.04
Older and Cerebrovascular Disease (CC 97 to 99, 103)	0.144	0.253	0.323	0.5696	1.15	0.70	1.90
Older and Renal Failure (CC 131)	-0.433	0.176	6.049	0.0139	0.65	0.46	0.92
Older and Chronic Obstructive Pulmonary Disease (CC 108)	-0.032	0.123	0.068	0.7936	0.97	0.76	1.23
Older and Pneumonia (CC 111 to 113)	-0.304	0.134	5.149	0.0233	0.74	0.57	0.96
Older and Diabetes and DM Complications (CC 15 to 20, 120)	-0.372	0.097	14.681	0.0001	0.69	0.57	0.83
Older and Protein-Calorie Malnutrition (CC 21)	-0.295	0.239	1.528	0.2165	0.74	0.47	1.19
Older and Dementia and Senility (CC 49 or 50)	-0.055	0.287	0.037	0.8472	0.95	0.54	1.66
Older and Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	0.141	0.234	0.363	0.5471	1.15	0.73	1.82
Older and Vascular or Circulatory Disease (CC 104, 105)	-0.311	0.189	2.711	0.0997	0.73	0.51	1.06
Older and Metastatic Cancer and Acute Leukemia (CC 7, 8)	-0.028	0.244	0.013	0.9093	0.97	0.60	1.57
Older and Trauma (CC 154 to 156, 158 to 162)	-0.428	0.205	4.342	0.0372	0.65	0.44	0.97
Older and Major Psych Disorders (CC 54 to 56)	-0.108	0.229	0.222	0.6376	0.90	0.57	1.41
Older and Liver and Biliary Disease (CC 25 to 27)	-0.516	0.225	5.278	0.0216	0.60	0.38	0.93

**Table 10b. HF Mortality Model with Interaction Terms -- GLM (N=60,022, C-statistic= 0.720)**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-Square</b>	<b>P-value</b>	<b>OR</b>	<b>LOR</b>	<b>UOR</b>
Intercept	-5.9558	0.1520	1534.4593	0.0000			
<b>Demographics</b>							
Age	0.0435	0.0020	480.4268	0.0000	1.0445	1.0404	1.0485
Male	0.0601	0.0869	0.4792	0.4888	1.0620	0.8957	1.2591
<b>Cardiovascular</b>							
Percutaneous Transluminal Coronary Angioplasty	-0.0488	0.1568	0.0970	0.7554	0.9523	0.7003	1.2950
Coronary Artery Bypass Graft Surgery	-0.1931	0.1445	1.7846	0.1816	0.8244	0.6211	1.0944
Congestive Heart failure (CC 80)	0.5665	0.1063	28.3788	0.0000	1.7621	1.4306	2.1704
Acute Myocardial Infarction (CC 81)	0.3000	0.1501	3.9979	0.0456	1.3499	1.0059	1.8114
Unstable Angina (CC82)	-0.1612	0.1902	0.7188	0.3965	0.8511	0.5863	1.2355
Chronic atherosclerosis (CC 83, 84)	-0.0734	0.0992	0.5473	0.4594	0.9292	0.7650	1.1287
Cardio-respiratory failure and shock (CC 79)	0.2067	0.1222	2.8626	0.0907	1.2297	0.9678	1.5624
Valvular or Rheumatic Heart Disease (CC 86)	0.3309	0.0936	12.5054	0.0004	1.3922	1.1589	1.6724
<b>Comorbidity</b>							
Hypertension (CC 89, 91)	-0.4502	0.0881	26.1116	0.0000	0.6375	0.5364	0.7576
Stroke (CC 95, 96)	0.2355	0.2226	1.1196	0.2900	1.2655	0.8181	1.9576
Renal Failure (CC 131)	0.0505	0.1064	0.2249	0.6353	1.0518	0.8538	1.2957
Chronic Obstructive Pulmonary Disease (CC 108)	0.0319	0.0916	0.1214	0.7275	1.0324	0.8628	1.2354
Pneumonia (CC 111 to 113)	0.0122	0.0995	0.0151	0.9023	1.0123	0.8330	1.2302
Diabetes and DM Complications (CC 15 to 20, 120)	-0.0300	0.0915	0.1077	0.7428	0.9704	0.8110	1.1611
Protein-Calorie Malnutrition (CC 21)	0.5761	0.1478	15.1888	0.0001	1.7791	1.3316	2.3769
Dementia and Senility (CC 49, 50)	-0.0752	0.2597	0.0840	0.7720	0.9275	0.5576	1.5429
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	0.5119	0.1413	13.1290	0.0003	1.6685	1.2649	2.2008
Vascular or Circulatory Disease (CC 104, 105)	0.1623	0.1219	1.7733	0.1830	1.1762	0.9263	1.4936
Metastatic Cancer and Acute Leukemia (CC 7, 8)	1.3165	0.2035	41.8623	0.0000	3.7303	2.5035	5.5583
Trauma (CC 154 to 156, 158 to 162)	0.1049	0.1593	0.4332	0.5104	1.1106	0.8127	1.5176
Major Psych Disorders (CC 54 to 56)	-0.0053	0.1526	0.0012	0.9722	0.9947	0.7375	1.3415
Liver and Biliary Disease (CC 25 to 27)	0.5438	0.1185	21.0493	0.0000	1.7225	1.3654	2.1729
Old (Age>=65)	-0.0298	0.1316	0.0513	0.8208	0.9706	0.7499	1.2563
<b>Interactions</b>							
Male	0.2092	0.0924	5.1235	0.0236	1.2326	1.0284	1.4774
<b>Cardiovascular</b>							
Percutaneous Transluminal Coronary Angioplasty	-0.3218	0.1677	3.6799	0.0551	0.7249	0.5218	1.0070
Coronary Artery Bypass Graft Surgery	0.1028	0.1508	0.4646	0.4955	1.1082	0.8247	1.4892
Congestive Heart failure (CC 80)	-0.3318	0.1128	8.6452	0.0033	0.7176	0.5752	0.8953

**Table 10b. HF Mortality Model with Interaction Terms -- GLM (N=60,022, C-statistic= 0.720)****Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-Square</b>	<b>P-value</b>	<b>OR</b>	<b>LOR</b>	<b>UOR</b>
Acute Myocardial Infarction (CC 81)	-0.0077	0.1596	0.0023	0.9615	0.9923	0.7257	1.3568
Unstable Angina (CC82)	-0.0629	0.2056	0.0934	0.7599	0.9391	0.6276	1.4052
Chronic atherosclerosis (CC 83, 84)	0.1093	0.1055	1.0734	0.3002	1.1155	0.9071	1.3718
Cardio-respiratory failure and shock (CC 79)	-0.1801	0.1328	1.8397	0.1750	0.8352	0.6438	1.0835
Valvular or Rheumatic Heart Disease (CC 86)	-0.1870	0.0990	3.5715	0.0588	0.8294	0.6832	1.0070
<b>Comorbidity</b>							
Hypertension (CC 89, 91)	0.1163	0.0938	1.5380	0.2149	1.1233	0.9347	1.3499
Stroke (CC 95, 96)	-0.0937	0.2412	0.1509	0.6977	0.9106	0.5676	1.4608
Renal Failure (CC 131)	0.0558	0.1135	0.2416	0.6230	1.0574	0.8465	1.3208
Chronic Obstructive Pulmonary Disease (CC 108)	0.0948	0.0972	0.9531	0.3289	1.0995	0.9089	1.3301
Pneumonia (CC 111 to 113)	0.2758	0.1050	6.8964	0.0086	1.3176	1.0725	1.6188
Diabetes and DM Complications (CC 15 to 20, 120)	-0.0927	0.0976	0.9018	0.3423	0.9115	0.7528	1.1036
Protein-Calorie Malnutrition (CC 21)	0.0707	0.1570	0.2028	0.6525	1.0733	0.7890	1.4599
Dementia and Senility (CC 49, 50)	0.5109	0.2622	3.7963	0.0514	1.6668	0.9970	2.7865
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	-0.5810	0.1574	13.6173	0.0002	0.5594	0.4109	0.7616
Vascular or Circulatory Disease (CC 104, 105)	-0.1159	0.1300	0.7942	0.3728	0.8906	0.6902	1.1491
Metastatic Cancer and Acute Leukemia (CC 7, 8)	-0.2986	0.2158	1.9160	0.1663	0.7418	0.4860	1.1323
Trauma (CC 154 to 156, 158 to 162)	0.1628	0.1662	0.9596	0.3273	1.1768	0.8497	1.6298
Major Psych Disorders (CC 54 to 56)	-0.0924	0.1725	0.2869	0.5922	0.9117	0.6502	1.2785
Liver and Biliary Disease (CC 25 to 27)	-0.2872	0.1518	3.5810	0.0584	0.7504	0.5573	1.0103

**Table 10c. HF Readmission Model with Interaction Terms -- GLM (N=76,536, C-statistic= 0.640)**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-Square</b>	<b>P-value</b>	<b>OR</b>	<b>LOR</b>	<b>UOR</b>
Intercept	-2.029	0.075	727.902	0.000			
<b>Demographics</b>							
Age	-0.002	0.001	3.039	0.081	0.998	0.996	1.000
Male	0.024	0.036	0.449	0.503	1.024	0.955	1.099
<b>Cardiovascular</b>							
Coronary Artery Bypass Graft Surgery	-0.077	0.057	1.849	0.174	0.926	0.828	1.035
Congestive Heart failure (CC 80)	0.281	0.044	41.753	0.000	1.325	1.216	1.443
Acute coronary syndrome (CC 81, 82)	0.087	0.052	2.801	0.094	1.091	0.985	1.208
Arrhythmias (CC 92, 93)	0.210	0.042	25.509	0.000	1.234	1.137	1.338
Cardio-respiratory failure and shock (CC 79)	0.122	0.051	5.808	0.016	1.130	1.023	1.248
Valvular or Rheumatic Heart Disease (CC 86)	0.060	0.040	2.235	0.135	1.062	0.981	1.149
Vascular or Circulatory Disease (CC 104, 105, 106)	0.163	0.045	12.966	0.000	1.177	1.077	1.286
Chronic atherosclerosis (CC 83, 84)	0.173	0.039	20.197	0.000	1.189	1.103	1.283
Other and unspecified heart disease (CC 94)	0.024	0.058	0.174	0.676	1.024	0.915	1.147
<b>Comorbidity</b>							
Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	-0.049	0.067	0.531	0.466	0.953	0.836	1.086
Stroke (CC 95, 96)	0.048	0.107	0.202	0.653	1.049	0.851	1.293
Renal Failure (CC 131)	0.084	0.048	3.065	0.080	1.088	0.990	1.196
Chronic Obstructive Pulmonary Disease (CC 108)	0.161	0.038	18.062	0.000	1.175	1.091	1.265
Diabetes and DM Complications (CC 15 to 20, 119, 120)	0.053	0.037	2.095	0.148	1.055	0.981	1.134
Disorders of fluid/electrolyte/acid-base (CC22, 23)	0.265	0.042	38.953	0.000	1.304	1.199	1.417
Other urinary tract disorders (CC 136)	0.093	0.042	4.810	0.028	1.097	1.010	1.193
Decubitus ulcer or chronic skin ulcer (CC 148, 149)	0.013	0.062	0.046	0.830	1.013	0.897	1.145
Other gastrointestinal disorders (CC 36)	0.193	0.038	25.226	0.000	1.213	1.125	1.307
Peptic ulcer, hemorrhage, other specified gastrointestinal disorders (CC 34)	0.073	0.062	1.376	0.241	1.075	0.952	1.214
Severe hematological disorders (CC 44)	0.157	0.119	1.741	0.187	1.169	0.927	1.476
Nephritis (CC132)	-0.026	0.059	0.200	0.655	0.974	0.867	1.094
Dementia and Senility (CC 49, 50)	-0.268	0.121	4.885	0.027	0.765	0.603	0.970
Metastatic Cancer and Acute Leukemia (CC 7)	0.264	0.176	2.264	0.132	1.303	0.923	1.838
Cancer (CC 8 to 12)	-0.069	0.078	0.786	0.375	0.933	0.800	1.088
Liver and biliary disease (CC 25 to 30)	0.197	0.044	19.762	0.000	1.218	1.117	1.329
End-stage renal disease or dialysis (CC 129, 130)	0.251	0.063	16.009	0.000	1.286	1.137	1.454
Asthma (CC 110)	0.080	0.050	2.532	0.112	1.083	0.982	1.196
Iron deficiency and other/unspecified anemias and blood disease (CC 47)	0.244	0.039	39.542	0.000	1.277	1.183	1.378
Pneumonia (CC 111 to 113)	0.066	0.040	2.781	0.095	1.068	0.988	1.155



**Table 10c. HF Readmission Model with Interaction Terms -- GLM (N=76,536, C-statistic= 0.640)**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-Square</b>	<b>P-value</b>	<b>OR</b>	<b>LOR</b>	<b>UOR</b>
Drug/alcohol abuse/dependence/psychosis (CC 51 to 53)	0.137	0.037	13.797	0.000	1.147	1.067	1.234
Major psych disorders (CC 54 to 56)	0.392	0.058	45.414	0.000	1.479	1.320	1.658
Depression (CC 58)	0.074	0.046	2.622	0.105	1.077	0.984	1.179
Other psychiatric disorders (CC 60)	0.194	0.056	12.155	0.000	1.214	1.089	1.354
Fibrosis of lung and other chronic lung disorders (CC 109)	0.145	0.099	2.175	0.140	1.157	0.953	1.403
Protein-Calorie Malnutrition (CC 21)	0.126	0.078	2.602	0.107	1.135	0.973	1.323
Old (Age>=65)	0.321	0.063	25.644	0.000	1.379	1.218	1.562
<b>Interactions</b>							
Old and Male	0.003	0.042	0.006	0.937	1.003	0.924	1.090
<b>Cardiovascular</b>							
Old and Coronary Artery Bypass Graft Surgery	0.051	0.063	0.664	0.415	1.053	0.930	1.191
Old and Congestive Heart failure (CC 80)	-0.118	0.052	5.175	0.023	0.889	0.803	0.984
Old and Acute coronary syndrome (CC 81, 82)	-0.055	0.061	0.806	0.369	0.947	0.840	1.067
Old and Arrhythmias (CC 92, 93)	-0.155	0.049	10.071	0.002	0.857	0.779	0.943
Old and Cardio-respiratory failure and shock (CC 79)	-0.046	0.061	0.573	0.449	0.955	0.847	1.076
Old and Valvular or Rheumatic Heart Disease (CC 86)	0.024	0.046	0.268	0.605	1.024	0.936	1.121
Old and Vascular or Circulatory Disease (CC 104, 105, 106)	-0.140	0.053	6.971	0.008	0.870	0.784	0.965
Old and Chronic atherosclerosis (CC 83, 84)	-0.069	0.046	2.243	0.134	0.933	0.853	1.022
Old and Other and unspecified heart disease (CC 94)	-0.002	0.070	0.001	0.982	0.998	0.871	1.145
<b>Comorbidity</b>							
Old and Hemiplegia, Paralysis, Functional Disability (CC 67 to 69, 100 to 102, 177, 178)	0.164	0.080	4.208	0.040	1.178	1.007	1.378
Old and Stroke (CC 95, 96)	-0.005	0.124	0.001	0.970	0.995	0.780	1.270
Old and Renal Failure (CC 131)	0.063	0.056	1.253	0.263	1.065	0.954	1.188
Old and Chronic Obstructive Pulmonary Disease (CC 108)	-0.053	0.044	1.426	0.232	0.949	0.870	1.034
Old and Diabetes and DM Complications (CC 15 to 20, 119, 120)	0.083	0.043	3.642	0.056	1.086	0.998	1.183
Old and Disorders of fluid/electrolyte/acid-base (CC22, 23)	-0.121	0.050	5.879	0.015	0.886	0.804	0.977
Old and Other urinary tract disorders (CC 136)	0.062	0.049	1.587	0.208	1.064	0.966	1.172
Old and Decubitus ulcer or chronic skin ulcer (CC 148, 149)	0.139	0.075	3.481	0.062	1.149	0.993	1.331
Old and Other gastrointestinal disorders (CC 36)	-0.130	0.045	8.441	0.004	0.878	0.804	0.959
Old and Peptic ulcer, hemorrhage, other specified gastrointestinal disorders (CC 34)	-0.055	0.071	0.590	0.442	0.947	0.823	1.089
Old and Severe hematological disorders (CC 44)	0.070	0.139	0.253	0.615	1.072	0.817	1.407
Old and Nephritis (CC132)	0.019	0.074	0.067	0.795	1.019	0.882	1.178
Old and Dementia and Senility (CC 49, 50)	0.280	0.125	5.048	0.025	1.324	1.036	1.691

**Table 10c. HF Readmission Model with Interaction Terms -- GLM (N=76,536, C-statistic= 0.640)**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Risk Factor</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-Square</b>	<b>P-value</b>	<b>OR</b>	<b>LOR</b>	<b>UOR</b>
Old and 'Metastatic Cancer and Acute Leukemia (CC 7)	-0.127	0.195	0.423	0.515	0.881	0.601	1.291
Old and Cancer (CC 8 to 12)	0.121	0.087	1.953	0.162	1.129	0.952	1.338
Old and Liver and biliary disease (CC 25 to 30)	-0.089	0.061	2.142	0.143	0.915	0.812	1.031
Old and End-stage renal disease or dialysis (CC 129, 130)	0.078	0.080	0.935	0.334	1.081	0.923	1.265
Old and Asthma (CC 110)	-0.102	0.068	2.292	0.130	0.903	0.790	1.031
Old and Iron deficiency and other/unspecified anemias and blood disease (CC 47)	-0.107	0.045	5.553	0.018	0.899	0.822	0.982
Old and 'Pneumonia (CC 111 to 113)	-0.008	0.047	0.033	0.855	0.992	0.905	1.086
Old and Drug/alcohol abuse/dependence/psychosis (CC 51 to 53)	-0.095	0.050	3.678	0.055	0.909	0.825	1.002
Old and Major psych disorders (CC 54 to 56)	-0.312	0.079	15.554	0.000	0.732	0.627	0.855
Old and Depression (CC 58)	-0.042	0.056	0.578	0.447	0.959	0.860	1.069
Old and Other psychiatric disorders (CC 60)	-0.062	0.069	0.807	0.369	0.940	0.821	1.076
Old and Fibrosis of lung and other chronic lung disorders (CC 109)	-0.017	0.110	0.024	0.878	0.983	0.793	1.219
Old and Protein-Calorie Malnutrition (CC 21)	-0.105	0.091	1.335	0.248	0.900	0.754	1.076

**Table 11a. AMI Mortality Model Performance for Models with Interaction Terms by Patient Subgroups**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Model with</b>	<b>N</b>	<b>C-statistic</b>	<b>SE</b>	<b>Lower C-stat</b>	<b>Upper C-stat</b>	<b>Predictive Ability*</b>
All 65+	24,561	0.714	0.004	0.705	0.722	(NA, 35.17%)
FFS, 65+	13,347	0.712	0.006	0.700	0.723	(NA, 35.12%)
Non-FFS, 65+	11,214	0.715	0.007	0.702	0.728	(NA, 35.24%)
All 18-64	14,920	0.750	0.010	0.730	0.769	(1.06%, 26.98%)
<b>All 18+</b>	<b>39,481</b>	<b>0.767</b>	<b>0.004</b>	<b>0.760</b>	<b>0.774</b>	<b>(1.06%, 34.78%)</b>

\* Mean observed mortality in the lowest and the highest decile of the predicted mortality.

**Table 11b. HF Mortality Model Performance for Models with Interaction by Patient Subgroups**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Model with</b>	<b>N</b>	<b>C-statistic</b>	<b>SE</b>	<b>Lower C-stat</b>	<b>Upper C-stat</b>	<b>Predictive Ability*</b>
All 65+	44,424	0.691	0.004	0.683	0.698	(1.45%, 25.62%)
FFS, 65+	27,977	0.691	0.005	0.681	0.700	(0.00%, 24.63%)
Non-FFS, 65+	16,447	0.692	0.006	0.680	0.704	(3.33%, 27.58%)
All 18-64	15,598	0.681	0.011	0.659	0.703	(1.87%, 17.78%)
<b>All 18+</b>	<b>60,022</b>	<b>0.720</b>	<b>0.003</b>	<b>0.714</b>	<b>0.727</b>	<b>(1.87%, 25.44%)</b>

\*Mean observation mortality in the lowest and the highest decile of the predicted mortality.

**Table 11c. HF Readmission Model Performance for Models with Interaction by Patient Subgroups**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

<b>Model with</b>	<b>N</b>	<b>C-statistic</b>	<b>SE</b>	<b>Lower C-stat</b>	<b>Upper C-stat</b>	<b>Predictive Ability*</b>
All 65+	54,773	0.617	0.003	0.612	0.623	(12.13%, 40.51%)
FFS, 65+	33,784	0.618	0.004	0.611	0.625	(12.58%, 40.66%)
Non-FFS, 65+	20,989	0.615	0.005	0.606	0.624	(11.53%, 40.21%)
All 18-64	21,763	0.689	0.004	0.680	0.697	(11.93%, 47.25%)
<b>All 18+</b>	<b>76,536</b>	<b>0.640</b>	<b>0.002</b>	<b>0.636</b>	<b>0.645</b>	<b>(11.99%, 44.07%)</b>

\*Mean observation readmission in the lowest and the highest decile of the predicted readmission.

**Table 12a. Reclassification Table of Risk Categories for AMI Mortality Model with and without Interaction Terms**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Model without Interactions	Model with Interactions										
	0 to <5%		5% to <10%		10% to <20%		>=20%		Total		
	#	%	#	%	#	%	#	%	#	%	
<b>Among All 18+ Patients</b>											
<b>Risk Category</b>											
0 to <5%	11,400	28.9	697	1.8	9	0.0	0	0.0	12,106	30.7	
5% to <10%	930	2.4	8,797	22.3	1,024	2.6	11	0.0	10,762	27.3	
10% to <20%	0	0.0	223	0.6	9,195	23.3	417	1.1	9,835	24.9	Same category: 90.84
>=20%	0	0.0	0	0.0	303	0.8	6,475	16.4	6,778	17.2	Similar category: 99.95
Total	12,330	31.2	9,717	24.6	10,531	26.7	6,903	17.5	39,481	100.0	
<b>In All 65+ Patients</b>											
<b>Risk Category</b>											
0 to <5%	1,156	4.7	277	1.1	0	0.0	0	0.0	1,433	5.8	
5% to <10%	17	0.1	6,678	27.2	590	2.4	0	0.0	7,285	29.7	
10% to <20%	0	0.0	164	0.7	8,791	35.8	239	1.0	9,194	37.4	Same category: 93.54
>=20%	0	0.0	0	0.0	300	1.2	6,349	25.9	6,649	27.1	Similar category: 100.00
Total	1,173	4.8	7,119	29.0	9,681	39.4	6,588	26.8	24,561	100.0	
<b>In FFS 65+ Patients</b>											
<b>Risk Category</b>											
0 to <5%	573	4.3	137	1.0	0	0.0	0	0.0	710	5.3	
5% to <10%	10	0.1	3,408	25.5	314	2.4	0	0.0	3,732	28.0	
10% to <20%	0	0.0	87	0.7	4,761	35.7	140	1.1	4,988	37.4	Same category: 93.55
>=20%	0	0.0	0	0.0	172	1.3	3,745	28.1	3,917	29.4	Similar category: 99.99
Total	583	4.4	3,632	27.2	5,247	39.3	3,885	29.1	13,347	100.0	
<b>In Non-FFS 65+ Patients</b>											
<b>Risk Category</b>											
0 to <5%	583	5.2	140	1.3	0	0.0	0	0.0	723	6.5	
5% to <10%	7	0.1	3,270	29.2	276	2.5	0	0.0	3,553	31.7	
10% to <20%	0	0.0	77	0.7	4,030	35.9	99	0.9	4,206	37.5	Same category: 93.52
>=20%	0	0.0	0	0.0	128	1.1	2,604	23.2	2,732	24.4	Similar category: 100.00
Total	590	5.3	3,487	31.1	4,434	39.5	2,703	24.1	11,214	100.0	
<b>In All 18-64 Patients</b>											
<b>Risk Category</b>											
0 to <5%	10,244	68.7	420	2.8	9	0.1	0	0.0	10,673	71.5	
5% to <10%	913	6.1	2,119	14.2	434	2.9	11	0.1	3,477	23.3	
10% to <20%	0	0.0	59	0.4	404	2.7	178	1.2	641	4.3	Same category: 86.41
>=20%	0	0.0	0	0.0	3	0.0	126	0.8	129	0.9	Similar category: 99.87
Total	11,157	74.8	2,598	17.4	850	5.7	315	2.1	14,920	100.0	

**Table 12b. Reclassification Table of Risk Categories for HF Mortality Model with and without Interaction Terms**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Model without Interaction	Model With Interaction										
	0 to <5%		5% to <10%		10% to <20%		>=20%		Total		
	#	%	#	%	#	%	#	%	#	%	
<b>Among All 18+ Patients</b>											
<b>Risk Category</b>											
0 to <5%	16,018	26.69	1,053	1.75	17	0.03	0	0.00	17,088	28.5	
5% to <10%	892	1.49	19,056	31.75	752	1.25	6	0.01	20,706	34.5	
10% to <20%	3	0.00	629	1.05	16,345	27.23	301	0.50	17,278	28.8	Same category: 93.5
>=20%	0	0.00	0	0.00	239	0.40	4,711	7.85	4,950	8.3	Similar category: 100.0
Total	16,913	28.18	20,738	34.55	17,353	28.91	5,018	8.36	60,022	100.0	
<b>In All 65+ Patients</b>											
<b>Risk Category</b>											
0 to <5%	4,422	9.95	126	0.28	0	0.00	0	0.00	4,548	10.2	
5% to <10%	346	0.78	17,404	39.18	395	0.89	0	0.00	18,145	40.9	
10% to <20%	0	0.00	539	1.21	16,056	36.14	233	0.52	16,828	37.9	Same category: 95.8
>=20%	0	0.00	0	0.00	226	0.51	4,677	10.53	4,903	11.0	Similar category: 100.0
Total	4,768	10.73	18,069	40.67	16,677	37.54	4,910	11.05	44,424	100.0	
<b>In FFS 65+ Patients</b>											
<b>Risk Category</b>											
0 to <5%	2,707	9.68	71	0.25	0	0.00	0	0.00	2,778	9.9	
5% to <10%	216	0.77	10,685	38.19	222	0.79	0	0.00	11,123	39.8	
10% to <20%	0	0.00	344	1.23	10,315	36.87	155	0.55	10,814	38.7	Same category: 95.9
>=20%	0	0.00	0	0.00	153	0.55	3,109	11.11	3,262	11.7	Similar category: 100.0
Total	2,923	10.45	11,100	39.67	10,690	38.21	3,264	11.66	27,977	100.0	
<b>In Non-FFS 65+ Patients</b>											
<b>Risk Category</b>											
0 to <5%	1,715	10.43	55	0.33	0	0.00	0	0.00	1,770	10.8	
5% to <10%	130	0.79	6,719	40.85	173	1.05	0	0.00	7,022	42.7	
10% to <20%	0	0.00	195	1.19	5,741	34.91	78	0.47	6,014	36.6	Same category: 95.7
>=20%	0	0.00	0	0.00	73	0.44	1,568	9.53	1,641	10.0	Similar category: 100.0
Total	1,845	11.22	6,969	42.37	5,987	36.40	1,646	10.00	16,447	100.0	
<b>In All 18-64 Patients</b>											
<b>Risk Category</b>											
0 to <5%	11,596	74.34	927	5.94	17	0.11	0	0.00	12,540	80.4	
5% to <10%	546	3.50	1,652	10.59	357	2.29	6	0.04	2,561	16.4	
10% to <20%	3	0.02	90	0.58	289	1.85	68	0.44	450	2.9	Same category: 87.0
>=20%	0	0.00	0	0.00	13	0.08	34	0.22	47	0.3	Similar category: 99.8
Total	12,145	77.86	2,669	17.11	676	4.33	108	0.70	15,598	100.0	

**Table 12c. Reclassification Table of Risk Categories for HF Readmission Model with and without Interaction Terms**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

Model without Interaction	Model With Interaction										Total		
	0 to <15%		15% to <20%		20% to <25%		25% to <30%		≥30%				
	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Among All 18+ Patients</b>													
<b>Risk Category</b>													
0 to <15%	8,836	11.54	3,793	4.96	0	0.00	0	0.00	0	0.00	12,629	16.5	
15% to <20%	3,236	4.23	17,751	23.19	1,669	2.18	0	0.00	0	0.00	22,656	29.6	
20% to <25%	5	0.01	1,576	2.06	11,226	14.67	1,080	1.41	13	0.02	13,900	18.2	Same category: 79.0
25% to <30%	0	0.00	14	0.02	1,672	2.18	7,731	10.10	1,140	1.49	10,557	13.8	Similar category: 99.9
≥30%	0	0.00	0	0.00	21	0.03	1,848	2.41	14,925	19.50	16,794	21.9	
Total	12,077	15.78	23,134	30.23	14,588	19.06	10,659	13.92	16,078	21.01	76,536	100.0	
<b>In All 65+ Patients</b>													
<b>Risk Category</b>													
0 to <15%	5,451	9.95	3,793	6.92	0	0.00	0	0.00	0	0.00	9,244	16.9	
15% to <20%	32	0.06	14,703	26.84	1,548	2.83	0	0.00	0	0.00	16,283	29.7	
20% to <25%	0	0.00	568	1.04	9,102	16.62	621	1.13	0	0.00	10,291	18.8	Same category: 82.3
25% to <30%	0	0.00	0	0.00	1,264	2.31	6,226	11.37	311	0.57	7,801	14.3	Similar category: 100.0
≥30%	0	0.00	0	0.00	7	0.01	1,580	2.88	9,567	17.47	11,154	20.4	
Total	5,483	10.01	19,064	34.80	11,921	21.77	8,427	15.38	9,878	18.04	54,773	100.0	
<b>In FFS 65+ Patients</b>													
<b>Risk Category</b>													
0 to <15%	3,212	9.51	2,218	6.57	0	0.00	0	0.00	0	0.00	5,430	16.1	
15% to <20%	21	0.06	8,854	26.21	918	2.72	0	0.00	0	0.00	9,793	29.0	
20% to <25%	0	0.00	348	1.03	5,684	16.82	391	1.16	0	0.00	6,423	19.0	Same category: 82.4
25% to <30%	0	0.00	0	0.00	813	2.41	3,896	11.53	198	0.59	4,907	14.5	Similar category: 100.0
≥30%	0	0.00	0	0.00	4	0.01	1,025	3.03	6,202	18.36	7,231	21.4	
Total	3,233	9.57	11,420	33.81	7,419	21.96	5,312	15.72	6,400	18.95	33,784	100.0	
<b>In Non-FFS 65+ Patients</b>													
<b>Risk Category</b>													
0 to <15%	2,239	10.67	1,575	7.50	0	0.00	0	0.00	0	0.00	3,814	18.2	
15% to <20%	11	0.05	5,849	27.87	630	3.00	0	0.00	0	0.00	6,490	30.9	
20% to <25%	0	0.00	220	1.05	3,418	16.28	230	1.10	0	0.00	3,868	18.4	Same category: 82.0
25% to <30%	0	0.00	0	0.00	451	2.15	2,330	11.10	113	0.54	2,894	13.8	Similar category: 100.0
≥30%	0	0.00	0	0.00	3	0.01	555	2.64	3,365	16.03	3,923	18.7	
Total	2,250	10.72	7,644	36.42	4,502	21.44	3,115	14.84	3,478	16.57	20,989	100.0	
<b>In All 18-64 Patients</b>													
<b>Risk Category</b>													
0 to <15%	3,385	15.55	0	0.00	0	0.00	0	0.00	0	0.00	3,385	15.6	
15% to <20%	3,204	14.72	3,048	14.01	121	0.56	0	0.00	0	0.00	6,373	29.3	
20% to <25%	5	0.02	1,008	4.63	2,124	9.76	459	2.11	13	0.06	3,609	16.6	Same category: 70.9
25% to <30%	0	0.00	14	0.06	408	1.87	1,505	6.92	829	3.81	2,756	12.7	Similar category: 99.8
≥30%	0	0.00	0	0.00	14	0.06	268	1.23	5,358	24.62	5,640	25.9	
Total	6,594	30.29	4,070	18.70	2,667	12.25	2,232	10.26	6,200	28.49	21,763	100.0	

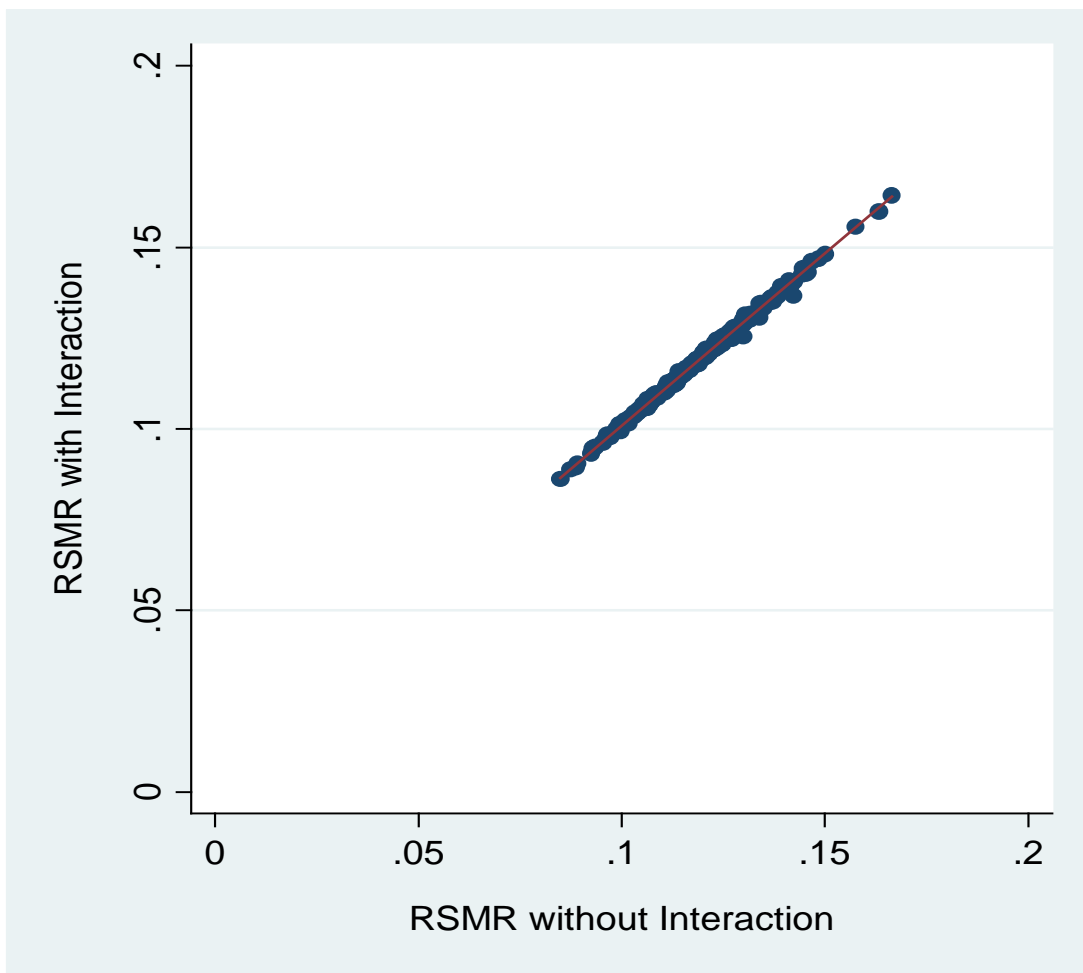


**Table 13a. AMI Mortality Model Performance for Models With and Without Interaction Terms (N = 39,481)**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

AMI Mortality Model	C-statistic	SE	Lower	Upper
With interaction terms	0.767	0.004	0.760	0.774
Without interaction terms	0.765	0.004	0.758	0.772

**Figure 4a. Scatterplot of AMI Risk-Standardized Mortality Rates (RSMRs) from Models With and Without Interaction Terms**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**



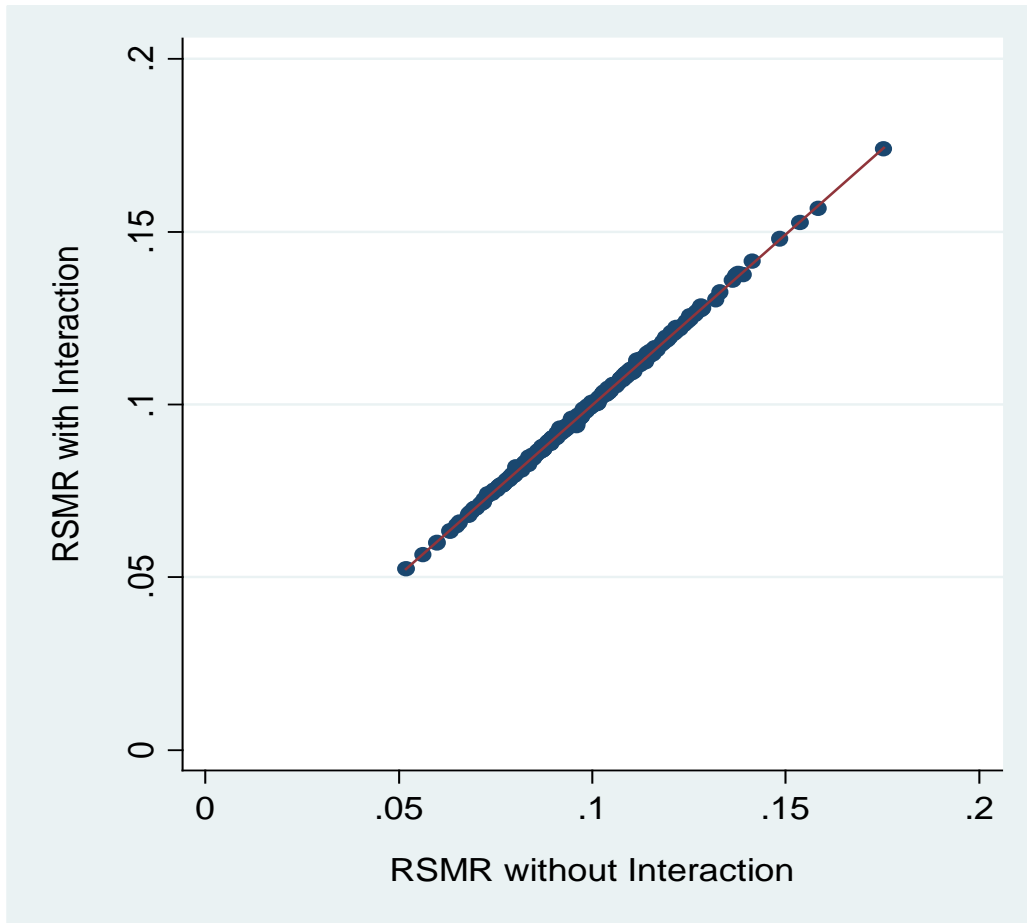
Correlation Coefficients (Weighted by Hospital Volume): 0.99879

**Table 13b. HF Mortality Model Performance for Models With and Without Interaction Terms (N = 60,022)**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

HF Mortality Model	C-statistic	SE	Lower	Upper
With interaction terms	0.720	0.003	0.714	0.727
Without interaction terms	0.718	0.003	0.712	0.725

**Figure 4b. Scatterplot of HF Risk-Standardized Mortality Rates (RSMRs) from Models With and Without Interaction Terms**

**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

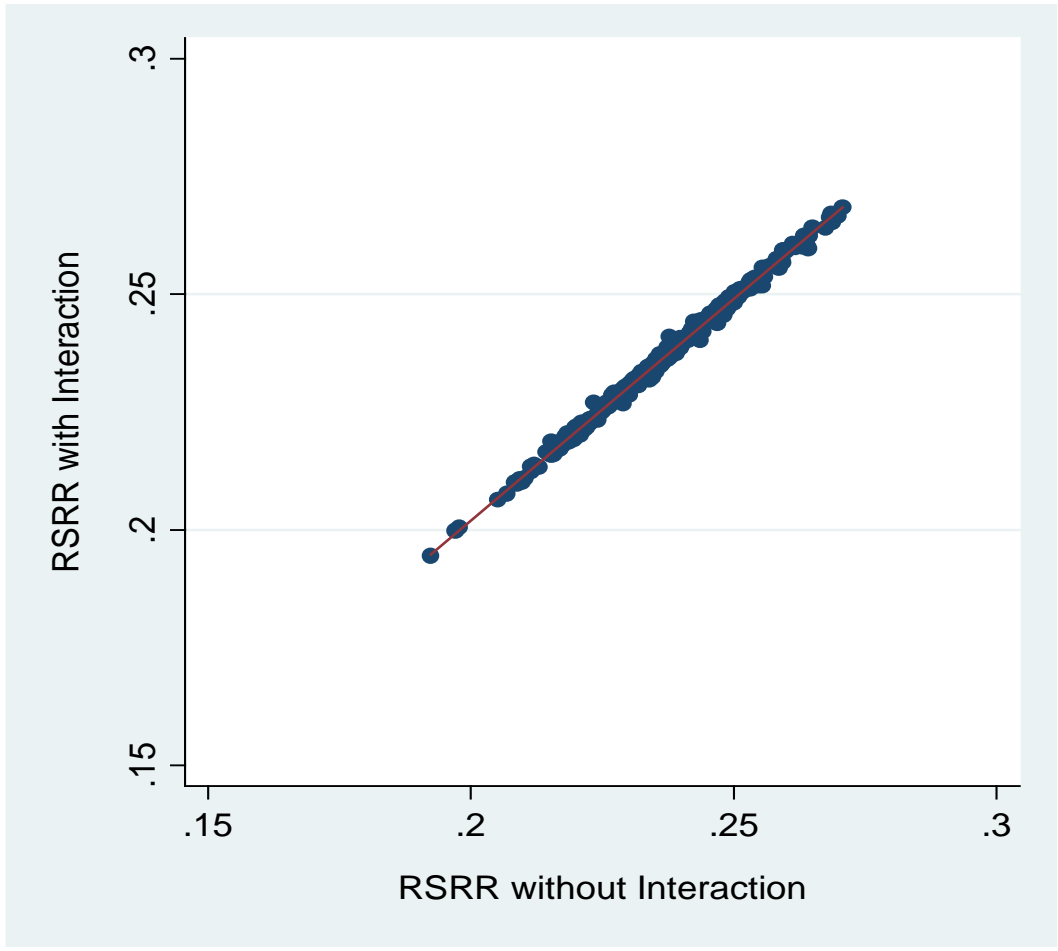


Correlation Coefficients (Weighted by Hospital Volume): 0.99971

**Table 13c. HF Readmission Model Performance for Models With and Without Interaction Terms (N = 76,536)**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**

HF Readmission Model	C-statistic	SE	Lower	Upper
With interaction terms	0.640	0.002	0.636	0.645
Without interaction terms	0.638	0.002	0.633	0.642

**Figure 4c. Scatterplot of HF Risk-Standardized Readmission Rates (RSRRs) from Models With and Without Interaction Terms**  
**Data Source: 2006 California Patient Discharge Data for All-payer Patients 18+ Admitted to California Hospitals**



Correlation Coefficients (Weighted by Hospital Volume): 0.99787