

Supplemental Material

Table S1. Patient characteristics stratified by change in statin adherence after AMI.

Patient Characteristics	Total N=113,296 N (%)	Adherence Change		
		Decrease N=18,502 % [ASD]	No Change N=72,510 % [ASD]	Increase N=22,284 % [ASD]
Age				
Mean \pm SD	77.3 \pm 7.4	77.7 \pm 7.4 [4.5]	77.4 \pm 7.4 [Ref]	76.5 \pm 7.1 [11.9]
66-75	51,010 (45.0)	42.6 [3.4]	44.3 [Ref]	49.3 [10.0]
76-85	44,751 (39.5)	40.2 [0.9]	39.7 [Ref]	38.2 [3.1]
86+	17,535 (15.5)	17.2 [3.3]	16.0 [Ref]	12.5 [9.9]
Female	61,555 (54.3)	55.1 [2.7]	53.7 [Ref]	55.7 [3.9]
Race/ethnicity				
White	95,481 (84.3)	83.8 [4.7]	85.5 [Ref]	80.5 [13.5]
Black	9,700 (8.6)	9.0 [4.5]	7.7 [Ref]	10.9 [10.9]
Hispanic	3,413 (3.0)	3.2 [3.2]	2.6 [Ref]	4.0 [7.8]
Asian	2,504 (2.2)	1.9 [2.2]	2.2 [Ref]	2.5 [1.6]
Other	2,198 (1.9)	2.1 [1.7]	1.9 [Ref]	2.1 [1.8]
Dual eligibility*	28,462 (25.1)	23.6 [3.0]	24.9 [Ref]	27.1 [5.1]
Household income[†]				
\leq \$30,000	53,388 (47.1)	47.7 [2.2]	46.6 [Ref]	48.5 [3.8]
\$30,001-60,000	46,749 (41.3)	40.8 [1.8]	41.7 [Ref]	40.1 [3.3]
\$60,001-100,000	10,579 (9.3)	9.2 [0.7]	9.4 [Ref]	9.2 [0.5]
\$100,001-150,000	1,963 (1.7)	1.8 [0.4]	1.7 [Ref]	1.6 [0.9]
>\$150,000	617 (0.5)	0.5 [1.4]	0.6 [Ref]	0.5 [0.3]
CCI comorbidities				
AMI	5,228 (4.6)	5.4 [3.5]	4.6 [Ref]	4.0 [3.0]
Cancer	13,792 (12.2)	13.3 [3.5]	12.1 [Ref]	11.4 [2.2]
CeVD	20,900 (18.4)	20.1 [4.6]	18.3 [Ref]	17.6 [1.9]
CHF	34,328 (30.3)	34.4 [8.4]	30.5 [Ref]	26.3 [9.4]
COPD	31,448 (27.8)	29.8 [5.0]	27.6 [Ref]	26.7 [2.0]
Dementia	3,303 (2.9)	3.6 [4.7]	2.8 [Ref]	2.8 [0.2]
Diabetes	54,209 (47.8)	49.4 [2.8]	48.0 [Ref]	46.2 [3.5]
Liver disease	2,157 (1.9)	2.3 [3.6]	1.8 [Ref]	1.9 [1.0]
Metastatic cancer	1,702 (1.5)	2.0 [4.8]	1.4 [Ref]	1.4 [0.1]
Para-/hemiplegia	1,236 (1.1)	1.3 [2.0]	1.0 [Ref]	1.1 [0.9]
Peptic ulcer disease	1,994 (1.8)	2.0 [2.4]	1.7 [Ref]	1.9 [2.0]
PVD	26,580 (2.3)	25.6 [4.8]	23.5 [Ref]	21.6 [4.4]
Renal disease	21,592 (19.1)	21.2 [5.3]	19.1 [Ref]	17.1 [5.4]
Rheumatic disease	4,204 (3.7)	4.0 [2.0]	3.6 [Ref]	3.7 [0.2]

Patient Characteristics	Total N=113,296 N (%)	Adherence Change		
		Decrease N=18,502 % [ASD]	No Change N=72,510 % [ASD]	Increase N=22,284 % [ASD]
CCI				
Mean ± SD	2.5 ± 2.3	2.8 ± 2.4 [11.1]	2.5 ± 2.3 [Ref]	2.4 ± 2.3 [7.1]
0	22,608 (20.0)	17.4 [6.2]	19.8 [Ref]	22.6 [7.0]
1-2	43,540 (38.4)	36.5 [4.5]	38.7 [Ref]	39.3 [1.3]
3-5	34,947 (30.8)	33.1 [4.4]	31.0 [Ref]	28.5 [5.5]
6-8	9,868 (8.7)	10.4 [6.2]	8.6 [Ref]	7.6 [3.5]
9 or more	2,333 (2.1)	2.6 [4.6]	2.0 [Ref]	1.9 [0.3]
Other comorbidities				
Dementia/Alz‡	11,574 (10.2)	12.1 [7.0]	9.9 [Ref]	9.7 [0.7]
Depression	17,464 (15.4)	17.3 [6.2]	15.0 [Ref]	15.3 [0.8]
CABG	1,136 (1.0)	1.1 [1.4]	1.0 [Ref]	1.0 [0.1]
PTCA/stent	7,441 (6.6)	7.2 [2.4]	6.6 [Ref]	5.8 [3.5]
IHD	68,689 (60.6)	64.1 [5.6]	61.4 [Ref]	55.4 [12.1]
Unstable angina	6,112 (5.4)	6.0 [2.3]	5.5 [Ref]	4.6 [3.9]
Lipid abnormalities	101,285 (89.4)	89.7 [0.5]	89.6 [Ref]	88.6 [3.0]
Rhabdo/myopathy	7,553 (6.7)	7.6 [5.1]	6.3 [Ref]	7.0 [3.1]
Pre-AMI medications				
Beta-blocker	73,425 (64.8)	65.4 [2.0]	66.4 [Ref]	59.3 [14.8]
ACE inhibitor/ARB	75,501 (66.6)	67.0 [0.8]	67.4 [Ref]	64.0 [7.2]
Index admission				
Subend infarction	90,299 (79.7)	81.4 [2.8]	80.3 [Ref]	76.3 [9.8]
CABG	6,988 (6.2)	5.3 [2.9]	6.0 [Ref]	7.6 [6.5]
PTCA/stent	41,596 (36.7)	30.3 [12.9]	36.4 [Ref]	43.1 [13.7]
Platelet inhibitors	4,919 (4.3)	3.6 [4.1]	4.4 [Ref]	4.9 [2.8]
Cardiac cath	64,954 (57.3)	51.4 [10.8]	56.8 [Ref]	63.9 [14.5]
Angiocardiology	65,107 (57.5)	51.4 [11.7]	57.2 [Ref]	63.3 [12.4]
Cardiogenic shock	2,484 (2.2)	2.2 [0.8]	2.1 [Ref]	2.6 [3.5]
Dysrhythmias	35,365 (31.2)	31.7 [0.0]	31.6 [Ref]	29.4 [4.8]
Hypotension	5,679 (5.0)	5.1 [0.5]	5.0 [Ref]	5.1 [0.4]
Acute renal failure	17,876 (15.8)	17.7 [5.8]	15.5 [Ref]	14.9 [1.7]
Heart failure	45,681 (40.3)	43.3 [6.0]	40.4 [Ref]	37.7 [5.5]
Length of stay (days)				
Mean ± SD	5.3 ± 5.0	5.7 ± 5.8 [9.3]	5.2 ± 4.8 [Ref]	5.3 ± 4.9 [1.7]
1-3	49,896 (44.0)	40.6 [8.1]	44.7 [Ref]	44.9 [0.4]
4-6	35,187 (31.1)	31.6 [1.1]	31.1 [Ref]	30.4 [1.6]
7-11	19,525 (17.2)	18.9 [5.1]	17.0 [Ref]	16.7 [0.7]
12+	8,688 (7.7)	8.8 [5.8]	7.3 [Ref]	8.1 [3.0]

	Total N=113,296 N (%)	Adherence Change		
		Decrease N=18,502 % [ASD]	No Change N=72,510 % [ASD]	Increase N=22,284 % [ASD]
Patient Characteristics				
Intensive care				
None	28,655 (25.3)	25.6 [0.6]	25.8 [Ref]	23.3 [5.8]
CCU only	26,295 (23.2)	22.3 [1.8]	23.1 [Ref]	24.4 [3.2]
ICU only	46,625 (41.2)	42.1 [2.2]	41.0 [Ref]	40.8 [0.4]
Both	11,721 (10.3)	10.0 [0.1]	10.1 [Ref]	11.4 [4.3]
Cardiologist consult	97,977 (86.5)	85.3 [3.1]	86.4 [Ref]	87.7 [3.8]
30-day follow-up				
None	17,186 (15.2)	15.8 [1.9]	15.1 [Ref]	14.9 [0.4]
PCP only§	33,332 (29.4)	31.0 [3.5]	29.4 [Ref]	28.0 [3.2]
Cardiologist only	20,292 (17.9)	16.2 [5.1]	18.1 [Ref]	18.8 [1.9]
Both	42,486 (37.5)	37.0 [0.7]	37.4 [Ref]	38.3 [1.8]
Simvastatin ADD change¶	2.7 ± 34.3	-8.6 ± 36.4 [35.4]	3.5 ± 32.0 [Ref]	9.7 ± 37.0 [17.8]
Pre-AMI statin#				
Low intensity	12,216 (10.8)	10.4 [1.5]	10.9 [Ref]	10.8 [0.1]
Moderate intensity	76,914 (67.9)	67.5 [1.1]	68.0 [Ref]	67.9 [0.2]
High intensity	24,166 (21.3)	22.4 [2.4]	21.1 [Ref]	21.2 [0.3]
Post-AMI statin#				
Low intensity	9,442 (8.3)	9.4 [3.4]	8.4 [Ref]	7.2 [4.4]
Moderate intensity	72,897 (6.4)	65.7 [2.3]	64.6 [Ref]	62.5 [4.2]
High intensity	30,957 (27.3)	25.0 [4.7]	27.0 [Ref]	30.2 [7.1]
Pre-AMI PDC				
<40%	18,205 (16.1)	0.0 [49.7]	11.0 [Ref]	45.9 [83.8]
40-79.9%	24,373 (21.5)	26.1 [41.7]	10.3 [Ref]	54.1 [106.0]
≥80%	70,718 (62.4)	73.9 [11.1]	78.7 [Ref]	0.0 [271.5]
Post-AMI PDC				
<40%	17,104 (15.1)	49.3 [91.9]	11.0 [Ref]	0.0 [49.7]
40-79.9%	21,348 (18.8)	50.7 [97.5]	10.3 [Ref]	20.1 [27.4]
≥80%	74,844 (66.1)	0.0 [271.5]	78.7 [Ref]	79.9 [3.1]

Percentages are column percentages. *Enrolled in Medicare and Medicaid. †Median household income of US Census block groups for individuals aged 65 and older. ‡Medicare Chronic Condition Data Warehouse definition. §Primary care physician, physician assistant, or nurse practitioner. ¶Weighted average of the simvastatin-equivalent average daily dose in the post-AMI period minus the weighted average of the pre-AMI period. #According to the 2013 American College of Cardiology/ American Heart Association guidelines on the reduction of atherosclerotic cardiovascular risk. *Abbreviations:* AMI=acute myocardial infarction; PDC=proportion of days covered; ASD=absolute standardized difference; Ref=reference group for ASD calculation; SD=standard deviation; CCI=Charlson Comorbidity Index; CeVD=cerebrovascular disease; CHF=congestive heart failure; COPD=chronic obstructive pulmonary disease; PVD=peripheral vascular disease; CCW=Alz=Alzheimer's disease; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; IHD=ischemic heart disease; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker; subend=subendocardial; Rhabdo=rhabdomyolysis; Cardiac cath=cardiac catheterization; CCU=coronary care unit; ICU=intensive care unit; PCP=primary care provider; ADD=average daily dose.

Table S2. Patient characteristics stratified by pre-AMI statin adherence.

Patient Characteristics	Pre-AMI PDC		
	<40% N=18,205 % [ASD]	40-79.9% N=24,373 % [ASD]	≥80% N=70,718 % [ASD]
Age			
Mean ± SD	76.7 ± 7.3 [12.0]	76.9 ± 7.2 [9.5]	77.6 ± 7.4 [Ref]
66-75	48.7 [11.0]	47.3 [8.2]	43.3 [Ref]
76-85	37.7 [5.0]	39.0 [2.3]	40.1 [Ref]
86+	13.6 [8.5]	13.7 [8.2]	16.6 [Ref]
Female	55.6 [4.0]	55.4 [3.6]	53.6 [Ref]
Race/ethnicity			
White	80.0 [17.1]	81.5 [13.3]	86.3 [Ref]
Black	12.2 [17.9]	10.6 [13.1]	6.9 [Ref]
Hispanic	3.9 [7.4]	3.6 [6.2]	2.6 [Ref]
Asian	2.1 [1.2]	2.1 [0.9]	2.3 [Ref]
Other	1.9 [0.3]	2.1 [1.7]	1.9 [Ref]
Dual eligibility*	25.6 [1.4]	25.0 [0.0]	25.0 [Ref]
Household income†			
≤\$30,000	49.4 [6.1]	47.6 [2.4]	46.4 [Ref]
\$30,001-60,000	40.0 [3.6]	40.9 [1.6]	41.7 [Ref]
\$60,001-100,000	8.7 [2.9]	9.3 [0.8]	9.5 [Ref]
\$100,001-150,000	1.5 [2.7]	1.7 [1.1]	1.8 [Ref]
>\$150,000	0.5 [1.4]	0.6 [0.0]	0.6 [Ref]
CCI comorbidities			
AMI	5.2 [3.0]	4.5 [0.2]	4.5 [Ref]
Cancer	12.1 [0.4]	12.2 [0.1]	12.2 [Ref]
CeVD	18.5 [0.5]	18.9 [1.6]	18.3 [Ref]
CHF	29.5 [2.4]	30.0 [1.2]	30.6 [Ref]
COPD	29.2 [4.1]	27.7 [0.7]	27.4 [Ref]
Dementia	3.2 [2.5]	3.1 [1.7]	2.8 [Ref]
Diabetes	47.1 [1.9]	47.7 [0.9]	48.1 [Ref]
Liver disease	2.2 [3.4]	2.2 [3.3]	1.7 [Ref]
Metastatic cancer	1.8 [3.4]	1.7 [2.4]	1.4 [Ref]
Para-/hemiplegia	1.2 [1.1]	1.1 [0.7]	1.1 [Ref]
Peptic ulcer disease	2.0 [2.8]	2.0 [2.7]	1.6 [Ref]
PVD	23.6 [0.5]	23.5 [0.1]	23.4 [Ref]
Renal disease	18.4 [2.6]	18.6 [2.1]	19.4 [Ref]
Rheumatic disease	4.0 [1.7]	3.8 [0.6]	3.6 [Ref]

Patient Characteristics	Pre-AMI PDC		
	<40% N=18,205 % [ASD]	40-79.9% N=24,373 % [ASD]	≥80% N=70,718 % [ASD]
CCI			
Mean ± SD	2.5 ± 2.4 [0.9]	2.5 ± 2.4 [0.5]	2.5 ± 2.3 [Ref]
0	20.2 [1.0]	20.3 [1.2]	19.8 [Ref]
1-2	38.2 [0.6]	38.5 [0.0]	38.5 [Ref]
3-5	30.5 [1.4]	30.2 [2.0]	31.1 [Ref]
6-8	8.7 [0.1]	8.8 [0.2]	8.7 [Ref]
9 or more	2.4 [3.6]	2.3 [2.5]	1.9 [Ref]
Other comorbidities			
Dementia/Alz‡	10.3 [0.5]	10.5 [1.2]	10.1 [Ref]
Depression	15.7 [1.6]	16.0 [2.4]	15.1 [Ref]
CABG	0.9 [1.6]	1.1 [0.4]	1.0 [Ref]
PTCA/stent	7.0 [2.0]	6.6 [0.6]	6.5 [Ref]
IHD	58.7 [5.0]	60.7 [0.9]	61.1 [Ref]
Unstable angina	5.5 [0.6]	5.4 [0.0]	5.4 [Ref]
Lipid abnormalities	87.5 [7.0]	89.9 [0.6]	89.7 [Ref]
Rhabdo/myopathy	7.9 [6.9]	7.1 [3.9]	6.2 [Ref]
Pre-AMI medications			
Beta-blocker	57.8 [19.1]	63.6 [7.2]	67.0 [Ref]
ACE inhibitor/ARB	60.2 [17.0]	66.5 [3.9]	68.3 [Ref]
Index admission			
Subend infarction	78.1 [5.8]	78.7 [4.3]	80.4 [Ref]
CABG	6.4 [1.3]	6.3 [0.9]	6.1 [Ref]
PTCA/stent	39.3 [7.5]	37.8 [4.4]	35.7 [Ref]
Platelet inhibitors	4.7 [2.6]	4.5 [1.6]	4.2 [Ref]
Cardiac cath	60.2 [8.2]	58.8 [5.5]	56.1 [Ref]
Angiocardiology	59.5 [6.1]	58.9 [5.0]	56.4 [Ref]
Cardiogenic shock	2.1 [0.0]	2.4 [1.8]	2.1 [Ref]
Dysrhythmias	30.2 [3.8]	29.9 [4.5]	31.9 [Ref]
Hypotension	4.8 [1.2]	5.1 [0.2]	5.0 [Ref]
Acute renal failure	15.1 [2.5]	15.7 [0.8]	16.0 [Ref]
Heart failure	38.7 [4.6]	39.5 [2.9]	41.0 [Ref]
Length of stay (days)			
Mean ± SD	5.3 ± 5.1 [0.7]	5.3 ± 4.9 [0.5]	5.3 ± 5.0 [Ref]
1-3	44.3 [1.0]	44.6 [1.7]	43.8 [Ref]
4-6	31.4 [0.6]	30.7 [0.9]	31.1 [Ref]
7-11	16.7 [2.1]	16.8 [2.0]	17.5 [Ref]
12+	7.7 [0.2]	7.9 [1.2]	7.6 [Ref]

	Pre-AMI PDC		
	<40%	40-79.9%	≥80%
	N=18,205	N=24,373	N=70,718
Patient Characteristics	% [ASD]	% [ASD]	% [ASD]
Intensive care			
None	24.2 [3.4]	25.0 [1.4]	25.7 [Ref]
CCU only	24.2 [3.1]	23.4 [1.2]	22.9 [Ref]
ICU only	40.8 [1.1]	40.7 [1.3]	41.4 [Ref]
Both	10.8 [2.3]	10.8 [2.4]	10.1 [Ref]
Cardiologist consult	86.7 [1.1]	86.7 [1.1]	86.3 [Ref]
30-day follow-up			
None	17.0 [6.7]	15.7 [3.3]	14.5 [Ref]
PCP only§	29.6 [0.4]	29.4 [0.0]	29.4 [Ref]
Cardiologist only	17.7 [0.3]	18.2 [1.0]	17.8 [Ref]
Both	35.8 [5.1]	36.7 [3.3]	38.2 [Ref]
Simvastatin ADD change¶	-4.0 ± 43.8 [23.3]	2.1 ± 36.0 [8.0]	4.7 ± 30.4 [Ref]
Pre-AMI statin#			
Low intensity	11.4 [1.7]	9.7 [4.0]	11.0 [Ref]
Moderate intensity	66.9 [3.4]	66.9 [3.3]	68.5 [Ref]
High intensity	21.6 [2.6]	23.3 [6.6]	20.6 [Ref]
Post-AMI statin#			
Low intensity	8.7 [0.7]	7.7 [3.0]	8.5 [Ref]
Moderate intensity	63.8 [2.4]	62.9 [4.2]	65.0 [Ref]
High intensity	27.5 [2.1]	29.4 [6.3]	26.6 [Ref]
Post-AMI PDC			
<40%	43.8 [96.9]	19.8 [41.7]	6.1 [Ref]
40-79.9%	24.6 [29.3]	30.7 [43.2]	13.3 [Ref]
≥80%	31.6 [113.8]	49.5 [69.2]	80.7 [Ref]

Percentages are column percentages. *Enrolled in Medicare and Medicaid. †Median household income of US Census block groups for individuals aged 65 and older. ‡Medicare Chronic Condition Data Warehouse definition. §Primary care physician, physician assistant, or nurse practitioner. ¶Weighted average of the simvastatin-equivalent average daily dose in the post-AMI period minus the weighted average of the pre-AMI period. #According to the 2013 American College of Cardiology/ American Heart Association guidelines on the reduction of atherosclerotic cardiovascular risk. Abbreviations: AMI=acute myocardial infarction; PDC=proportion of days covered; ASD=absolute standardized difference; Ref=reference group for ASD calculation; SD=standard deviation; CCI=Charlson Comorbidity Index; CeVD=cerebrovascular disease; CHF=congestive heart failure; COPD=chronic obstructive pulmonary disease; PVD=peripheral vascular disease; CCW=Alz=Alzheimer's disease; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; IHD=ischemic heart disease; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker; subend=subendocardial; Rhabdo=rhabdomyolysis; Cardiac cath=cardiac catheterization; CCU=coronary care unit; ICU=intensive care unit; PCP=primary care provider; ADD=average daily dose.

Table S3. Patient characteristics stratified by post-AMI statin adherence.

Patient Characteristics	Post-AMI PDC		
	<40% N=17,104 % [ASD]	40-79.9% N=21,348 % [ASD]	≥80% N=74,844 % [ASD]
Age			
Mean ± SD	77.5 ± 7.5 [3.1]	77.0 ± 7.3 [4.6]	77.3 ± 7.3 [Ref]
66-75	44.1 [1.3]	46.8 [4.2]	44.7 [Ref]
76-85	39.2 [1.1]	38.8 [1.9]	39.8 [Ref]
86+	16.7 [3.2]	14.3 [3.3]	15.5 [Ref]
Female	55.5 [3.4]	55.1 [2.6]	53.8 [Ref]
Race/ethnicity			
White	82.2 [8.7]	82.0 [9.2]	85.4 [Ref]
Black	10.9 [11.9]	10.4 [10.0]	7.5 [Ref]
Hispanic	3.3 [2.8]	3.5 [3.8]	2.8 [Ref]
Asian	1.7 [4.7]	2.0 [2.4]	2.4 [Ref]
Other	1.9 [0.2]	2.1 [1.6]	1.9 [Ref]
Dual eligibility*	23.6 [5.2]	24.0 [4.1]	25.8 [Ref]
Household income†			
≤\$30,000	48.7 [4.2]	47.7 [2.3]	46.6 [Ref]
\$30,001-60,000	40.7 [1.7]	40.7 [1.7]	41.6 [Ref]
\$60,001-100,000	8.6 [3.0]	9.4 [0.5]	9.5 [Ref]
\$100,001-150,000	1.5 [2.0]	1.7 [0.4]	1.8 [Ref]
>\$150,000	0.5 [1.3]	0.5 [1.6]	0.6 [Ref]
CCI comorbidities			
AMI	6.2 [8.8]	4.6 [1.9]	4.2 [Ref]
Cancer	13.4 [4.8]	12.3 [1.5]	11.8 [Ref]
CeVD	20.6 [7.2]	19.1 [3.4]	17.8 [Ref]
CHF	35.9 [14.8]	30.5 [3.4]	29.0 [Ref]
COPD	31.7 [10.7]	28.0 [2.7]	26.8 [Ref]
Dementia	4.1 [8.2]	2.9 [1.6]	2.6 [Ref]
Diabetes	49.1 [3.5]	48.5 [2.2]	47.4 [Ref]
Liver disease	2.6 [6.3]	2.0 [1.9]	1.7 [Ref]
Metastatic cancer	2.3 [7.8]	1.5 [2.1]	1.3 [Ref]
Para-/hemiplegia	1.4 [3.0]	1.0 [0.4]	1.0 [Ref]
Peptic ulcer disease	2.1 [3.4]	1.9 [1.7]	1.6 [Ref]
PVD	26.5 [9.0]	23.9 [3.1]	22.6 [Ref]
Renal disease	21.5 [7.5]	18.9 [0.9]	18.5 [Ref]
Rheumatic disease	4.3 [3.3]	3.6 [0.1]	3.6 [Ref]

Patient Characteristics	Post-AMI PDC		
	<40%	40-79.9%	≥80%
	N=17,104 % [ASD]	N=21,348 % [ASD]	N=74,844 % [ASD]
CCI			
Mean ± SD	2.9 ± 2.5 [18.1]	2.6 ± 2.3 [5.0]	2.4 ± 2.3 [Ref]
0	16.3 [11.8]	19.5 [3.6]	20.9 [Ref]
1-2	36.0 [6.2]	38.2 [1.7]	39.0 [Ref]
3-5	33.6 [7.7]	31.6 [3.4]	30.0 [Ref]
6-8	10.9 [9.3]	8.6 [1.5]	8.2 [Ref]
9 or more	3.1 [8.3]	2.1 [2.2]	1.8 [Ref]
Other comorbidities			
Dementia/Alz‡	12.5 [8.9]	10.3 [2.3]	9.7 [Ref]
Depression	17.2 [6.6]	16.2 [3.8]	14.8 [Ref]
CABG	1.0 [0.5]	1.0 [0.2]	1.0 [Ref]
PTCA/stent	8.0 [7.2]	6.9 [3.0]	6.2 [Ref]
IHD	65.5 [13.1]	61.7 [5.2]	59.2 [Ref]
Unstable angina	6.4 [5.6]	5.6 [2.5]	5.1 [Ref]
Lipid abnormalities	88.6 [3.1]	89.7 [0.5]	89.5 [Ref]
Rhabdo/myopathy	8.3 [8.6]	7.2 [4.4]	6.1 [Ref]
Pre-AMI medications			
Beta-blocker	62.9 [5.5]	63.9 [3.2]	65.5 [Ref]
ACE inhibitor/ARB	62.9 [9.9]	66.2 [3.0]	67.6 [Ref]
Index admission			
Subend infarction	81.4 [5.7]	80.3 [2.7]	79.2 [Ref]
CABG	4.6 [8.7]	6.1 [1.8]	6.5 [Ref]
PTCA/stent	30.1 [17.6]	36.0 [5.1]	38.4 [Ref]
Platelet inhibitors	3.8 [3.4]	4.2 [1.3]	4.5 [Ref]
Cardiac cath	50.8 [16.0]	57.7 [2.2]	58.7 [Ref]
Angiocardiology	50.8 [16.3]	57.6 [2.7]	58.9 [Ref]
Cardiogenic shock	1.9 [2.5]	2.1 [1.0]	2.3 [Ref]
Dysrhythmias	31.4 [0.1]	30.6 [1.7]	31.4 [Ref]
Hypotension	5.0 [0.5]	4.8 [1.1]	5.1 [Ref]
Acute renal failure	17.0 [4.3]	15.9 [1.4]	15.4 [Ref]
Heart failure	43.3 [7.0]	39.6 [0.5]	39.8 [Ref]
Length of stay (days)			
Mean ± SD	5.6 ± 5.8 [6.7]	5.3 ± 5.0 [1.5]	5.2 ± 4.8 [Ref]
1-3	41.2 [6.8]	44.3 [0.5]	44.6 [Ref]
4-6	32.1 [2.6]	30.9 [0.1]	30.9 [Ref]
7-11	18.2 [3.1]	17.1 [0.0]	17.1 [Ref]
12+	8.5 [3.7]	7.7 [0.7]	7.5 [Ref]

	Post-AMI PDC		
	<40% N=17,104	40-79.9% N=21,348	≥80% N=74,844
Patient Characteristics	% [ASD]	% [ASD]	% [ASD]
Intensive care			
None	26.3 [2.7]	24.9 [0.6]	25.2 [Ref]
CCU only	22.4 [2.2]	23.3 [0.0]	23.3 [Ref]
ICU only	41.4 [0.8]	41.3 [0.5]	41.1 [Ref]
Both	9.8 [2.1]	10.5 [0.2]	10.4 [Ref]
Cardiologist consult	84.8 [5.8]	86.6 [0.7]	86.8 [Ref]
30-day follow-up			
None	17.8 [9.2]	15.6 [3.1]	14.4 [Ref]
PCP only§	32.1 [7.4]	29.8 [2.5]	28.7 [Ref]
Cardiologist only	15.7 [7.0]	18.0 [1.0]	18.4 [Ref]
Both	34.3 [8.6]	36.6 [3.9]	38.5 [Ref]
Simvastatin ADD change¶	-20.7 ± 41.0 [78.4]	3.7 ± 31.0 [13.1]	7.8 ± 31.1 [Ref]
Pre-AMI statin#			
Low intensity	11.5 [1.2]	9.0 [7.0]	11.1 [Ref]
Moderate intensity	66.9 [3.7]	66.1 [5.4]	68.6 [Ref]
High intensity	21.6 [3.4]	24.9 [11.1]	20.3 [Ref]
Post-AMI statin#			
Low intensity	10.5 [8.4]	7.4 [2.4]	8.1 [Ref]
Moderate intensity	66.0 [3.5]	63.1 [2.7]	64.3 [Ref]
High intensity	23.5 [9.4]	29.5 [4.2]	27.6 [Ref]
Pre-AMI PDC			
<40%	46.6 [97.5]	21.0 [38.7]	7.7 [Ref]
40-79.9%	28.2 [29.4]	35.1 [44.6]	16.1 [Ref]
≥80%	25.2 [118.8]	43.9 [69.8]	76.2 [Ref]

Percentages are column percentages. *Enrolled in Medicare and Medicaid. †Median household income of US Census block groups for individuals aged 65 and older. ‡Medicare Chronic Condition Data Warehouse definition. §Primary care physician, physician assistant, or nurse practitioner. ¶Weighted average of the simvastatin-equivalent average daily dose in the post-AMI period minus the weighted average of the pre-AMI period. #According to the 2013 American College of Cardiology/ American Heart Association guidelines on the reduction of atherosclerotic cardiovascular risk. *Abbreviations:* AMI=acute myocardial infarction; PDC=proportion of days covered; ASD=absolute standardized difference; Ref=reference group for ASD calculation; SD=standard deviation; CCI=Charlson Comorbidity Index; CeVD=cerebrovascular disease; CHF=congestive heart failure; COPD=chronic obstructive pulmonary disease; PVD=peripheral vascular disease; CCW=Alz=Alzheimer's disease; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; IHD=ischemic heart disease; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker; subend=subendocardial; Rhabdo=rhabdomyolysis; Cardiac cath=cardiac catheterization; CCU=coronary care unit; ICU=intensive care unit; PCP=primary care provider; ADD=average daily dose.

Table S4. Full model for 3-level multinomial regression model predicting statin adherence change after an AMI.

Patient Characteristics	Model 1: 3-Level Multinomial	
	<u>Logistic Regression*</u>	
	OR (99% CI)	
	Decrease	Increase
Pre-AMI PDC (10%)†	1.04 (1.03, 1.05)	0.67 (0.67, 0.68)
Age		
66-75	1.	1.
76-85	0.99 (0.94, 1.04)	0.97 (0.92, 1.02)
86+	0.99 (0.92, 1.06)	0.88 (0.81, 0.95)
Female	1.03 (0.98, 1.08)	1.06 (1.01, 1.12)
Race/ethnicity		
White	1.	1.
Black	1.21 (1.12, 1.31)	1.14 (1.05, 1.23)
Hispanic	1.30 (1.15, 1.48)	1.29 (1.13, 1.48)
Asian	0.97 (0.83, 1.14)	1.16 (0.99, 1.36)
Other	1.22 (1.05, 1.42)	1.15 (0.97, 1.36)
Dual eligibility‡	0.80 (0.75, 0.84)	1.18 (1.11, 1.25)
Household income§		
≤\$30,000	1.	1.
\$30,001-60,000	0.96 (0.91, 1.00)	0.98 (0.93, 1.03)
\$60,001-100,000	0.96 (0.89, 1.04)	1.03 (0.95, 1.12)
\$100,001-150,000	1.01 (0.86, 1.19)	1.05 (0.87, 1.26)
>\$150,000	0.79 (0.58, 1.08)	1.10 (0.80, 1.51)
Adjusted CCII		
0	1.	1.
1-2	1.03 (0.97, 1.10)	0.88 (0.83, 0.94)
3-5	1.08 (1.01, 1.15)	0.84 (0.79, 0.91)
6-8	1.14 (1.04, 1.26)	0.81 (0.73, 0.91)
9 or more	1.39 (1.19, 1.62)	0.77 (0.64, 0.93)
Baseline comorbidities		
Prior AMI#	1.04 (0.94, 1.15)	0.92 (0.81, 1.04)
Dementia/Alz**	1.13 (1.06, 1.21)	1.05 (0.97, 1.14)
Depression	1.11 (1.05, 1.18)	1.02 (0.95, 1.09)
CABG	1.13 (0.92, 1.39)	1.28 (1.01, 1.62)
PTCA/stent	1.12 (1.02, 1.23)	0.85 (0.76, 0.95)
Ischemic heart disease	1.09 (1.04, 1.15)	0.84 (0.79, 0.89)
Unstable angina	1.04 (0.94, 1.15)	0.89 (0.79, 1.00)
Lipid abnormalities	1.00 (0.93, 1.07)	1.07 (0.99, 1.16)
Rhabdomyolysis/myopathy	1.15 (1.05, 1.24)	1.01 (0.92, 1.11)

Model 1: 3-Level Multinomial		
<u>Logistic Regression*</u>		
OR (99% CI)		
Patient Characteristics	Decrease	Increase
Concurrent medications		
Beta-blocker	0.88 (0.84, 0.93)	0.99 (0.94, 1.04)
ACE inhibitor/ARB	0.95 (0.91, 1.00)	1.10 (1.05, 1.16)
Index admission		
Subendocardial infarction††	0.97 (0.92, 1.03)	0.90 (0.85, 0.96)
CABG	0.78 (0.71, 0.87)	1.34 (1.21, 1.49)
PTCA/stent	0.82 (0.78, 0.87)	1.25 (1.17, 1.32)
Platelet inhibitors	0.91 (0.81, 1.02)	1.00 (0.89, 1.12)
Cardiac catheterization	1.03 (0.95, 1.12)	1.09 (1.00, 1.19)
Angiocardiology	0.90 (0.82, 0.97)	1.05 (0.97, 1.15)
Cardiogenic shock	1.04 (0.90, 1.21)	1.14 (0.98, 1.34)
Cardiac dysrhythmias	1.00 (0.95, 1.05)	0.93 (0.88, 0.98)
Hypotension	1.01 (0.91, 1.11)	1.05 (0.94, 1.16)
Acute renal failure	1.05 (0.99, 1.12)	1.00 (0.93, 1.07)
Heart failure	1.02 (0.98, 1.07)	1.00 (0.95, 1.06)
Length of stay (days)		
1-3	1.	1.
4-6	1.05 (1.00, 1.11)	1.00 (0.94, 1.06)
7-11	1.14 (1.07, 1.22)	1.02 (0.95, 1.10)
12+	1.27 (1.16, 1.39)	1.08 (0.97, 1.20)
Intensive care		
None	1.	1.
Coronary care unit only	1.03 (0.96, 1.09)	1.03 (0.96, 1.11)
Intensive care unit only	1.05 (1.00, 1.11)	1.01 (0.95, 1.07)
Both	1.04 (0.96, 1.13)	1.03 (0.94, 1.12)
Cardiologist consult	0.95 (0.89, 1.01)	1.04 (0.96, 1.11)
30-day follow-up		
None	1.	1.
PCP only‡‡	0.97 (0.91, 1.04)	1.08 (1.00, 1.16)
Cardiologist only	0.91 (0.84, 0.98)	1.15 (1.05, 1.25)
Both	0.95 (0.89, 1.02)	1.21 (1.12, 1.30)

*Three-level multinomial logistic regression comparing decrease in adherence to no change and comparing increase in adherence to no change. †Odds ratio for a 10% higher pre-AMI adherence (e.g. 50% compared to 40%). ‡Enrolled in Medicare and Medicaid. §Median household income of US Census block groups for individuals aged 65 and older. ICCI score does not include counts for AMI and dementia. #CCI definition.

**Medicare Chronic Condition Data Warehouse definition. ††Diagnosis code for subendocardial infarction, compared to a transmural infarction. ‡‡Primary care physician, physician assistant, or nurse practitioner. Abbreviations: AMI=acute myocardial infarction; OR=odds ratio; CI=confidence interval; PDC=proportion of days covered; CCI=Charlson Comorbidity Index; Alz=Alzheimer's disease; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker; PCP=primary care provider.

Table S5. Full model for five-level multinomial regression model predicting statin adherence change after an AMI.

Patient Characteristics	Model 2: 5-Level Multinomial Logistic Regression*			
	OR (99% CI) Major Decrease	OR (99% CI) Mild/Moderate Decrease	OR (99% CI) Mild/Moderate Increase	OR (99% CI) Major Increase
Pre-AMI PDC (10%) ^{†‡}	1.48 (1.43, 1.54)	0.99 (0.98, 1.00)	0.71 (0.71, 0.72)	0.49 (0.48, 0.49)
Age				
66-75	1.	1.	1.	1.
76-85	0.95 (0.87, 1.05)	1.00 (0.95, 1.06)	0.96 (0.91, 1.02)	1.01 (0.92, 1.11)
86+	0.99 (0.88, 1.12)	0.98 (0.91, 1.06)	0.86 (0.79, 0.93)	0.94 (0.81, 1.08)
Female	1.06 (0.97, 1.15)	1.02 (0.97, 1.07)	1.07 (1.01, 1.12)	1.04 (0.95, 1.14)
Race/ethnicity				
White	1.	1.	1.	1.
Black	1.25 (1.07, 1.45)	1.21 (1.11, 1.32)	1.15 (1.06, 1.25)	1.16 (1.01, 1.34)
Hispanic	1.29 (1.00, 1.64)	1.32 (1.15, 1.52)	1.32 (1.15, 1.51)	1.25 (1.00, 1.58)
Asian	0.87 (0.64, 1.19)	1.01 (0.84, 1.20)	1.18 (1.00, 1.39)	1.09 (0.82, 1.47)
Other	1.19 (0.88, 1.59)	1.24 (1.04, 1.46)	1.14 (0.96, 1.36)	1.27 (0.94, 1.71)
Dual eligibility [†]	0.81 (0.73, 0.90)	0.79 (0.74, 0.84)	1.13 (1.06, 1.20)	1.46 (1.31, 1.63)
Household income [‡]				
≤\$30,000	1.	1.	1.	1.
\$30,001-60,000	0.95 (0.87, 1.04)	0.96 (0.91, 1.01)	0.98 (0.93, 1.04)	0.99 (0.90, 1.08)
\$60,001-100,000	0.95 (0.82, 1.11)	0.96 (0.88, 1.05)	1.03 (0.95, 1.13)	1.05 (0.89, 1.22)
\$100,001-150,000	0.91 (0.66, 1.25)	1.04 (0.87, 1.25)	1.03 (0.85, 1.25)	1.16 (0.82, 1.63)
>\$150,000	0.81 (0.45, 1.45)	0.79 (0.56, 1.11)	1.13 (0.82, 1.56)	0.90 (0.47, 1.70)
Adjusted CCI [§]				
0	1.	1.	1.	1.
1-2	1.01 (0.90, 1.14)	1.04 (0.97, 1.11)	0.89 (0.83, 0.95)	0.82 (0.73, 0.92)
3-5	1.07 (0.94, 1.22)	1.08 (1.00, 1.17)	0.87 (0.81, 0.94)	0.69 (0.61, 0.79)
6-8	1.15 (0.96, 1.37)	1.14 (1.02, 1.27)	0.82 (0.73, 0.92)	0.74 (0.61, 0.91)
9 or more	1.37 (1.02, 1.83)	1.40 (1.18, 1.66)	0.81 (0.66, 0.99)	0.58 (0.41, 0.83)

Patient Characteristics	Model 2: 5-Level Multinomial Logistic Regression*			
	OR (99% CI) Major Decrease	OR (99% CI) Mild/Moderate Decrease	OR (99% CI) Mild/Moderate Increase	OR (99% CI) Major Increase
Baseline comorbidities				
Prior AMI	1.14 (0.95, 1.38)	1.01 (0.90, 1.13)	0.92 (0.81, 1.05)	0.90 (0.72, 1.14)
Dementia/Alz#	1.30 (1.15, 1.47)	1.08 (1.00, 1.17)	1.06 (0.97, 1.15)	0.97 (0.83, 1.14)
Depression	1.14 (1.02, 1.28)	1.10 (1.03, 1.18)	1.01 (0.94, 1.09)	1.03 (0.91, 1.16)
CABG	1.24 (0.84, 1.83)	1.10 (0.87, 1.38)	1.26 (0.99, 1.61)	1.35 (0.85, 2.17)
PTCA/stent	1.21 (1.02, 1.45)	1.09 (0.99, 1.21)	0.86 (0.77, 0.96)	0.79 (0.64, 0.97)
Ischemic heart disease	1.07 (0.97, 1.18)	1.10 (1.04, 1.17)	0.89 (0.84, 0.94)	0.61 (0.56, 0.68)
Unstable angina	1.01 (0.84, 1.22)	1.05 (0.94, 1.17)	0.87 (0.77, 0.99)	0.97 (0.78, 1.20)
Lipid abnormalities	0.88 (0.77, 1.01)	1.04 (0.96, 1.13)	1.08 (1.00, 1.18)	1.07 (0.94, 1.23)
Rhabdo/myopathy	1.15 (0.98, 1.35)	1.15 (1.04, 1.26)	1.03 (0.94, 1.14)	0.91 (0.77, 1.08)
Concurrent medications				
Beta-blocker	0.83 (0.75, 0.91)	0.90 (0.85, 0.95)	0.99 (0.94, 1.04)	1.01 (0.92, 1.11)
ACE inhibitor/ARB	0.88 (0.81, 0.97)	0.98 (0.93, 1.03)	1.09 (1.04, 1.15)	1.19 (1.09, 1.31)
Index admission				
Subend infarction**	0.91 (0.82, 1.02)	0.99 (0.93, 1.06)	0.92 (0.86, 0.98)	0.81 (0.73, 0.90)
CABG	0.73 (0.59, 0.89)	0.80 (0.71, 0.91)	1.28 (1.15, 1.43)	1.77 (1.46, 2.14)
PTCA/stent	0.80 (0.72, 0.89)	0.83 (0.78, 0.88)	1.19 (1.12, 1.27)	1.60 (1.43, 1.78)
Platelet inhibitors	0.86 (0.68, 1.09)	0.92 (0.81, 1.05)	1.01 (0.90, 1.13)	0.95 (0.78, 1.16)
Cardiac catheterization	0.99 (0.84, 1.17)	1.04 (0.95, 1.15)	1.07 (0.97, 1.17)	1.20 (1.02, 1.41)
Angiocardiology	0.87 (0.74, 1.02)	0.91 (0.83, 0.99)	1.06 (0.97, 1.16)	1.02 (0.87, 1.19)
Cardiogenic shock	0.87 (0.64, 1.17)	1.10 (0.94, 1.30)	1.14 (0.97, 1.34)	1.21 (0.92, 1.60)
Cardiac dysrhythmias	1.01 (0.92, 1.10)	0.99 (0.94, 1.05)	0.93 (0.88, 0.98)	0.90 (0.82, 0.99)
Hypotension	1.01 (0.84, 1.22)	1.01 (0.90, 1.12)	1.05 (0.94, 1.17)	1.04 (0.86, 1.27)
Acute renal failure	1.05 (0.94, 1.17)	1.05 (0.98, 1.13)	1.00 (0.93, 1.07)	0.99 (0.87, 1.13)
Heart failure	1.08 (0.99, 1.18)	1.00 (0.95, 1.06)	1.00 (0.95, 1.06)	1.00 (0.91, 1.10)
Length of stay (days)				

Model 2: 5-Level Multinomial Logistic Regression*				
Patient Characteristics	OR (99% CI)	OR (99% CI)	OR (99% CI)	OR (99% CI)
	Major Decrease	Mild/Moderate Decrease	Mild/Moderate Increase	Major Increase
1-3	1.	1.	1.	1.
4-6	1.11 (1.01, 1.23)	1.04 (0.98, 1.10)	0.99 (0.93, 1.05)	1.04 (0.94, 1.16)
7-11	1.36 (1.21, 1.53)	1.08 (1.01, 1.17)	1.00 (0.93, 1.08)	1.10 (0.96, 1.25)
12+	1.67 (1.42, 1.96)	1.16 (1.05, 1.28)	1.07 (0.96, 1.19)	1.11 (0.91, 1.34)
Intensive care				
None	1.	1.	1.	1.
CCU only	1.03 (0.91, 1.16)	1.03 (0.96, 1.10)	1.02 (0.95, 1.09)	1.12 (0.98, 1.27)
ICU only	1.09 (0.98, 1.21)	1.04 (0.98, 1.11)	1.00 (0.94, 1.06)	1.07 (0.95, 1.20)
Both	1.00 (0.85, 1.18)	1.05 (0.96, 1.16)	1.02 (0.92, 1.12)	1.09 (0.93, 1.29)
Cardiologist consult	0.95 (0.84, 1.08)	0.95 (0.88, 1.02)	1.02 (0.94, 1.10)	1.14 (0.99, 1.31)
30-day follow-up				
None	1.	1.	1.	1.
PCP only††	1.01 (0.89, 1.15)	0.96 (0.89, 1.03)	1.07 (0.99, 1.15)	1.10 (0.96, 1.27)
Cardiologist only	0.83 (0.72, 0.97)	0.93 (0.85, 1.01)	1.13 (1.03, 1.23)	1.27 (1.09, 1.48)
Both	0.93 (0.82, 1.06)	0.95 (0.89, 1.03)	1.16 (1.08, 1.26)	1.48 (1.29, 1.69)

*Five-level multinomial logistic regression model comparing all four outcomes in table to the reference group of no change in adherence. †Enrolled in Medicare and Medicaid. ‡Median household income of US Census block groups for individuals aged 65 and older. §CCI score does not include counts for AMI and dementia. ¶CCI definition. #Medicare Chronic Condition Data Warehouse definition. **Diagnosis code for subendocardial infarction, compared to a transmural infarction. ††Primary care physician, physician assistant, or nurse practitioner. ‡‡Odds ratio for a 10% higher pre-AMI adherence (e.g. 50% compared to 40%). *Abbreviations:* AMI=acute myocardial infarction; OR=odds ratio; CI=confidence interval; PDC=proportion of days covered; CCI=Charlson Comorbidity Index; Alz=Alzheimer's disease; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; Rhabdo=rhabdomyolysis; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker; subend=subendocardial; CCU=coronary care unit; ICU=intensive care unit; PCP=primary care provider.

Table S6. Crude estimates, fully adjusted model, and sensitivity analyses involving changing variable definitions or adding new variables to the model for the three-level multinomial regression model predicting statin adherence change after an AMI.

		Crude estimates	Crude + pre-AMI PDC†	Fully adjusted model‡	Adherence change conservative§	6-week follow-up¶	Liver disease#	ADD change**	Statin intensity††
Patient characteristics		OR [99% CLR]							
Pre-AMI PDC (10%)‡‡	Increase	0.67 [1.01]		0.67 [1.01]	0.67 [1.01]	0.67 [1.01]	0.67 [1.01]	0.66 [1.02]*	0.67 [1.01]
	Decrease	1.03 [1.02]		1.04 [1.02]	1.05 [1.02]	1.04 [1.02]	1.04 [1.02]	1.08 [1.02]*	1.04 [1.02]
Age									
66-75		1.	1.	1.	1.	1.	1.	1.	1.
76-85	Increase	0.87 [1.09]*	0.92 [1.11]	0.97 [1.11]	0.97 [1.11]	0.97 [1.11]	0.97 [1.11]	0.98 [1.11]	0.98 [1.11]
	Decrease	1.05 [1.10]*	1.05 [1.10]*	0.99 [1.10]	0.99 [1.10]	0.99 [1.10]	0.99 [1.10]	0.99 [1.10]	0.99 [1.10]
86+	Increase	0.70 [1.13]*	0.75 [1.16]*	0.88 [1.17]	0.88 [1.17]	0.88 [1.17]	0.88 [1.17]	0.90 [1.17]	0.89 [1.17]
	Decrease	1.12 [1.13]*	1.11 [1.13]*	0.99 [1.14]	0.98 [1.14]	0.99 [1.14]	0.99 [1.14]	0.99 [1.14]	0.99 [1.14]
Female	Increase	1.08 [1.08]	1.06 [1.10]	1.06 [1.10]	1.06 [1.11]	1.06 [1.10]	1.06 [1.10]	1.06 [1.11]	1.06 [1.10]
	Decrease	1.06 [1.09]	1.06 [1.09]	1.03 [1.09]	1.03 [1.10]	1.03 [1.09]	1.03 [1.09]	1.03 [1.10]	1.03 [1.09]
Race/ethnicity									
White		1.	1.	1.	1.	1.	1.	1.	1.
Black	Increase	1.50 [1.14]*	1.15 [1.17]	1.14 [1.18]	1.12 [1.18]	1.14 [1.18]	1.14 [1.18]	1.11 [1.18]	1.13 [1.18]
	Decrease	1.18 [1.16]	1.21 [1.16]	1.21 [1.17]	1.18 [1.17]	1.21 [1.17]	1.21 [1.17]	1.22 [1.17]	1.21 [1.17]
Hispanic	Increase	1.63 [1.24]*	1.39 [1.29]	1.29 [1.30]	1.30 [1.30]	1.29 [1.30]	1.30 [1.30]	1.26 [1.31]	1.29 [1.30]
	Decrease	1.23 [1.28]	1.25 [1.28]	1.30 [1.29]	1.28 [1.30]	1.31 [1.29]	1.30 [1.29]	1.32 [1.30]	1.31 [1.29]
Asian	Increase	1.18 [1.29]	1.30 [1.36]	1.16 [1.37]	1.18 [1.38]	1.16 [1.37]	1.17 [1.37]	1.14 [1.38]	1.15 [1.38]
	Decrease	0.87 [1.36]	0.87 [1.36]	0.97 [1.37]	0.97 [1.38]	0.97 [1.37]	0.97 [1.37]	0.98 [1.38]	0.97 [1.37]
Other	Increase	1.21 [1.32]	1.21 [1.39]	1.15 [1.39]	1.15 [1.40]	1.15 [1.39]	1.15 [1.39]	1.11 [1.40]	1.14 [1.39]
	Decrease	1.15 [1.35]	1.15 [1.35]	1.22 [1.36]	1.22 [1.36]	1.22 [1.36]	1.22 [1.36]	1.25 [1.36]	1.23 [1.36]
Dual eligibility	Increase	1.12 [1.09]	1.18 [1.11]	1.18 [1.13]	1.19 [1.13]	1.18 [1.13]	1.18 [1.13]	1.14 [1.13]	1.17 [1.13]
	Decrease	0.93 [1.10]*	0.93 [1.10]*	0.80 [1.12]	0.80 [1.12]	0.80 [1.12]	0.80 [1.12]	0.81 [1.12]	0.80 [1.12]

		Crude estimates	Crude + pre-AMI PDC†	Fully adjusted model‡	Adherence change conservative§	6-week follow-up	Liver disease#	ADD change**	Statin intensity††
Patient characteristics		OR [99% CLR]							
Household income									
≤\$30,000		1.	1.	1.	1.	1.	1.	1.	1.
\$30,001-60,000	Increase	0.92 [1.09]*	0.96 [1.10]	0.98 [1.11]	0.99 [1.11]	0.98 [1.11]	0.98 [1.11]	0.99 [1.11]	0.98 [1.11]
	Decrease	0.96 [1.09]	0.95 [1.09]	0.96 [1.10]	0.96 [1.10]	0.96 [1.10]	0.96 [1.10]	0.96 [1.10]	0.96 [1.10]
\$60,001-100,000	Increase	0.95 [1.15]	1.03 [1.18]	1.03 [1.18]	1.03 [1.19]	1.03 [1.18]	1.03 [1.18]	1.01 [1.19]	1.03 [1.18]
	Decrease	0.96 [1.16]	0.95 [1.17]	0.96 [1.17]	0.96 [1.17]	0.96 [1.17]	0.96 [1.17]	0.97 [1.17]	0.96 [1.17]
\$100,001-150,000	Increase	0.90 [1.37]	1.04 [1.44]	1.05 [1.44]	1.06 [1.45]	1.05 [1.44]	1.05 [1.44]	1.02 [1.45]	1.04 [1.44]
	Decrease	1.01 [1.38]	1.00 [1.38]	1.01 [1.39]	1.01 [1.39]	1.01 [1.39]	1.01 [1.39]	1.03 [1.39]	1.01 [1.39]
>\$150,000	Increase	0.92 [1.71]	1.07 [1.87]	1.10 [1.88]	1.11 [1.90]	1.10 [1.88]	1.10 [1.88]	1.07 [1.90]	1.08 [1.88]
	Decrease	0.80 [1.85]	0.80 [1.85]	0.79 [1.85]	0.78 [1.88]	0.80 [1.85]	0.79 [1.85]	0.79 [1.87]	0.80 [1.85]
Adjusted CCI§§									
0		1.	1.	1.	1.	1.	1.	1.	1.
1-2	Increase	0.89 [1.11]	0.86 [1.13]	0.88 [1.14]	0.88 [1.14]	0.88 [1.14]	0.88 [1.14]	0.90 [1.14]	0.88 [1.14]
	Decrease	1.08 [1.13]	1.08 [1.13]	1.03 [1.13]	1.03 [1.14]	1.03 [1.13]	1.03 [1.13]	1.01 [1.13]	1.03 [1.13]
3-5	Increase	0.81 [1.12]	0.76 [1.14]*	0.84 [1.16]	0.83 [1.16]	0.84 [1.16]	0.85 [1.16]	0.87 [1.16]	0.85 [1.16]
	Decrease	1.21 [1.13]*	1.21 [1.13]*	1.08 [1.15]	1.07 [1.15]	1.08 [1.15]	1.08 [1.15]	1.04 [1.15]	1.07 [1.15]
6-8	Increase	0.78 [1.18]	0.70 [1.22]*	0.81 [1.24]	0.81 [1.25]	0.81 [1.24]	0.81 [1.25]	0.87 [1.25]	0.82 [1.25]
	Decrease	1.36 [1.19]*	1.36 [1.19]*	1.14 [1.21]	1.14 [1.21]	1.14 [1.21]	1.12 [1.21]	1.08 [1.21]	1.13 [1.21]
9 or more	Increase	0.86 [1.37]	0.66 [1.45]	0.77 [1.47]	0.78 [1.47]	0.77 [1.47]	0.81 [1.48]	0.83 [1.47]	0.78 [1.47]
	Decrease	1.63 [1.35]	1.64 [1.35]	1.39 [1.36]	1.40 [1.37]	1.38 [1.36]	1.42 [1.37]	1.26 [1.37]	1.38 [1.36]
Baseline comorbidities									
Prior AMI	Increase	0.86 [1.22]	0.73 [1.26]*	0.92 [1.28]	0.93 [1.29]	0.92 [1.28]	0.92 [1.28]	0.92 [1.29]	0.92 [1.28]
	Decrease	1.17 [1.21]*	1.18 [1.21]*	1.04 [1.23]	1.04 [1.23]	1.04 [1.23]	1.04 [1.23]	1.02 [1.23]	1.04 [1.23]
Dementia/ Alzheimer's###	Increase	0.98 [1.14]	0.94 [1.17]*	1.05 [1.18]	1.06 [1.18]	1.05 [1.18]	1.05 [1.18]	1.06 [1.18]	1.05 [1.18]
	Decrease	1.25 [1.14]*	1.26 [1.14]*	1.13 [1.15]	1.13 [1.15]	1.13 [1.15]	1.13 [1.15]	1.13 [1.15]	1.13 [1.15]
Depression	Increase	1.02 [1.12]	0.98 [1.14]	1.02 [1.14]	1.02 [1.15]	1.02 [1.14]	1.02 [1.14]	1.01 [1.15]	1.02 [1.15]
	Decrease	1.18 [1.12]	1.19 [1.12]	1.11 [1.13]	1.11 [1.13]	1.11 [1.13]	1.11 [1.13]	1.12 [1.13]	1.11 [1.13]

		Crude estimates	Crude + pre-AMI PDC†	Fully adjusted model‡	Adherence change conservative§	6-week follow-up¶	Liver disease#	ADD change**	Statin intensity††
Patient characteristics		OR [99% CLR]							
CABG	Increase	1.01 [1.49]	1.11 [1.59]	1.28 [1.61]	1.28 [1.62]	1.27 [1.61]	1.28 [1.61]	1.26 [1.61]	1.29 [1.61]
	Decrease	1.15 [1.50]	1.15 [1.50]	1.13 [1.52]	1.13 [1.53]	1.13 [1.52]	1.13 [1.52]	1.14 [1.53]	1.13 [1.52]
PTCA/stent	Increase	0.87 [1.18]	0.78 [1.21]	0.85 [1.24]	0.84 [1.25]	0.85 [1.24]	0.85 [1.24]	0.88 [1.24]	0.85 [1.24]
	Decrease	1.10 [1.18]	1.11 [1.18]	1.12 [1.20]	1.14 [1.21]	1.12 [1.20]	1.12 [1.20]	1.10 [1.21]	1.11 [1.20]
Ischemic heart disease	Increase	0.78 [1.08]*	0.76 [1.10]*	0.84 [1.11]	0.83 [1.12]	0.84 [1.11]	0.84 [1.11]	0.90 [1.12]*	0.84 [1.12]
	Decrease	1.12 [1.09]	1.13 [1.09]	1.09 [1.11]	1.09 [1.11]	1.10 [1.11]	1.09 [1.11]	1.04 [1.11]	1.08 [1.11]
Unstable angina	Increase	0.84 [1.20]	0.77 [1.24]*	0.89 [1.26]	0.89 [1.27]	0.89 [1.26]	0.89 [1.26]	0.89 [1.27]	0.89 [1.26]
	Decrease	1.10 [1.20]	1.11 [1.20]	1.04 [1.22]	1.05 [1.22]	1.04 [1.22]	1.04 [1.22]	1.04 [1.22]	1.04 [1.22]
Lipid abnormalities	Increase	0.91 [1.13]*	1.03 [1.16]	1.07 [1.17]	1.07 [1.17]	1.07 [1.17]	1.07 [1.17]	1.08 [1.17]	1.07 [1.17]
	Decrease	1.02 [1.15]	1.01 [1.15]	1.00 [1.16]	0.99 [1.16]	1.00 [1.16]	1.00 [1.16]	1.00 [1.16]	0.99 [1.16]
Rhabdomyolysis/myopathy	Increase	1.13 [1.17]*	0.96 [1.20]	1.01 [1.21]	1.01 [1.21]	1.01 [1.21]	1.01 [1.21]	1.01 [1.21]	1.01 [1.21]
	Decrease	1.22 [1.18]	1.24 [1.18]	1.15 [1.18]	1.16 [1.18]	1.15 [1.18]	1.14 [1.18]	1.14 [1.18]	1.14 [1.18]
Concurrent medications									
Beta-blocker	Increase	0.74 [1.08]*	0.88 [1.10]*	0.99 [1.11]	0.99 [1.11]	0.99 [1.11]	0.99 [1.11]	1.01 [1.11]	0.99 [1.11]
	Decrease	0.96 [1.09]*	0.95 [1.09]*	0.88 [1.10]	0.88 [1.10]	0.88 [1.10]	0.88 [1.10]	0.87 [1.10]	0.88 [1.10]
ACE inhibitor/ARB	Increase	0.86 [1.09]*	1.07 [1.10]	1.10 [1.11]	1.10 [1.11]	1.10 [1.11]	1.10 [1.11]	1.11 [1.11]	1.10 [1.11]
	Decrease	0.98 [1.09]	0.98 [1.09]	0.95 [1.10]	0.95 [1.10]	0.95 [1.10]	0.95 [1.10]	0.95 [1.10]	0.95 [1.10]
Index admission									
Subendocardial infarction	Increase	0.79 [1.10]*	0.79 [1.12]*	0.90 [1.13]	0.90 [1.13]	0.90 [1.13]	0.90 [1.13]	0.93 [1.13]	0.91 [1.13]
	Decrease	1.07 [1.12]*	1.07 [1.11]*	0.97 [1.12]	0.97 [1.12]	0.97 [1.12]	0.97 [1.12]	0.96 [1.12]	0.97 [1.12]
CABG	Increase	1.30 [1.17]	1.40 [1.20]	1.34 [1.24]	1.36 [1.24]	1.33 [1.24]	1.34 [1.24]	1.34 [1.24]	1.35 [1.24]
	Decrease	0.88 [1.21]*	0.88 [1.21]*	0.78 [1.24]	0.77 [1.24]	0.79 [1.24]	0.78 [1.24]	0.80 [1.24]	0.78 [1.24]
PTCA/stent	Increase	1.32 [1.08]	1.36 [1.10]*	1.25 [1.13]	1.26 [1.13]	1.24 [1.13]	1.25 [1.13]	1.15 [1.13]*	1.22 [1.13]
	Decrease	0.76 [1.10]*	0.76 [1.10]*	0.82 [1.12]	0.82 [1.12]	0.83 [1.12]	0.82 [1.12]	0.87 [1.12]	0.83 [1.12]
Platelet inhibitors	Increase	1.14 [1.20]*	1.12 [1.24]	1.00 [1.25]	0.99 [1.25]	1.00 [1.25]	1.00 [1.25]	0.97 [1.26]	1.00 [1.25]
	Decrease	0.81 [1.25]	0.81 [1.25]	0.91 [1.26]	0.90 [1.26]	0.91 [1.26]	0.91 [1.26]	0.93 [1.26]	0.91 [1.26]

		Crude estimates	Crude + pre-AMI PDC†	Fully adjusted model‡	Adherence change conservative§	6-week follow-up¶	Liver disease#	ADD change**	Statin intensity††
Patient characteristics		OR [99% CLR]							
Cardiac catheterization	Increase	1.35 [1.09]*	1.38 [1.10]*	1.09 [1.19]	1.09 [1.19]	1.09 [1.19]	1.09 [1.19]	1.08 [1.19]	1.09 [1.19]
	Decrease	0.81 [1.09]*	0.81 [1.09]*	1.03 [1.19]	1.03 [1.19]	1.03 [1.19]	1.03 [1.19]	1.04 [1.19]	1.03 [1.19]
Angiocardiology	Increase	1.29 [1.08]*	1.34 [1.10]*	1.05 [1.19]	1.06 [1.19]	1.05 [1.19]	1.05 [1.19]	1.04 [1.19]	1.05 [1.19]
	Decrease	0.79 [1.09]*	0.79 [1.09]*	0.90 [1.18]	0.88 [1.18]	0.90 [1.18]	0.90 [1.18]	0.91 [1.19]	0.90 [1.18]
Cardiogenic shock	Increase	1.26 [1.29]	1.37 [1.35]*	1.14 [1.36]	1.14 [1.37]	1.14 [1.36]	1.14 [1.36]	1.13 [1.37]	1.14 [1.36]
	Decrease	1.06 [1.34]	1.05 [1.34]	1.04 [1.35]	1.03 [1.36]	1.04 [1.35]	1.04 [1.35]	1.05 [1.36]	1.04 [1.35]
Cardiac dysrhythmias	Increase	0.90 [1.09]	0.91 [1.11]	0.93 [1.11]	0.93 [1.11]	0.93 [1.11]	0.93 [1.11]	0.94 [1.11]	0.93 [1.11]
	Decrease	1.00 [1.10]	1.00 [1.10]	1.00 [1.10]	1.00 [1.10]	1.00 [1.10]	1.00 [1.10]	0.98 [1.10]	0.99 [1.10]
Hypotension	Increase	1.02 [1.20]	1.07 [1.24]	1.05 [1.24]	1.07 [1.24]	1.05 [1.24]	1.05 [1.24]	1.04 [1.24]	1.04 [1.24]
	Decrease	1.03 [1.21]	1.02 [1.21]	1.01 [1.22]	1.01 [1.22]	1.01 [1.22]	1.01 [1.22]	1.00 [1.22]	1.01 [1.22]
Acute renal failure	Increase	0.95 [1.12]	0.97 [1.14]	1.00 [1.15]	1.01 [1.15]	1.00 [1.15]	1.00 [1.15]	1.00 [1.15]	1.00 [1.15]
	Decrease	1.17 [1.12]*	1.17 [1.12]*	1.05 [1.13]	1.06 [1.13]	1.05 [1.13]	1.05 [1.13]	1.04 [1.13]	1.05 [1.13]
Heart failure	Increase	0.89 [1.09]*	0.90 [1.10]*	1.00 [1.11]	1.01 [1.11]	1.00 [1.11]	1.00 [1.11]	1.02 [1.11]	1.01 [1.11]
	Decrease	1.13 [1.09]*	1.13 [1.09]*	1.02 [1.10]	1.03 [1.10]	1.02 [1.10]	1.02 [1.10]	1.00 [1.10]	1.02 [1.10]
Length of stay (days)									
1-3		1.	1.	1.	1.	1.	1.	1.	1.
4-6	Increase	0.97 [1.10]	0.96 [1.11]	1.00 [1.12]	0.99 [1.12]	1.00 [1.12]	1.00 [1.12]	1.00 [1.12]	1.00 [1.12]
	Decrease	1.12 [1.11]*	1.12 [1.11]*	1.05 [1.11]	1.06 [1.11]	1.05 [1.11]	1.05 [1.11]	1.05 [1.11]	1.05 [1.11]
7-11	Increase	0.98 [1.12]	1.00 [1.14]	1.02 [1.16]	1.02 [1.16]	1.02 [1.16]	1.02 [1.16]	1.03 [1.16]	1.03 [1.16]
	Decrease	1.23 [1.13]*	1.22 [1.13]	1.14 [1.14]	1.15 [1.14]	1.14 [1.14]	1.14 [1.14]	1.13 [1.14]	1.14 [1.14]
12+	Increase	1.11 [1.17]	1.12 [1.20]	1.08 [1.23]	1.08 [1.23]	1.08 [1.23]	1.08 [1.23]	1.09 [1.23]	1.08 [1.23]
	Decrease	1.34 [1.17]	1.34 [1.17]	1.27 [1.20]	1.28 [1.20]	1.26 [1.20]	1.27 [1.20]	1.23 [1.20]	1.27 [1.20]

		Crude estimates	Crude + pre-AMI PDC†	Fully adjusted model‡	Adherence change conservative§	6-week follow-up¶	Liver disease#	ADD change**	Statin intensity††
Patient characteristics		OR [99% CLR]							
Intensive care									
None		1.	1.	1.	1.	1.	1.	1.	1.
Coronary care unit only	Increase	1.17 [1.12]*	1.16 [1.14]*	1.03 [1.15]	1.03 [1.15]	1.03 [1.15]	1.03 [1.15]	1.02 [1.15]	1.03 [1.15]
	Decrease	0.98 [1.13]	0.98 [1.13]	1.03 [1.13]	1.03 [1.14]	1.03 [1.13]	1.03 [1.13]	1.04 [1.14]	1.03 [1.13]
Intensive care unit only	Increase	1.10 [1.11]*	1.10 [1.13]*	1.01 [1.13]	1.01 [1.13]	1.01 [1.13]	1.01 [1.13]	1.01 [1.13]	1.01 [1.13]
	Decrease	1.04 [1.11]	1.04 [1.11]	1.05 [1.12]	1.05 [1.12]	1.06 [1.12]	1.05 [1.12]	1.05 [1.12]	1.05 [1.12]
Both	Increase	1.25 [1.15]*	1.26 [1.18]*	1.03 [1.20]	1.02 [1.20]	1.03 [1.20]	1.03 [1.20]	1.01 [1.20]	1.02 [1.20]
	Decrease	1.01 [1.17]	1.01 [1.17]	1.04 [1.18]	1.04 [1.18]	1.04 [1.18]	1.04 [1.18]	1.04 [1.19]	1.04 [1.18]
Cardiologist consult	Increase	1.12 [1.13]	1.15 [1.15]*	1.04 [1.16]	1.04 [1.16]	1.03 [1.16]	1.04 [1.16]	1.02 [1.16]	1.03 [1.16]
	Decrease	0.91 [1.13]	0.91 [1.13]	0.95 [1.14]	0.94 [1.14]	0.96 [1.14]	0.95 [1.14]	0.96 [1.14]	0.95 [1.14]
30-day follow-up									
None		1.	1.	1.	1.	1.	1.	1.	1.
Primary care provider only***	Increase	0.96 [1.14]*	1.04 [1.16]	1.08 [1.16]	1.10 [1.17]	1.08 [1.19]	1.08 [1.16]	1.06 [1.17]	1.07 [1.16]
	Decrease	1.01 [1.14]	1.00 [1.14]	0.97 [1.14]	0.97 [1.15]	0.97 [1.16]	0.97 [1.14]	0.98 [1.15]	0.97 [1.14]
Cardiologist only	Increase	1.05 [1.15]*	1.20 [1.17]	1.15 [1.18]	1.18 [1.19]	1.16 [1.21]	1.15 [1.18]	1.10 [1.18]	1.14 [1.18]
	Decrease	0.86 [1.16]	0.85 [1.16]	0.91 [1.17]	0.91 [1.17]	0.86 [1.19]	0.91 [1.17]	0.94 [1.17]	0.92 [1.17]
Both	Increase	1.03 [1.13]*	1.22 [1.15]	1.21 [1.16]	1.25 [1.16]	1.24 [1.18]	1.21 [1.16]	1.17 [1.16]	1.20 [1.16]
	Decrease	0.95 [1.14]	0.94 [1.14]	0.95 [1.14]	0.95 [1.14]	0.92 [1.16]	0.95 [1.14]	0.97 [1.14]	0.96 [1.14]
Mild liver disease¶¶	Increase						1.00 [1.43]		
	Decrease						1.19 [1.36]		
Moderate/sever liver disease¶¶¶	Increase						0.47 [3.42]		
	Decrease						1.10 [2.49]		
Change in simvastatin-equivalent ADD**	Increase							1.01 [1.00]	
	Decrease							0.99 [1.00]	

		Crude estimates	Crude + pre-AMI PDC†	Fully adjusted model‡	Adherence change conservative§	6-week follow-up	Liver disease#	ADD change**	Statin intensity††
Patient characteristics					OR [99% CLR]				
Pre-AMI statin intensity††									
Low	Increase								1.08 [1.22]
	Decrease								0.79 [1.25]
Moderate									1.
High	Increase								0.80 [1.17]
	Decrease								1.32 [1.18]
Post-AMI statin intensity††									
Low	Increase								0.79 [1.26]
	Decrease								1.32 [1.27]
Moderate									1.
High	Increase								1.33 [1.15]
	Decrease								0.77 [1.17]

All eight models are using the three-level multinomial logistic regression comparing decrease in adherence to no change and comparing increase in adherence to no change. *Point estimate does not fall within the 99% confidence interval for the original full model (Model 1 from Table 2 in the main manuscript). †Estimates are only adjusted for pre-AMI adherence. ‡Fully adjusted model (Model 1 from Table 2 in the main manuscript). §This model required categorical changes in statin adherence to be at least a 10% absolute difference from pre- to post-AMI PDC (e.g. a pre-AMI PDC of 78% to post-AMI PDC of 84% would not be considered an adherence increase in this sensitivity analysis). ||The period for post-AMI follow-up with clinicians was extended to 42 days (6 weeks). #CCI measures of liver disease were added as separate variables to the model and the CCI score was further adjusted by not including mild and moderate/severe liver disease. **Weighted average of the simvastatin-equivalent average daily dose in the post-AMI period minus the weighted average of the simvastatin-equivalent average daily dose in the pre-AMI period. Dose equivalency calculations were made as follows: fluvastatin, pravastatin, and lovastatin doses in mg were divided by 4, 2, and 2, respectively; atorvastatin, rosuvastatin, and pitavastatin doses in mg were multiplied by 2, 4, and 10, respectively. ††Statin intensity was measured using the LAST statin prescription claim filled BEFORE the index AMI hospitalization and using the FIRST claim filled AFTER the index hospitalization discharge. Statin intensity was measured according to the 2013 American College of Cardiology/ American Heart Association Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults. ‡‡Odds ratio for a 10% higher pre-AMI adherence (e.g. 50% compared to 40%). §§CCI score does not include counts for AMI and dementia; in the liver disease sensitivity analysis, it also does not include those measures. ||CCI definition. ##Medicare Chronic Condition Data Warehouse definition. ***Primary care physician, physician assistant, or nurse practitioner. *Abbreviations:* AMI=acute myocardial infarction; PDC=proportion of days covered; ADD=average daily dose; OR=odds ratio; CLR=confidence limit ratio (upper 99% confidence limit divided by the lower limit); CCI=Charlson Comorbidity Index; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker.

Table S7. Fully adjusted model and sensitivity analyses with restricted cohort eligibility for the three-level multinomial regression model predicting statin adherence change after an AMI.

		Fully adjusted model*	Prevalent statin users†	Post-AMI 6-month survival‡	No AMI 6- month post- AMI§
		N=113,296	N=101,905	N=101,015	N=104,572
Patient characteristics		OR [99% CLR]			
Pre-AMI PDC (10%)	Increase	0.67 [1.01]	0.68 [1.02]	0.67 [1.02]	0.67 [1.02]
	Decrease	1.04 [1.02]	1.04 [1.02]	1.05 [1.02]	1.04 [1.02]
Age					
66-75		1.	1.	1.	1.
76-85	Increase	0.97 [1.11]	0.97 [1.11]	0.97 [1.12]	0.98 [1.11]
	Decrease	0.99 [1.10]	0.99 [1.11]	0.99 [1.11]	0.99 [1.11]
86+	Increase	0.88 [1.17]	0.87 [1.18]	0.89 [1.18]	0.89 [1.18]
	Decrease	0.99 [1.14]	1.01 [1.16]	0.98 [1.16]	0.99 [1.15]
Female	Increase	1.06 [1.10]	1.06 [1.11]	1.08 [1.11]	1.07 [1.11]
	Decrease	1.03 [1.09]	1.03 [1.10]	1.03 [1.10]	1.03 [1.10]
Race/ethnicity					
White		1.	1.	1.	1.
Black	Increase	1.14 [1.18]	1.15 [1.19]	1.13 [1.19]	1.12 [1.19]
	Decrease	1.21 [1.17]	1.19 [1.19]	1.22 [1.19]	1.22 [1.18]
Hispanic	Increase	1.29 [1.30]	1.30 [1.32]	1.30 [1.32]	1.32 [1.32]
	Decrease	1.30 [1.29]	1.27 [1.33]	1.36 [1.32]	1.37 [1.31]
Asian	Increase	1.16 [1.37]	1.16 [1.39]	1.14 [1.40]	1.14 [1.39]
	Decrease	0.97 [1.37]	0.99 [1.40]	0.98 [1.40]	0.97 [1.40]
Other	Increase	1.15 [1.39]	1.16 [1.42]	1.12 [1.42]	1.13 [1.41]
	Decrease	1.22 [1.36]	1.19 [1.40]	1.22 [1.38]	1.25 [1.37]
Dual eligibility	Increase	1.18 [1.13]	1.18 [1.13]	1.20 [1.14]	1.20 [1.13]
	Decrease	0.80 [1.12]	0.81 [1.13]	0.80 [1.13]	0.80 [1.13]
Household income					
≤\$30,000		1.	1.	1.	1.
\$30,001-60,000	Increase	0.98 [1.11]	1.00 [1.11]	0.98 [1.11]	0.99 [1.11]
	Decrease	0.96 [1.10]	0.96 [1.11]	0.96 [1.10]	0.96 [1.10]
\$60,001-100,000	Increase	1.03 [1.18]	1.05 [1.19]	1.03 [1.20]	1.04 [1.19]
	Decrease	0.96 [1.17]	0.96 [1.18]	0.96 [1.18]	0.97 [1.17]
\$100,001-150,000	Increase	1.05 [1.44]	1.05 [1.47]	1.07 [1.47]	1.03 [1.46]
	Decrease	1.01 [1.39]	1.03 [1.42]	1.00 [1.42]	0.98 [1.40]
>\$150,000	Increase	1.10 [1.88]	1.15 [1.94]	1.27 [1.93]	1.08 [1.93]
	Decrease	0.79 [1.85]	0.81 [1.96]	0.82 [1.95]	0.82 [1.89]

		Fully adjusted model*	Prevalent statin users†	Post-AMI 6-month survival‡	No AMI 6- month post- AMI§
		N=113,296	N=101,905	N=101,015	N=104,572
Patient characteristics		OR [99% CLR]			
Adjusted CCI#					
0		1.	1.	1.	1.
1-2	Increase	0.88 [1.14]	0.89 [1.14]	0.88 [1.14]	0.88 [1.14]
	Decrease	1.03 [1.13]	1.02 [1.15]	1.03 [1.14]	1.03 [1.14]
3-5	Increase	0.84 [1.16]	0.87 [1.16]	0.85 [1.16]	0.85 [1.16]
	Decrease	1.08 [1.15]	1.07 [1.16]	1.09 [1.16]	1.08 [1.15]
6-8	Increase	0.81 [1.24]	0.84 [1.26]	0.79 [1.27]	0.81 [1.26]
	Decrease	1.14 [1.21]	1.15 [1.23]	1.12 [1.23]	1.11 [1.22]
9 or more	Increase	0.77 [1.47]	0.77 [1.49]	0.82 [1.59]	0.75 [1.50]
	Decrease	1.39 [1.36]	1.45 [1.40]	1.21 [1.48]	1.44 [1.38]
Baseline comorbidities					
Prior AMI**	Increase	0.92 [1.28]	0.91 [1.31]	0.96 [1.32]	0.90 [1.32]
	Decrease	1.04 [1.23]	0.99 [1.26]	1.07 [1.26]	1.01 [1.26]
Dementia/Alzheimer's††	Increase	1.05 [1.18]	1.02 [1.19]	1.05 [1.20]	1.05 [1.19]
	Decrease	1.13 [1.15]	1.17 [1.16]	1.13 [1.17]	1.12 [1.16]
Depression	Increase	1.02 [1.14]	1.03 [1.15]	1.00 [1.16]	1.01 [1.15]
	Decrease	1.11 [1.13]	1.13 [1.14]	1.12 [1.14]	1.12 [1.13]
CABG	Increase	1.28 [1.61]	1.35 [1.69]	1.30 [1.63]	1.29 [1.64]
	Decrease	1.13 [1.52]	1.15 [1.65]	1.16 [1.54]	1.14 [1.54]
PTCA/stent	Increase	0.85 [1.24]	0.86 [1.26]	0.84 [1.26]	0.85 [1.26]
	Decrease	1.12 [1.20]	1.12 [1.23]	1.12 [1.22]	1.14 [1.22]
Ischemic heart disease	Increase	0.84 [1.11]	0.85 [1.12]	0.83 [1.12]	0.84 [1.12]
	Decrease	1.09 [1.11]	1.07 [1.12]	1.12 [1.11]	1.10 [1.11]
Unstable angina	Increase	0.89 [1.26]	0.89 [1.28]	0.89 [1.28]	0.89 [1.28]
	Decrease	1.04 [1.22]	0.99 [1.25]	1.02 [1.24]	1.04 [1.23]
Lipid abnormalities	Increase	1.07 [1.17]	1.06 [1.18]	1.06 [1.18]	1.06 [1.18]
	Decrease	1.00 [1.16]	1.03 [1.17]	0.99 [1.17]	0.98 [1.16]
Rhabdomyolysis/ myopathy	Increase	1.01 [1.21]	1.01 [1.22]	0.98 [1.22]	1.03 [1.22]
	Decrease	1.15 [1.18]	1.15 [1.20]	1.15 [1.20]	1.16 [1.19]
Concurrent medications					
Beta-blocker	Increase	0.99 [1.11]	1.00 [1.11]	0.98 [1.12]	0.98 [1.11]
	Decrease	0.88 [1.10]	0.91 [1.11]	0.87 [1.11]	0.88 [1.10]
ACE inhibitor/ARB	Increase	1.10 [1.11]	1.10 [1.11]	1.09 [1.11]	1.10 [1.11]
	Decrease	0.95 [1.10]	0.96 [1.11]	0.95 [1.10]	0.97 [1.10]
Index admission					
Subendocardial infarction	Increase	0.90 [1.13]	0.91 [1.13]	0.90 [1.13]	0.92 [1.13]
	Decrease	0.97 [1.12]	0.96 [1.13]	0.97 [1.13]	0.97 [1.13]

		Fully adjusted model*	Prevalent statin users†	Post-AMI 6-month survival‡	No AMI 6- month post- AMI§
		N=113,296	N=101,905	N=101,015	N=104,572
Patient characteristics		OR [99% CLR]			
CABG	Increase	1.34 [1.24]	1.36 [1.25]	1.37 [1.25]	1.36 [1.24]
	Decrease	0.78 [1.24]	0.77 [1.26]	0.78 [1.24]	0.78 [1.24]
PTCA/stent	Increase	1.25 [1.13]	1.23 [1.13]	1.26 [1.13]	1.26 [1.13]
	Decrease	0.82 [1.12]	0.80 [1.13]	0.83 [1.13]	0.83 [1.12]
Platelet inhibitors	Increase	1.00 [1.25]	0.99 [1.27]	0.99 [1.26]	1.01 [1.26]
	Decrease	0.91 [1.26]	0.92 [1.29]	0.92 [1.27]	0.92 [1.27]
Cardiac catheterization	Increase	1.09 [1.19]	1.09 [1.20]	1.08 [1.20]	1.08 [1.20]
	Decrease	1.03 [1.19]	1.03 [1.21]	1.03 [1.19]	1.03 [1.19]
Angiocardiology	Increase	1.05 [1.19]	1.04 [1.20]	1.03 [1.20]	1.06 [1.19]
	Decrease	0.90 [1.18]	0.90 [1.20]	0.90 [1.19]	0.90 [1.19]
Cardiogenic shock	Increase	1.14 [1.36]	1.14 [1.39]	1.18 [1.40]	1.16 [1.38]
	Decrease	1.04 [1.35]	1.00 [1.40]	1.03 [1.39]	1.07 [1.36]
Cardiac dysrhythmias	Increase	0.93 [1.11]	0.93 [1.11]	0.93 [1.12]	0.93 [1.11]
	Decrease	1.00 [1.10]	1.01 [1.11]	1.00 [1.10]	1.00 [1.10]
Hypotension	Increase	1.05 [1.24]	1.07 [1.25]	1.04 [1.25]	1.04 [1.25]
	Decrease	1.01 [1.22]	1.03 [1.24]	0.99 [1.23]	0.98 [1.23]
Acute renal failure	Increase	1.00 [1.15]	0.99 [1.16]	0.98 [1.16]	1.00 [1.16]
	Decrease	1.05 [1.13]	1.07 [1.14]	1.05 [1.14]	1.05 [1.13]
Heart failure	Increase	1.00 [1.11]	1.00 [1.11]	1.02 [1.12]	1.01 [1.11]
	Decrease	1.02 [1.10]	1.03 [1.11]	1.03 [1.11]	1.02 [1.10]
Length of stay (days)					
1-3		1.	1.	1.	1.
4-6	Increase	1.00 [1.12]	0.99 [1.13]	1.00 [1.13]	1.02 [1.13]
	Decrease	1.05 [1.11]	1.06 [1.12]	1.05 [1.12]	1.06 [1.12]
7-11	Increase	1.02 [1.16]	1.00 [1.17]	1.01 [1.17]	1.02 [1.17]
	Decrease	1.14 [1.14]	1.15 [1.15]	1.15 [1.15]	1.16 [1.14]
12+	Increase	1.08 [1.23]	1.09 [1.24]	1.06 [1.25]	1.07 [1.24]
	Decrease	1.27 [1.20]	1.31 [1.22]	1.32 [1.22]	1.28 [1.21]
Intensive care					
None		1.	1.	1.	1.
Coronary care unit only	Increase	1.03 [1.15]	1.03 [1.16]	1.04 [1.16]	1.05 [1.15]
	Decrease	1.03 [1.13]	1.03 [1.15]	1.03 [1.14]	1.02 [1.14]
Intensive care unit only	Increase	1.01 [1.13]	1.01 [1.14]	1.00 [1.14]	1.01 [1.14]
	Decrease	1.05 [1.12]	1.06 [1.13]	1.05 [1.12]	1.05 [1.12]
Both	Increase	1.03 [1.20]	1.04 [1.21]	1.05 [1.21]	1.03 [1.21]
	Decrease	1.04 [1.18]	1.03 [1.20]	1.05 [1.20]	1.05 [1.19]
Cardiologist consult	Increase	1.04 [1.16]	1.03 [1.17]	1.01 [1.17]	1.05 [1.17]
	Decrease	0.95 [1.14]	0.93 [1.15]	0.94 [1.15]	0.95 [1.14]

		Fully adjusted model*	Prevalent statin users†	Post-AMI 6-month survival‡	No AMI 6- month post- AMI§
		N=113,296	N=101,905	N=101,015	N=104,572
Patient characteristics		OR [99% CLR]			
30-day follow-up					
None		1.	1.	1.	1.
Primary care provider only‡‡	Increase	1.08 [1.16]	1.05 [1.17]	1.11 [1.18]	1.07 [1.17]
	Decrease	0.97 [1.14]	0.98 [1.16]	0.95 [1.16]	0.97 [1.15]
Cardiologist only	Increase	1.15 [1.18]	1.14 [1.19]	1.19 [1.19]	1.16 [1.19]
	Decrease	0.91 [1.17]	0.91 [1.19]	0.92 [1.18]	0.91 [1.17]
Both	Increase	1.21 [1.16]	1.21 [1.17]	1.25 [1.17]	1.21 [1.17]
	Decrease	0.95 [1.14]	0.96 [1.16]	0.95 [1.15]	0.95 [1.15]

All four models are using the three-level multinomial logistic regression comparing decrease in adherence to no change and comparing increase in adherence to no change. No point estimates fell outside of the 99% confidence interval for the original full model (Model 1 from Table 2 in the main manuscript). *Fully adjusted model (Model 1 from Table 2 in the main manuscript). †Patients who were first identified as statin users in our data within the 6 months prior to index AMI were excluded (i.e. only prevalent statin users were included). ‡Patients must have survived 6 months post-AMI discharge to be included in model. §Patients with another AMI within 6 months after their index AMI hospital discharge were excluded from model. ¶Odds ratio for a 10% higher pre-AMI adherence (e.g. 50% compared to 40%). #CCI score does not include counts for AMI and dementia. **CCI definition. ††Medicare Chronic Condition Data Warehouse definition. ‡‡Primary care physician, physician assistant, or nurse practitioner. *Abbreviations:* AMI=acute myocardial infarction; PDC=proportion of days covered; OR=odds ratio; CLR=confidence limit ratio (upper 99% confidence limit divided by the lower limit); CCI=Charlson Comorbidity Index; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker.

Table S8. Three-level multinomial regression models predicting change from **1-year** pre-AMI statin adherence to **1-year** post-AMI statin adherence (N=112,780).

Patient Characteristics	3-Level Multinomial Logistic Regression†	
	Decrease	Increase
Pre-AMI PDC (10%)§	1.00 (0.99, 1.01)*	0.61 (0.61, 0.62)*
Age		
66-75	1.	1.
76-85	0.99 (0.94, 1.03)	0.98 (0.93, 1.04)
86+	0.98 (0.92, 1.04)	0.89 (0.82, 0.97)
Female	1.03 (0.98, 1.07)	1.05 (1.00, 1.11)
Race/ethnicity		
White	1.	1.
Black	1.17 (1.09, 1.26)	1.05 (0.96, 1.15)
Hispanic	1.26 (1.12, 1.42)	1.27 (1.11, 1.46)
Asian	0.97 (0.84, 1.12)	1.09 (0.92, 1.29)
Other	1.19 (1.04, 1.38)	1.15 (0.97, 1.37)
Dual eligibility	0.77 (0.73, 0.81)	1.18 (1.11, 1.26)
Household income#		
≤\$30,000	1.	1.
\$30,001-60,000	0.96 (0.92, 1.00)	0.99 (0.94, 1.05)
\$60,001-100,000	0.95 (0.89, 1.02)	1.05 (0.96, 1.15)
\$100,001-150,000	0.98 (0.84, 1.14)	1.10 (0.90, 1.33)
>\$150,000	0.91 (0.69, 1.19)	1.07 (0.76, 1.51)
Adjusted CCI**		
0	1.	1.
1-2	1.07 (1.01, 1.13)	0.92 (0.86, 0.98)
3-5	1.13 (1.06, 1.20)	0.87 (0.80, 0.94)
6-8	1.18 (1.08, 1.29)	0.86 (0.77, 0.97)
9 or more	1.56 (1.35, 1.80)	0.87 (0.71, 1.07)
Baseline comorbidities		
Prior AMI††	1.03 (0.94, 1.14)	1.00 (0.87, 1.14)
Dementia/Alz‡‡	1.18 (1.11, 1.26)	1.16 (1.06, 1.26)*
Depression	1.10 (1.05, 1.17)	1.03 (0.96, 1.10)
CABG	0.95 (0.78, 1.16)	1.28 (0.99, 1.64)
PTCA/stent	1.16 (1.07, 1.26)	0.84 (0.75, 0.95)
Ischemic heart disease	1.10 (1.05, 1.16)	0.81 (0.76, 0.86)
Unstable angina	1.05 (0.96, 1.15)	0.90 (0.79, 1.02)
Lipid abnormalities	0.98 (0.92, 1.05)	1.09 (1.00, 1.19)
Rhabdo/myopathy	1.09 (1.01, 1.17)	1.00 (0.90, 1.10)

<u>3-Level Multinomial Logistic Regression†</u>		
	OR (99% CI)	
Patient Characteristics	Decrease	Increase
Concurrent medications		
Beta-blocker	0.89 (0.86, 0.93)	0.98 (0.93, 1.04)
ACE inhibitor/ARB	0.97 (0.93, 1.01)	1.08 (1.02, 1.14)
Index admission		
Subend infarction§§	0.98 (0.93, 1.03)	0.89 (0.83, 0.95)
CABG	0.75 (0.68, 0.82)	1.37 (1.22, 1.53)
PTCA/stent	0.87 (0.82, 0.91)	1.24 (1.16, 1.32)
Platelet inhibitors	0.97 (0.88, 1.08)	0.90 (0.80, 1.02)
Cardiac catheterization	1.05 (0.98, 1.14)	1.03 (0.94, 1.13)
Angiocardiology	0.87 (0.80, 0.94)	1.09 (0.99, 1.19)
Cardiogenic shock	0.99 (0.86, 1.13)	1.10 (0.93, 1.29)
Cardiac dysrhythmias	1.03 (0.99, 1.08)	0.98 (0.93, 1.04)
Hypotension	0.99 (0.91, 1.08)	1.00 (0.89, 1.12)
Acute renal failure	1.09 (1.03, 1.15)	1.02 (0.95, 1.10)
Heart failure	1.01 (0.97, 1.06)	1.02 (0.96, 1.07)
Length of stay (days)		
1-3	1.	1.
4-6	1.04 (0.99, 1.09)	1.02 (0.96, 1.08)
7-11	1.10 (1.03, 1.16)	1.06 (0.98, 1.14)
12+	1.19 (1.09, 1.29)	1.14 (1.02, 1.27)
Intensive care		
None	1.	1.
CCU only	1.03 (0.97, 1.09)	1.03 (0.96, 1.11)
ICU only	1.06 (1.00, 1.11)	1.03 (0.96, 1.10)
Both	1.04 (0.97, 1.13)	1.05 (0.96, 1.16)
Cardiologist consult	0.95 (0.90, 1.01)	1.00 (0.93, 1.08)
30-day follow-up		
None	1.	1.
PCP only	0.98 (0.92, 1.04)	1.12 (1.03, 1.21)
Cardiologist only	0.90 (0.84, 0.97)	1.16 (1.06, 1.27)
Both	0.94 (0.88, 0.99)	1.27 (1.17, 1.37)

*Point estimate does not fall within the 99% confidence interval for the original full model (Model 1 from Table 2 in the main manuscript). †Three-level multinomial logistic regression comparing decrease in adherence to no change and comparing increase in adherence to no change. §Odds ratio for a 10% higher pre-AMI adherence (e.g. 50% compared to 40%). ¶Enrolled in Medicare and Medicaid. #Median household income of US Census block groups for individuals aged 65 and older. **CCI score does not include counts for AMI and dementia. ††CCI definition. ‡‡Medicare Chronic Condition Data Warehouse definition. §§Diagnosis code for subendocardial infarction, compared to a transmural infarction. ||Primary care physician, physician assistant, or nurse practitioner. *Abbreviations:* AMI=acute myocardial infarction; OR=odds ratio; CI=confidence interval; PDC=proportion of days covered; CCI=Charlson Comorbidity Index; Alz=Alzheimer's disease; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; Rhabdo=rhabdomyolysis; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker; subend=subendocardial; CCU=coronary care unit; ICU=intensive care unit; PCP=primary care provider.

Table S9. Three-level multinomial regression model predicting statin adherence change after an AMI using a likelihood function conditional on the pre-AMI adherence category.†

Patient Characteristics	3-Level Multinomial Logistic Regression‡	
	Decrease	Increase
OR (99% CI)		
Age		
66-75	1.	1.
76-85	0.98 (0.93, 1.02)	1.00 (0.95, 1.06)
86+	0.97 (0.90, 1.03)	0.97 (0.89, 1.06)*
Female	1.04 (0.99, 1.08)	1.02 (0.97, 1.08)
Race/ethnicity		
White	1.	1.
Black	1.29 (1.19, 1.40)	0.94 (0.86, 1.02)*
Hispanic	1.36 (1.19, 1.55)	1.09 (0.94, 1.25)*
Asian	0.98 (0.84, 1.15)	1.16 (0.96, 1.40)
Other	1.24 (1.06, 1.44)	1.02 (0.85, 1.23)
Dual eligibility§	0.77 (0.73, 0.82)	1.31 (1.23, 1.40)*
Household income		
≤\$30,000	1.	1.
\$30,001-60,000	0.95 (0.91, 1.00)	0.98 (0.93, 1.04)
\$60,001-100,000	0.95 (0.88, 1.03)	1.03 (0.94, 1.13)
\$100,001-150,000	0.99 (0.84, 1.17)	1.05 (0.86, 1.30)
>\$150,000	0.77 (0.56, 1.05)	1.06 (0.74, 1.52)
Adjusted CCI#		
0	1.	1.
1-2	1.04 (0.98, 1.11)	0.86 (0.80, 0.93)
3-5	1.10 (1.03, 1.18)	0.83 (0.76, 0.90)
6-8	1.17 (1.06, 1.29)	0.79 (0.70, 0.89)
9 or more	1.47 (1.26, 1.72)	0.72 (0.59, 0.88)
Baseline comorbidities		
Prior AMI**	1.14 (1.06, 1.22)	1.01 (0.93, 1.10)
Dementia/Alzheimer's††	1.07 (0.97, 1.19)	0.95 (0.83, 1.08)
Depression	1.12 (1.05, 1.19)	0.99 (0.92, 1.06)
CABG	1.11 (0.90, 1.37)	1.28 (0.98, 1.67)
PTCA/stent	1.14 (1.04, 1.26)	0.82 (0.73, 0.92)
Ischemic heart disease	1.11 (1.06, 1.17)	0.77 (0.73, 0.82)*
Unstable angina	1.05 (0.96, 1.16)	0.88 (0.78, 0.99)
Lipid abnormalities	0.97 (0.90, 1.05)	1.00 (0.92, 1.09)
Rhabdomyolysis/myopathy	1.18 (1.08, 1.28)	0.98 (0.89, 1.09)
Concurrent medications		
Beta-blocker	0.85 (0.81, 0.89)	0.99 (0.94, 1.05)
ACE inhibitor/ARB	0.92 (0.88, 0.96)	1.07 (1.02, 1.13)
Index admission		
Subendocardial infarction‡‡	0.97 (0.92, 1.03)	0.91 (0.85, 0.97)
CABG	0.77 (0.69, 0.86)	1.50 (1.32, 1.69)*
PTCA/stent	0.82 (0.77, 0.86)	1.33 (1.25, 1.42)*

Patient Characteristics	3-Level Multinomial Logistic Regression [‡]	
	Decrease	Increase
Platelet inhibitors	0.91 (0.81, 1.02)	0.99 (0.87, 1.12)
Cardiac catheterization	1.04 (0.95, 1.13)	1.10 (0.99, 1.21)
Angiocardiology	0.89 (0.81, 0.96)	1.05 (0.96, 1.16)
Cardiogenic shock	1.03 (0.89, 1.20)	1.10 (0.92, 1.32)
Cardiac dysrhythmias	1.00 (0.96, 1.05)	0.95 (0.90, 1.01)
Hypotension	1.00 (0.91, 1.11)	1.04 (0.92, 1.17)
Acute renal failure	1.05 (0.99, 1.12)	0.99 (0.92, 1.07)
Heart failure	1.02 (0.98, 1.07)	1.02 (0.96, 1.08)
Length of stay (days)		
1-3	1.	1.
4-6	1.06 (1.00, 1.11)	1.01 (0.95, 1.07)
7-11	1.14 (1.07, 1.22)	1.04 (0.96, 1.13)
12+	1.27 (1.16, 1.39)	1.06 (0.95, 1.19)
Intensive care		
None	1.	1.
Coronary care unit only	1.03 (0.97, 1.10)	1.04 (0.97, 1.13)
Intensive care unit only	1.06 (1.00, 1.12)	1.02 (0.96, 1.09)
Both	1.05 (0.96, 1.14)	1.00 (0.91, 1.11)
Cardiologist consult	0.95 (0.89, 1.01)	1.04 (0.96, 1.13)
30-day follow-up		
None	1.	1.
Primary care provider only ^{§§}	0.95 (0.89, 1.02)	1.12 (1.04, 1.21)
Cardiologist only	0.88 (0.82, 0.96)	1.22 (1.11, 1.33)
Both	0.92 (0.86, 0.98)	1.32 (1.22, 1.43)*

*Point estimate does not fall within the 99% confidence interval for the original full model (Model 1 from Table 2 in the main manuscript). [†]Using PROC NLMIXED in SAS, the likelihood function was defined as conditional on the pre-AMI adherence category. Patients who were moderately non-adherent (pre-AMI PDC 40-79.9%) were compared to the whole population on the likelihood of having no change, decreased, or increased adherence. Patients who were severely non-adherent (pre-AMI PDC <40%) were compared to patients who were severely non-adherent or moderately non-adherent on the likelihood of having no change or increased adherence. Patients who were adherent (pre-AMI PDC ≥80%) were compared to patients who were adherent or moderately non-adherent on the likelihood of having no change or decreased adherence. [‡]Three-level multinomial logistic regression comparing decrease in adherence to no change and comparing increase in adherence to no change. [§]Enrolled in Medicare and Medicaid. [¶]Median household income of US Census block groups for individuals aged 65 and older. [#]CCI score does not include counts for AMI and dementia. ^{**}CCI definition. ^{††}Medicare Chronic Condition Data Warehouse definition. ^{‡‡}Diagnosis code for subendocardial infarction, compared to a transmural infarction. ^{§§}Primary care physician, physician assistant, or nurse practitioner. *Abbreviations:* AMI=acute myocardial infarction; OR=odds ratio; CI=confidence interval; PDC=proportion of days covered; CCI=Charlson Comorbidity Index; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker.

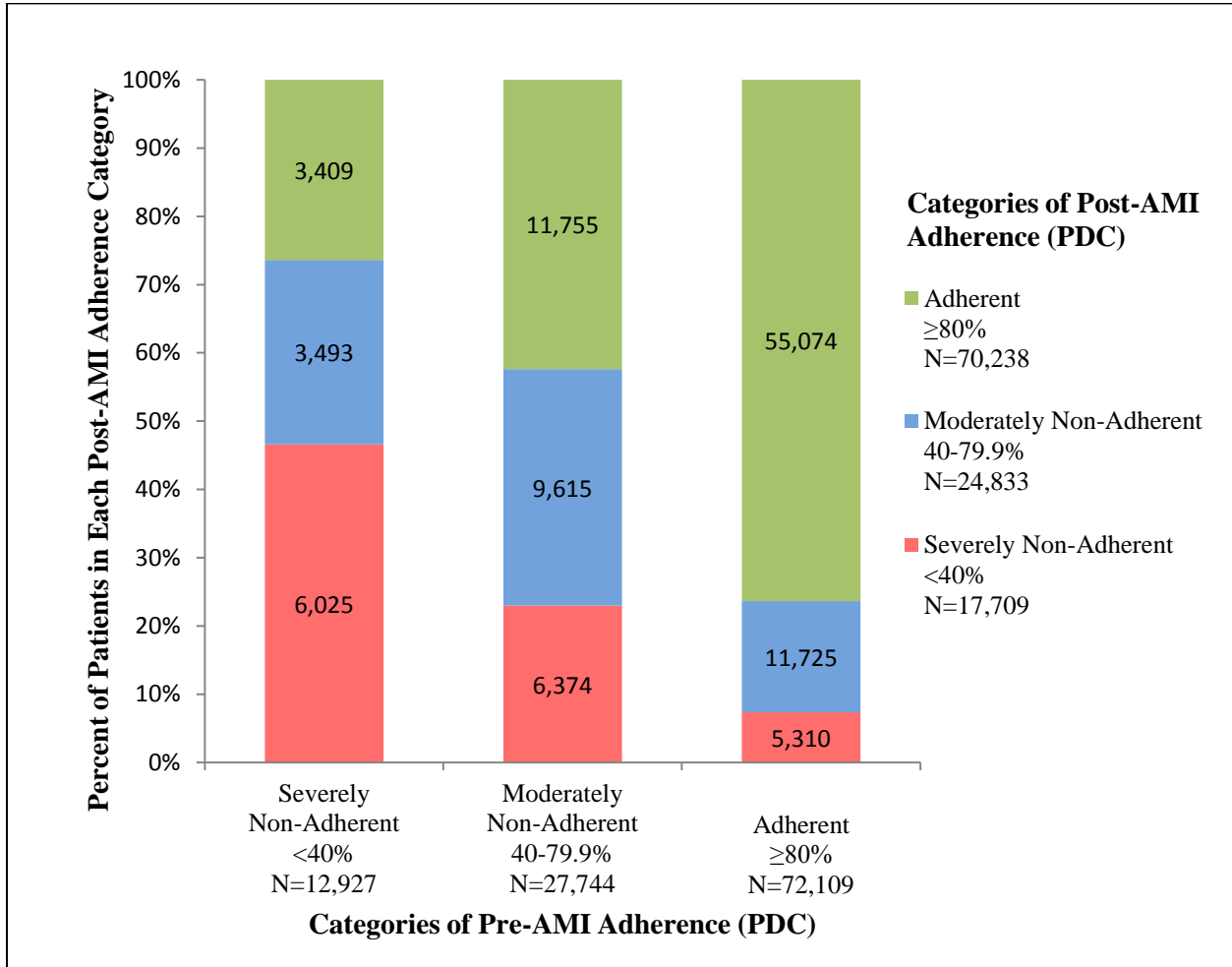
Table S10. Linear regression model predicting statin adherence change after an AMI.

Patient Characteristics	Mean Change in PDC (99% CI)*
Intercept†	-2.93 (-4.16, -1.70)
Pre-AMI PDC‡	-0.50 (-0.51, -0.50)
Age	
66-75	0.
76-85	0.13 (-0.33, 0.59)
86+	-0.05 (-0.71, 0.61)
Female	-0.04 (-0.47, 0.40)
Race/ethnicity	
White	0.
Black	-1.36 (-2.13, -0.59)
Hispanic	-0.38 (-1.63, 0.87)
Asian	0.92 (-0.53, 2.37)
Other	-0.64 (-2.15, 0.87)
Dual eligibility§	3.65 (3.12, 4.18)
Household income	
≤\$30,000	0.
\$30,001-60,000	0.31 (-0.14, 0.76)
\$60,001-100,000	0.71 (-0.04, 1.46)
\$100,001-150,000	0.65 (-0.95, 2.25)
>\$150,000	2.20 (-0.61, 5.01)
Adjusted CCI#	
0	0.
1-2	-1.20 (-1.78, -0.62)
3-5	-2.03 (-2.68, -1.38)
6-8	-2.68 (-3.63, -1.74)
9 or more	-5.49 (-7.12, -3.86)
Baseline comorbidities	
Prior AMI**	-0.88 (-1.93, 0.17)
Dementia/Alzheimer's††	-1.37 (-2.08, -0.66)
Depression	-0.69 (-1.29, -0.10)
CABG	0.59 (-1.52, 2.69)
PTCA/stent	-2.50 (-3.42, -1.57)
Ischemic heart disease	-2.67 (-3.15, -2.18)
Unstable angina	-1.04 (-2.02, -0.05)
Lipid abnormalities	0.29 (-0.41, 0.98)
Rhabdo/myopathy	-1.34 (-2.18, -0.50)
Concurrent medications	
Beta-blocker	0.70 (0.24, 1.16)
ACE inhibitor/ARB	0.77 (0.32, 1.21)

Patient Characteristics	Mean Change in PDC (99% CI)*
Index admission	
Subendocardial infarction‡‡	-0.61 (-1.15, -0.07)
CABG	5.02 (4.04, 6.00)
PTCA/stent	3.65 (3.12, 4.19)
Platelet inhibitors	0.79 (-0.24, 1.81)
Cardiac catheterization	0.49 (-0.31, 1.28)
Angiocardiology	1.31 (0.53, 2.09)
Cardiogenic shock	0.89 (-0.56, 2.33)
Cardiac dysrhythmias	-0.39 (-0.84, 0.06)
Hypotension	-0.01 (-0.96, 0.94)
Acute renal failure	-0.34 (-0.95, 0.26)
Heart failure	-0.10 (-0.55, 0.35)
Length of stay (days)	
1-3	0.
4-6	-0.39 (-0.89, 0.11)
7-11	-1.17 (-1.81, -0.54)
12+	-1.96 (-2.87, -1.06)
Intensive care	
None	0.
Coronary care unit only	0.18 (-0.42, 0.79)
Intensive care unit only	-0.23 (-0.76, 0.31)
Both	0.06 (-0.74, 0.87)
Cardiologist consult	0.92 (0.29, 1.56)
30-day follow-up	
None	0.
Primary care provider only§§	0.92 (0.26, 1.58)
Cardiologist only	2.37 (1.63, 3.11)
Both	2.44 (1.79, 3.08)

*Linear regression model predicting adherence change as a continuous outcome (post-AMI PDC minus pre-AMI PDC). Estimates can be interpreted as follows: an estimate of 2.44 means that the patient characteristic is associated with a 2.44% increase in PDC (e.g. 70.00% to 72.44%) compared to the reference category after an AMI, holding all other patient characteristics constant; an estimate of -1.96 means the patient characteristic is associated with a 1.96% decrease in PDC compared to the reference category after an AMI. †Predicted change in adherence for patients with a pre-AMI PDC of 80% and all other variables set to the reference category. ‡‡Predicted change in statin adherence associated with a 1% increase in pre-AMI PDC (e.g. a patient with a pre-AMI PDC of 75% would be predicted to have a 0.50% decrease in statin PDC after an AMI compared to a patient with 74% PDC pre-AMI). §Enrolled in Medicare and Medicaid. ¶Median household income of US Census block groups for individuals aged 65 and older. #CCI score does not include counts for AMI and dementia. **CCI definition. ††Medicare Chronic Condition Data Warehouse definition. ‡‡Diagnosis code for subendocardial infarction, compared to a transmural infarction. §§Primary care physician, physician assistant, or nurse practitioner. *Abbreviations:* AMI=acute myocardial infarction; PDC=proportion of days covered; CI=confidence interval; CCI=Charlson Comorbidity Index; CABG=Coronary artery bypass surgery; PTCA=percutaneous transluminal coronary angioplasty; ACE=angiotensin-converting enzyme; ARB=angiotensin II receptor blocker.

Figure S1. Sensitivity analysis showing distribution of **1-year** post-AMI adherence stratified by **1-year** pre-AMI adherence



AMI=acute myocardial infarction; PDC=proportion of days covered.