The Role of Chronic Kidney Disease in Modulating PCI Outcomes in Myocardial Infarction: Insights from the National Inpatient Sample

Analysis for RCOP NIS Cardio12

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## Preamble:

* **Reference Papers:**
  + [Holzmann et al. (2020)](https://doi.org/10.1161/JAHA.119.015084)
* **Study Objective**: Investigate the impact of chronic kidney disease (CKD) on percutaneous coronary intervention (PCI) outcomes in patients admitted with acute myocardial infarction (AMI) across U.S. hospitals from 2018 to 2020. The study evaluates whether outcomes vary based on CKD severity (Stage 1 to 5 or end-stage kidney disease [ESKD]), adjusting for demographic, clinical, and hospital factors.
* **Data Source**: Cross-sectional analysis using the National Inpatient Sample (NIS) from 2018 to 2020.
* **Patient Selection**: Included all inpatient admissions with:
  + A principal diagnosis of acute myocardial infarction (AMI) (ICD-10 DX codes I21.xx).
  + Documented chronic kidney disease (CKD), categorized by severity (Stages 1–5 or ESKD, ICD-10 DX codes N18[1-6].xx).
  + Underwent percutaneous coronary intervention (PCI) during hospitalization.
* **Primary Outcomes**:
  + In-hospital Mortality (binary: yes/no).
  + Length of Stay (LOS) (continuous: days).
  + Inflation-Adjusted Total Charge ($, inflation adjusted to 2020 dollars using Consumer Price Index [CPI] data from the U.S. Bureau of Labor Statistics).
* **Statistical Analysis**: Multivariable logistic and linear regression analyses were conducted to evaluate the independent association of CKD severity with each outcome, adjusting for:
  + Demographics and Clinical Factors: Age, sex, race/ethnicity, acute MI type (STEMI, NSTEMI, or other MI), insurance payer, income quartile, Charlson Comorbidity Index, atrial fibrillation, cerebrovascular disease, heart failure, diabetes mellitus, hyperlipidemia, hypertension, peripheral vascular disease, prior MI, and prior PCI.
  + Hospital Factors: Region, bed size, and location/teaching status.
* **Software:** All analyses were conducted using the R Statistical Language (Version 4.4.2; R Foundation for Statistical Computing, Vienna, Austria), employing survey-weighted methods to account for the complex sampling design of the NIS.

## Baseline Table:

| **Characteristic** | **Overall** N = 163,745*1* | **CKD, Stage 3** N = 93,830*1* | **CKD, Stage 1** N = 1,450*1* | **CKD, Stage 2** N = 14,005*1* | **CKD, Stage 4** N = 17,150*1* | **CKD, Stage 5** N = 1,755*1* | **ESKD** N = 35,555*1* | **p-value***2* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age, y | 70 (11) | 72 (11) | 65 (12) | 68 (11) | 72 (11) | 69 (12) | 65 (11) | <0.001 |
| Sex |  |  |  |  |  |  |  | <0.001 |
| Female | 56,805 (35%) | 32,120 (34%) | 390 (27%) | 3,455 (25%) | 6,670 (39%) | 710 (40%) | 13,460 (38%) |  |
| Male | 106,935 (65%) | 61,710 (66%) | 1,060 (73%) | 10,545 (75%) | 10,480 (61%) | 1,045 (60%) | 22,095 (62%) |  |
| Race |  |  |  |  |  |  |  | <0.001 |
| White | 110,915 (69%) | 70,045 (77%) | 1,005 (70%) | 9,855 (72%) | 12,105 (73%) | 1,005 (59%) | 16,900 (49%) |  |
| Asian or Pacific Islander | 6,110 (3.8%) | 2,510 (2.7%) | 80 (5.6%) | 400 (2.9%) | 715 (4.3%) | 115 (6.7%) | 2,290 (6.6%) |  |
| Black | 21,925 (14%) | 9,740 (11%) | 150 (10%) | 1,850 (14%) | 1,885 (11%) | 310 (18%) | 7,990 (23%) |  |
| Hispanic | 15,060 (9.4%) | 6,455 (7.1%) | 120 (8.4%) | 1,090 (8.0%) | 1,350 (8.1%) | 230 (13%) | 5,815 (17%) |  |
| Native American | 1,300 (0.8%) | 515 (0.6%) | 15 (1.0%) | 85 (0.6%) | 160 (1.0%) | 5 (0.3%) | 520 (1.5%) |  |
| Other | 4,450 (2.8%) | 2,295 (2.5%) | 60 (4.2%) | 360 (2.6%) | 460 (2.8%) | 50 (2.9%) | 1,225 (3.5%) |  |
| MI type |  |  |  |  |  |  |  | <0.001 |
| Non-ST-elevation MI | 124,740 (76%) | 70,025 (75%) | 965 (67%) | 10,125 (72%) | 12,900 (75%) | 1,200 (68%) | 29,525 (83%) |  |
| Other MI | 2,140 (1.3%) | 1,100 (1.2%) | 15 (1.0%) | 145 (1.0%) | 180 (1.0%) | 35 (2.0%) | 665 (1.9%) |  |
| ST-elevation MI | 36,865 (23%) | 22,705 (24%) | 470 (32%) | 3,735 (27%) | 4,070 (24%) | 520 (30%) | 5,365 (15%) |  |
| Expected primary payer |  |  |  |  |  |  |  | <0.001 |
| Medicaid | 10,560 (6.5%) | 5,175 (5.5%) | 100 (6.9%) | 1,165 (8.3%) | 1,070 (6.2%) | 160 (9.2%) | 2,890 (8.1%) |  |
| Medicare | 121,290 (74%) | 69,640 (74%) | 805 (56%) | 8,755 (63%) | 13,150 (77%) | 1,225 (70%) | 27,715 (78%) |  |
| Other | 7,365 (4.5%) | 4,575 (4.9%) | 80 (5.5%) | 865 (6.2%) | 640 (3.7%) | 110 (6.3%) | 1,095 (3.1%) |  |
| Private | 24,355 (15%) | 14,330 (15%) | 465 (32%) | 3,200 (23%) | 2,275 (13%) | 250 (14%) | 3,835 (11%) |  |
| Residential income |  |  |  |  |  |  |  | <0.001 |
| $1 - $51,999 | 49,360 (31%) | 26,905 (29%) | 330 (23%) | 4,105 (30%) | 5,035 (30%) | 525 (31%) | 12,460 (36%) |  |
| $52,000 - $65,999 | 44,755 (28%) | 26,260 (28%) | 350 (24%) | 4,000 (29%) | 4,755 (28%) | 410 (24%) | 8,980 (26%) |  |
| $66,000 - $87,999 | 38,845 (24%) | 22,820 (25%) | 340 (24%) | 3,235 (23%) | 4,070 (24%) | 430 (25%) | 7,950 (23%) |  |
| $88,000 or more | 28,370 (18%) | 16,485 (18%) | 410 (29%) | 2,500 (18%) | 3,010 (18%) | 350 (20%) | 5,615 (16%) |  |
| Hospital region |  |  |  |  |  |  |  | <0.001 |
| Midwest | 42,165 (26%) | 26,325 (28%) | 295 (20%) | 3,925 (28%) | 4,360 (25%) | 325 (19%) | 6,935 (20%) |  |
| Northeast | 24,115 (15%) | 13,390 (14%) | 295 (20%) | 2,120 (15%) | 2,695 (16%) | 265 (15%) | 5,350 (15%) |  |
| South | 65,175 (40%) | 36,455 (39%) | 500 (34%) | 5,470 (39%) | 6,875 (40%) | 750 (43%) | 15,125 (43%) |  |
| West | 32,290 (20%) | 17,660 (19%) | 360 (25%) | 2,490 (18%) | 3,220 (19%) | 415 (24%) | 8,145 (23%) |  |
| Hospital bedsize |  |  |  |  |  |  |  | 0.007 |
| Large | 90,350 (55%) | 51,165 (55%) | 960 (66%) | 8,135 (58%) | 9,495 (55%) | 1,010 (58%) | 19,585 (55%) |  |
| Medium | 47,560 (29%) | 27,660 (29%) | 325 (22%) | 3,735 (27%) | 4,900 (29%) | 525 (30%) | 10,415 (29%) |  |
| Small | 25,835 (16%) | 15,005 (16%) | 165 (11%) | 2,135 (15%) | 2,755 (16%) | 220 (13%) | 5,555 (16%) |  |
| Hospital location/teaching status |  |  |  |  |  |  |  | <0.001 |
| Rural | 8,290 (5.1%) | 5,420 (5.8%) | 60 (4.1%) | 640 (4.6%) | 830 (4.8%) | 90 (5.1%) | 1,250 (3.5%) |  |
| Urban, non-teaching | 27,100 (17%) | 15,940 (17%) | 245 (17%) | 2,160 (15%) | 2,880 (17%) | 250 (14%) | 5,625 (16%) |  |
| Urban, teaching | 128,355 (78%) | 72,470 (77%) | 1,145 (79%) | 11,205 (80%) | 13,440 (78%) | 1,415 (81%) | 28,680 (81%) |  |
| Charlson comorbidity index | 5.63 (1.52) | 5.53 (1.56) | 5.28 (1.51) | 5.24 (1.58) | 5.90 (1.48) | 5.79 (1.37) | 5.95 (1.36) | <0.001 |
| Atrial fibrillation | 40,010 (24%) | 23,425 (25%) | 300 (21%) | 3,135 (22%) | 4,215 (25%) | 355 (20%) | 8,580 (24%) | 0.010 |
| Cerebrovascular disease | 15,985 (9.8%) | 9,095 (9.7%) | 120 (8.3%) | 1,200 (8.6%) | 1,815 (11%) | 175 (10.0%) | 3,580 (10%) | 0.12 |
| Heart failure | 101,055 (62%) | 54,085 (58%) | 630 (43%) | 7,145 (51%) | 12,175 (71%) | 1,290 (74%) | 25,730 (72%) | <0.001 |
| Diabetes mellitus | 105,820 (65%) | 56,520 (60%) | 885 (61%) | 7,665 (55%) | 12,060 (70%) | 1,250 (71%) | 27,440 (77%) | <0.001 |
| Hyperlipidemia | 125,005 (76%) | 74,250 (79%) | 1,170 (81%) | 11,295 (81%) | 12,730 (74%) | 1,185 (68%) | 24,375 (69%) | <0.001 |
| Hypertension | 156,855 (96%) | 89,600 (95%) | 1,305 (90%) | 13,025 (93%) | 16,605 (97%) | 1,690 (96%) | 34,630 (97%) | <0.001 |
| Peripheral vascular disease | 26,000 (16%) | 15,295 (16%) | 205 (14%) | 1,945 (14%) | 2,920 (17%) | 205 (12%) | 5,430 (15%) | <0.001 |
| Prior MI | 33,290 (20%) | 19,125 (20%) | 240 (17%) | 2,725 (19%) | 3,350 (20%) | 300 (17%) | 7,550 (21%) | 0.056 |
| Prior PCI | 31,555 (19%) | 18,215 (19%) | 175 (12%) | 2,500 (18%) | 3,160 (18%) | 225 (13%) | 7,280 (20%) | <0.001 |
| *1*Mean (SD); n (%) | | | | | | | | |
| *2*Design-based KruskalWallis test; Pearson's X^2: Rao & Scott adjustment | | | | | | | | |

## Outcomes Table:

| **Characteristic** | **Overall** N = 163,745*1* | **CKD, Stage 3** N = 93,830*1* | **CKD, Stage 1** N = 1,450*1* | **CKD, Stage 2** N = 14,005*1* | **CKD, Stage 4** N = 17,150*1* | **CKD, Stage 5** N = 1,755*1* | **ESKD** N = 35,555*1* | **p-value***2* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Died during hospitalization | 8,745 (5.3%) | 4,180 (4.5%) | 25 (1.7%) | 475 (3.4%) | 1,245 (7.3%) | 205 (12%) | 2,615 (7.4%) | <0.001 |
| Length of stay (days) | 5 (2, 10) | 4 (2, 9) | 4 (2, 9) | 4 (2, 8) | 6 (3, 12) | 6 (3, 13) | 6 (3, 11) | <0.001 |
| Inflation-adjusted total charge ($) | 125,010 (79,189, 214,228) | 116,113 (75,122, 195,922) | 124,287 (79,120, 208,851) | 116,983 (75,514, 190,931) | 134,431 (82,327, 231,382) | 152,317 (87,110, 267,778) | 151,483 (92,825, 267,852) | <0.001 |
| *1*n (%); Median (Q1, Q3) | | | | | | | | |
| *2*Pearson's X^2: Rao & Scott adjustment; Design-based KruskalWallis test | | | | | | | | |

## Multivariable Logistic Regression:

### In-Hospital Mortality:

| **Characteristic** | **OR***1* | **95% CI***1* | **p-value** |
| --- | --- | --- | --- |
| CKD type |  |  |  |
| CKD, Stage 3 | — | — |  |
| CKD, Stage 1 | 0.37 | 0.14, 1.00 | 0.050 |
| CKD, Stage 2 | 0.84 | 0.67, 1.06 | 0.14 |
| CKD, Stage 4 | 1.50 | 1.28, 1.75 | <0.001 |
| CKD, Stage 5 | 2.45 | 1.71, 3.51 | <0.001 |
| ESKD | 2.02 | 1.78, 2.30 | <0.001 |
| Age, y | 1.03 | 1.02, 1.04 | <0.001 |
| Sex |  |  |  |
| Female | — | — |  |
| Male | 0.88 | 0.79, 0.97 | 0.015 |
| Race |  |  |  |
| White | — | — |  |
| Asian or Pacific Islander | 1.21 | 0.94, 1.55 | 0.14 |
| Black | 0.83 | 0.70, 0.98 | 0.026 |
| Hispanic | 0.91 | 0.76, 1.10 | 0.3 |
| Native American | 1.85 | 1.20, 2.83 | 0.005 |
| Other | 0.97 | 0.72, 1.31 | 0.9 |
| MI type |  |  |  |
| Non-ST-elevation MI | — | — |  |
| Other MI | 1.12 | 0.72, 1.76 | 0.6 |
| ST-elevation MI | 3.15 | 2.83, 3.50 | <0.001 |
| Expected primary payer |  |  |  |
| Medicaid | — | — |  |
| Medicare | 0.93 | 0.73, 1.19 | 0.6 |
| Other | 0.87 | 0.61, 1.24 | 0.4 |
| Private | 0.93 | 0.71, 1.21 | 0.6 |
| Residential income |  |  |  |
| $1 - $51,999 | — | — |  |
| $52,000 - $65,999 | 0.91 | 0.79, 1.05 | 0.2 |
| $66,000 - $87,999 | 0.89 | 0.77, 1.03 | 0.12 |
| $88,000 or more | 0.98 | 0.83, 1.15 | 0.8 |
| Hospital region |  |  |  |
| Midwest | — | — |  |
| Northeast | 0.81 | 0.68, 0.96 | 0.015 |
| South | 1.03 | 0.90, 1.18 | 0.6 |
| West | 1.12 | 0.95, 1.31 | 0.2 |
| Hospital bedsize |  |  |  |
| Large | — | — |  |
| Medium | 1.01 | 0.90, 1.14 | 0.8 |
| Small | 1.02 | 0.88, 1.18 | 0.8 |
| Hospital location/teaching status |  |  |  |
| Rural | — | — |  |
| Urban, non-teaching | 1.27 | 0.94, 1.72 | 0.12 |
| Urban, teaching | 1.46 | 1.10, 1.94 | 0.008 |
| Charlson comorbidity index | 1.07 | 1.02, 1.12 | 0.004 |
| Atrial fibrillation |  |  |  |
| No | — | — |  |
| Yes | 1.26 | 1.12, 1.41 | <0.001 |
| Cerebrovascular disease |  |  |  |
| No | — | — |  |
| Yes | 1.48 | 1.26, 1.74 | <0.001 |
| Heart failure |  |  |  |
| No | — | — |  |
| Yes | 1.98 | 1.74, 2.27 | <0.001 |
| Diabetes mellitus |  |  |  |
| No | — | — |  |
| Yes | 0.91 | 0.79, 1.05 | 0.2 |
| Hyperlipidemia |  |  |  |
| No | — | — |  |
| Yes | 0.51 | 0.46, 0.57 | <0.001 |
| Hypertension |  |  |  |
| No | — | — |  |
| Yes | 0.82 | 0.65, 1.03 | 0.084 |
| Peripheral vascular disease |  |  |  |
| No | — | — |  |
| Yes | 1.18 | 1.02, 1.36 | 0.022 |
| Prior MI |  |  |  |
| No | — | — |  |
| Yes | 0.74 | 0.64, 0.86 | <0.001 |
| Prior PCI |  |  |  |
| No | — | — |  |
| Yes | 0.67 | 0.57, 0.78 | <0.001 |
| *1*OR = Odds Ratio, CI = Confidence Interval | | | |

## Multivariable Linear Regression:

### Length of Stay:

| **Characteristic** | **Beta** | **95% CI***1* | **p-value** |
| --- | --- | --- | --- |
| CKD type |  |  |  |
| CKD, Stage 3 | — | — |  |
| CKD, Stage 1 | -0.19 | -0.87, 0.48 | 0.6 |
| CKD, Stage 2 | -0.39 | -0.62, -0.15 | 0.001 |
| CKD, Stage 4 | 1.4 | 1.1, 1.7 | <0.001 |
| CKD, Stage 5 | 1.9 | 1.0, 2.7 | <0.001 |
| ESKD | 1.4 | 1.1, 1.7 | <0.001 |
| Age, y | -0.01 | -0.01, 0.00 | 0.2 |
| Sex |  |  |  |
| Female | — | — |  |
| Male | -0.01 | -0.19, 0.17 | 0.9 |
| Race |  |  |  |
| White | — | — |  |
| Asian or Pacific Islander | 0.94 | 0.35, 1.5 | 0.002 |
| Black | 0.01 | -0.28, 0.29 | >0.9 |
| Hispanic | 0.84 | 0.49, 1.2 | <0.001 |
| Native American | 0.33 | -0.77, 1.4 | 0.6 |
| Other | 0.62 | -0.05, 1.3 | 0.071 |
| MI type |  |  |  |
| Non-ST-elevation MI | — | — |  |
| Other MI | 0.23 | -0.45, 0.91 | 0.5 |
| ST-elevation MI | -1.1 | -1.3, -0.93 | <0.001 |
| Expected primary payer |  |  |  |
| Medicaid | — | — |  |
| Medicare | -1.4 | -1.9, -0.84 | <0.001 |
| Other | -0.77 | -1.4, -0.14 | 0.017 |
| Private | -0.80 | -1.3, -0.28 | 0.003 |
| Residential income |  |  |  |
| $1 - $51,999 | — | — |  |
| $52,000 - $65,999 | -0.08 | -0.30, 0.14 | 0.5 |
| $66,000 - $87,999 | 0.02 | -0.22, 0.27 | 0.9 |
| $88,000 or more | -0.07 | -0.34, 0.20 | 0.6 |
| Hospital region |  |  |  |
| Midwest | — | — |  |
| Northeast | 1.2 | 0.79, 1.6 | <0.001 |
| South | 0.60 | 0.37, 0.83 | <0.001 |
| West | -0.25 | -0.53, 0.03 | 0.079 |
| Hospital bedsize |  |  |  |
| Large | — | — |  |
| Medium | -0.98 | -1.2, -0.75 | <0.001 |
| Small | -1.6 | -1.8, -1.3 | <0.001 |
| Hospital location/teaching status |  |  |  |
| Rural | — | — |  |
| Urban, non-teaching | 0.71 | 0.27, 1.1 | 0.001 |
| Urban, teaching | 1.8 | 1.4, 2.2 | <0.001 |
| Charlson comorbidity index | 0.28 | 0.19, 0.36 | <0.001 |
| Atrial fibrillation |  |  |  |
| No | — | — |  |
| Yes | 2.1 | 1.9, 2.3 | <0.001 |
| Cerebrovascular disease |  |  |  |
| No | — | — |  |
| Yes | 2.6 | 2.2, 3.0 | <0.001 |
| Heart failure |  |  |  |
| No | — | — |  |
| Yes | 2.6 | 2.4, 2.8 | <0.001 |
| Diabetes mellitus |  |  |  |
| No | — | — |  |
| Yes | -0.05 | -0.29, 0.20 | 0.7 |
| Hyperlipidemia |  |  |  |
| No | — | — |  |
| Yes | -1.8 | -2.1, -1.6 | <0.001 |
| Hypertension |  |  |  |
| No | — | — |  |
| Yes | -0.72 | -1.3, -0.10 | 0.024 |
| Peripheral vascular disease |  |  |  |
| No | — | — |  |
| Yes | -0.27 | -0.51, -0.03 | 0.029 |
| Prior MI |  |  |  |
| No | — | — |  |
| Yes | -1.2 | -1.4, -1.1 | <0.001 |
| Prior PCI |  |  |  |
| No | — | — |  |
| Yes | -1.5 | -1.7, -1.4 | <0.001 |
| *1*CI = Confidence Interval | | | |

### Inflation Adjusted Total Charge:

| **Characteristic** | **Beta** | **95% CI***1* | **p-value** |
| --- | --- | --- | --- |
| CKD type |  |  |  |
| CKD, Stage 3 | — | — |  |
| CKD, Stage 1 | 58 | -20,254, 20,369 | >0.9 |
| CKD, Stage 2 | -1,640 | -7,870, 4,589 | 0.6 |
| CKD, Stage 4 | 17,032 | 10,318, 23,745 | <0.001 |
| CKD, Stage 5 | 29,730 | 7,654, 51,805 | 0.008 |
| ESKD | 44,883 | 36,413, 53,352 | <0.001 |
| Age, y | -425 | -648, -203 | <0.001 |
| Sex |  |  |  |
| Female | — | — |  |
| Male | 7,412 | 2,407, 12,416 | 0.004 |
| Race |  |  |  |
| White | — | — |  |
| Asian or Pacific Islander | 29,245 | 10,246, 48,244 | 0.003 |
| Black | -5,284 | -12,736, 2,168 | 0.2 |
| Hispanic | 39,494 | 28,789, 50,198 | <0.001 |
| Native American | -15,435 | -39,321, 8,452 | 0.2 |
| Other | 40,023 | 15,663, 64,384 | 0.001 |
| MI type |  |  |  |
| Non-ST-elevation MI | — | — |  |
| Other MI | -7,727 | -26,362, 10,909 | 0.4 |
| ST-elevation MI | -4,748 | -10,506, 1,009 | 0.11 |
| Expected primary payer |  |  |  |
| Medicaid | — | — |  |
| Medicare | -10,882 | -20,851, -913 | 0.032 |
| Other | -3,660 | -16,913, 9,594 | 0.6 |
| Private | 320 | -12,168, 12,808 | >0.9 |
| Residential income |  |  |  |
| $1 - $51,999 | — | — |  |
| $52,000 - $65,999 | 260 | -5,879, 6,399 | >0.9 |
| $66,000 - $87,999 | 4,323 | -2,313, 10,960 | 0.2 |
| $88,000 or more | 6,539 | -2,327, 15,405 | 0.15 |
| Hospital region |  |  |  |
| Midwest | — | — |  |
| Northeast | 33,001 | 22,536, 43,467 | <0.001 |
| South | 39,152 | 32,423, 45,881 | <0.001 |
| West | 84,287 | 71,553, 97,021 | <0.001 |
| Hospital bedsize |  |  |  |
| Large | — | — |  |
| Medium | -8,828 | -18,166, 511 | 0.064 |
| Small | -20,751 | -29,962, -11,540 | <0.001 |
| Hospital location/teaching status |  |  |  |
| Rural | — | — |  |
| Urban, non-teaching | 36,234 | 25,435, 47,032 | <0.001 |
| Urban, teaching | 42,427 | 34,043, 50,812 | <0.001 |
| Charlson comorbidity index | 2,317 | -3.4, 4,638 | 0.050 |
| Atrial fibrillation |  |  |  |
| No | — | — |  |
| Yes | 40,248 | 34,475, 46,021 | <0.001 |
| Cerebrovascular disease |  |  |  |
| No | — | — |  |
| Yes | 50,371 | 41,561, 59,182 | <0.001 |
| Heart failure |  |  |  |
| No | — | — |  |
| Yes | 54,384 | 49,171, 59,597 | <0.001 |
| Diabetes mellitus |  |  |  |
| No | — | — |  |
| Yes | 833 | -5,885, 7,552 | 0.8 |
| Hyperlipidemia |  |  |  |
| No | — | — |  |
| Yes | -38,631 | -45,680, -31,581 | <0.001 |
| Hypertension |  |  |  |
| No | — | — |  |
| Yes | -17,932 | -34,164, -1,699 | 0.030 |
| Peripheral vascular disease |  |  |  |
| No | — | — |  |
| Yes | -3,300 | -10,971, 4,372 | 0.4 |
| Prior MI |  |  |  |
| No | — | — |  |
| Yes | -25,594 | -30,381, -20,807 | <0.001 |
| Prior PCI |  |  |  |
| No | — | — |  |
| Yes | -30,746 | -35,178, -26,315 | <0.001 |
| *1*CI = Confidence Interval | | | |