**Supplemental Table 2.** Variables Associated with Increasing Inpatient Hospital Costsa

|  | No AKI | AKIb | AKI-D |
| --- | --- | --- | --- |
| Variable | Adjusted % change in cost (95% CI)c |
| Age (per yr) | 0.67 (0.65, 0.69) | -0.44 (-0.48, -0.41)  | -0.52 (-0.62, -0.43) |
| Sex |  |  |  |
|  Male | Referent | Referent | Referent  |
|  Female | -12.7 (-13.3, -12.2) | -2.3 (-3.0, -1.5) | -1.6 (-4.0, 0.8) |
| Hospital teaching status |  |  |  |
|  Rural | Referent | Referent | Referent |
|  Urban nonteaching | 0.7 (-3.4, 4.7) | 6.3 (0.1, 12.5) | 11.4 (2.0, 20.8) |
|  Urban teaching  | 16.5 (12.0, 21.0) | 21.8 (14.9, 28.7) | 36.8 (26.5, 47.0) |
| Hospital region  |  |  |  |
|  Northeast | Referent | Referent | Referent  |
|  West | -10.0 (-14.0, -6.0) | -16.6 (-21.3, -12.0) | -9.8 (-16.7, -2.8) |
|  Midwest | -0.9 (-5.1, 3.4) | -9.4 (-14.2, -4.7) | -2.2 (-9.1, 4.7) |
|  South | 20.5 (15.7, 25.4) | 14.4 (9.2, 19.6) | 26.1 (17.5, 34.7) |
| Hospital bed number |  |  |  |
|  Small | Referent | Referent | Referent  |
|  Medium | -8.5 (-12.4, -4.6) | 0.6 (-4.1, 5.4) | 5.2 (-2.0, 12.5) |
|  Large | -2.5 (-6.4, 1.4) | 8.8 (3.8, 13.9) | 14.5 (7.3, 21.7) |
| Acute medical conditions  |  |  |  |
|  Myocardial infarction | -0.3 (-1.3, 0.7) | 3.5 (2.1, 4.9) | -5.9 (-9.8, -2.0) |
|  Stroke | 9.1 (7.9, 10.3) | 28.4 (27.0, 29.9) | 21.7 (16.1, 27.3) |
|  Venous thromboembolic disease | 25.7 (24.6, 26.8) | 43.8 (42.4, 45.3) | 37.4 (32.6, 42.2) |
|  Gastrointestinal bleed | -13.3 (-14.3, -12.3) | 9.8 (8.3, 11.2) | 20.3 (15.4, 25.1) |
|  Acute pancreatitis  | 12.1 (11.0, 13.2) | 28.2 (26.1, 30.3) | 20.7 (14.7, 26.8) |
|  Sepsis | 36.5 (35.3, 37.8) | 38.0 (37.1, 39.0) | 30.1 (27.2, 32.9) |
|  Pneumonia | 12.4 (11.5, 13.4) | 22.1 (20.9, 23.2) | 26.8 (23.7, 29.8) |
| Chronic comorbidities  |  |  |  |
|  Cancer | 28.1 (25.1, 31.1) | 24.6 (22.4, 26.7) | 20.6 (15.3, 26.0) |
|  Chronic kidney disease | -11.1 (-11.7, -10.5) | -1.5 (-2.5, -5.0) | -8.1 (-10.9, -5.2) |
|  Congestive heart failure | 0.5 (-0.2, 1.1) | 13.7 (12.9, 14.6) | 7.8 (5.1, 10.4) |
|  Dementia | -15.8 (-16.8, -14.9) | -7.0 (-7.9, -6.0) | -10.7 (-16.3, -5.1) |
|  Diabetes | 1.4 (1.0, 1.8) | -2.6 (-3.4, -1.7) | -7.4 (-10.0, -4.7) |
|  Human immunodeficiency virus | 19.2 (16.1, 22.2) | 7.1 (3.5, 10.7) | -2.7 (-12.3, 6.9) |
|  Hypertension | 6.1 (5.6, 6.5) | -5.8 (-6.8, -4.8) | -9.9 (-13.0, -6.7) |
|  Chronic obstructive pulmonary disease | -4.3 (-5.1, -3.4) | 0.5 (-0.3, 1.3) | -4.6 (-7.5, -1.7) |
|  Peripheral vascular disease | 0.0 (-0.7, 0.7) | 4.8 (3.8, 5.8) | 2.0 (-1.8, 5.8) |
| Hospital procedures  |  |  |  |
|  Intravenous contrast  | 48.3 (46.2, 50.5) | 29.4 (26.8, 32.0) | 18.1 (12.0, 24.1) |
|  Blood product transfusion | 53.0 (51.5, 54.5) | 46.1 (44.7, 47.5) | 20.5 (17.4, 23.5) |
|  Mechanical ventilation | 100.2 (98.7, 101.1) | 82.9 (81.5, 84.3) | 48.4 (45.0, 51.8) |
|  Non-invasive ventilation  | 25.1 (22.8, 27.4) | 23.9 (22.0, 25.8) | 10.8 (6.6, 15.0) |
|  Cardiopulmonary resuscitation  | -21.3 (-24.0, -18.5) | -22.6 (-25.7, -19.5) | -22.0 (-27.9, -16.1) |
|  Left ventricular assist device | 166.7 (154.5, 178.8) | 135.4 (122.6, 148.2) | 82.1 (67.1, 97.0) |
|  Extracorporeal membrane oxygenation  | 136.9 (111.9, 161.9) | 125.7 (111.2, 140.2) | 75.7 (58.9, 92.4) |
|  Echocardiogram | 16.5 (14.1, 18.9) | 21.3 (18.1, 24.5) | 12.4 (6.4, 18.5) |
|  Coronary angiogram | -13.2 (-15.6, -10.8) | 23.1 (20.1, 26.2) | 19.4 (13.4, 25.5) |
|  Percutaneous transluminal coronary angioplasty  | 41.2 (39.5, 43.0) | 30.1 (27.4, 32.9) | 16.3 (8.5, 24.0) |
|  Cardiopulmonary bypass | 53.5 (49.9, 57.1) | 54.8 (48.8, 60.9) | 45.3 (35.6, 55.1) |
|  Coronary artery bypass grafting  | 54.5 (50.9, 58.0) | 40.9 (34.8, 46.9) | 23.3 (13.5, 33.1) |
|  Heart valve surgery  | 64.2 (61.0, 67.5) | 59.6 (54.6, 64.6) | 32.2 (23.5, 40.9) |
|  Abdominal aortic aneurysm repair | 76.6 (74.2, 79.0) | 88.0 (82.4, 93.7) | 46.6 (36.2, 56.9) |
|  Carotid endarterectomy  | 12.2 (10.4, 14.0) | 58.1 (52.9, 63.3) | 28.6 (10.6, 46.6) |
|  Peripheral vascular surgery | 53.6 (51.7, 55.6) | 74.5 (71.4, 77.6) | 36.7 (28.7, 44.8) |

aUnless otherwise indicated, all comparisons are stratified by column and the reference group for each comparison is patients without the covariate of interest. For example, costs increased by 36.5% in patients with sepsis compared to patients without sepsis. Costs also increased by 38.0% in patients with AKI and sepsis compared to patients who experienced AKI without sepsis. Even though these relative cost increases are similar, the absolute cost increase is greater in the AKI with sepsis group because the AKI referent group has a higher baseline cost than the No AKI referent group.

bThe AKI group includes patients with AKI-D.

cAll cost estimates are adjusted for the demographic factors, hospital differences, comorbidities, and procedures listed in this supplementary table.

NOTE: Abbreviations: AKI, acute kidney injury; AKI-D, acute kidney injury requiring dialysis; CI, confidence interval.