Supplementary Material

- Supplementary Method. Procedure-related Readmission
- Figure S1. Inclusion of Patients with a Colon Operation or a Coronary Artery Bypass Grafting (2015-2016)
- Table S1. Unadjusted and Adjusted Difference in Median Hospital Costs, Revenues and Earnings Between Patients With and Without a Surgical Site Infection after Colon Operation or Coronary Artery Bypass Grafting (2015–2016)
- Supplementary Results.

Supplementary Method. Procedure-related Readmission

Consensus on specific procedure-related readmissions was sought by three researchers (FJ, JAR and AS), which were blinded to the respective financial data.

For procedure-related readmissions after coronary artery bypass graftings, we used the classification by Lancey, et al. ('clear' category).¹ Complications related to surgical site infections (SSI), acute vascular complications, pericardial effusion/tamponade, and arrhythmia/heart block were defined as clear procedure-related readmissions.

For procedure-related readmissions after colon surgery, we used the classification by Guinier, et al.² Complications related to SSI, anastomotic leak, wound disruption, stoma complication, surgical site hemorrhage, uninfected hematoma/seroma, and persistent postoperative fistula were defined as clear procedure-related readmissions. Any complication due to intraabdominal foreign bodies was considered as procedure-related readmission.

1. Lancey R, Kurlansky P, Argenziano M, et al. Uniform standards do not apply to readmission following coronary artery bypass surgery: A multi-institutional study. *J Thorac Cardiovasc Surg* 2015;149:850-857 e851; discussion 857.

2. Guinier D, Mantion GA, Alves A, et al. Risk factors of unplanned readmission after colorectal surgery: A prospective, multicenter study. *Dis Colon Rectum* 2007;50:1316-1323.

Figure S1. Inclusion of Patients with a Colon Operation or a Coronary Artery Bypass Grafting (2015-2016)



Abbreviations: CABG, Coronary Artery Bypass Grafting; SSI, surgical site infection.

- ^aWe excluded four patients who had both a colon operation and a CABG during the index hospitalization; we excluded one patient who had two unrelated colon operations during the index hospitalization.
- ^b We excluded one patient with two unrelated CABGs during the same index hospitalization.

Table S1. Unadjusted and Adjusted Difference in Median Hospital Costs, Revenues and Earnings Between Patients With and Without a Surgical Site Infection after Colon Operation or Coronary Artery Bypass Grafting (2015–2016)

| | Colon operation (n=229) | CABG (n=433) ^a |
|---|---------------------------------|-------------------------------------|
| Difference in median hospital costs [USD], 95% CI | | |
| — Unadjusted | 28,502 (17,430 to 46,158) | 53,015 (22,403 to 85,860) |
| — Adjusted ^b | 53,348 (34,091 to 69,436) | 55,547 (34,735 to 94,427) |
| Difference in median hospital revenues [USD], 95% Cl | | |
| — Unadjusted | 18,322 (11,558 to 23,572) | 30,091 (8,481 to 56,564) |
| — Adjusted ^b | 30,966 (17,650 to 41,064) | 33,222 (17,803 to 59,994) |
| Difference in median hospital earnings [USD], 95% CI | | |
| — Unadjusted | -9,895 (-18,105 to -3,544) | -23,169 (-33,520 to - 15,016) |
| — Adjusted ^b | -17,916 (-21,198 to -14,764) | -34,741 (-39,927 to - 30,287) |

Abbreviations: CABG, coronary artery bypass grafting; CI, confidence interval; USD, US Dollar.

Note: Values signify the difference in median hospital costs, revenues and earnings between patients with and without a surgical site infection after each colon operations and coronary artery bypass grafting; A positive difference (+) indicates higher median values for patients with a surgical site infection.

^a Includes patients with an index surgery from January 2015 through October 2016.

^b Adjusted for American Society of Anesthesiologists classification, emergency surgery (yes or no), surgery year (2015 or 2016), patient age, number of secondary diagnoses (International Classification of Diseases codes, version 10), and surgical procedure (only in CABG group; minimally invasive direct coronary artery bypass surgery or conventional bypass surgery).

Supplementary Results.

Earnings with privately insured patients

In colon surgery, 6/33 (18%) patients with a surgical site infection (SSI) and 54/196 (28%) patients without a SSI were privately insured, resulting in supplementary earnings for the hospital (median supplementary earnings per patient, \$16,309; interquartile range [IQR], \$11,529 to \$22,611; and \$14,261; IQR, \$4,331 to \$31,418, respectively). In coronary artery bypass grafting, 9/39 (23%) patients with a SSI and 114/394 (29%) patients without a SSI were privately insured, resulting in supplementary earnings for the hospital (median supplementary earnings per patient, \$25,778; IQR, \$20,768 to \$46,029; and \$20,747; IQR, \$11,100 to \$37,658, respectively).