**Supplementary Table 1. Colon Procedures Performed Either by Laparoscopic or Open Approach**

|  |  |
| --- | --- |
| **Surgical Procedure** | **ICD-9 Code** |
| Laparoscopic right hemicolectomy | 17.33 |
| Laparoscopic sigmoidectomy | 17.36 |
| Laparoscopic left hemicolectomy | 17.35 |
| Laparoscopic cecectomy | 17.32 |
| Laparoscopic resection of transverse colon | 17.34 |
| Open and other right hemicolectomy | 45.73 |
| Open and other sigmoidectomy | 45.76 |
| Open and other left hemicolectomy | 45.75 |
| Open and other cecectomy | 45.72 |
| Open and other resection of transverse colon | 45.74 |

**Supplementary Table 2. Changes in Hospital Surgical Site Infection Quartile Ranks by All Colon Procedures, Laparoscopic Procedures, and Open Procedures (including only procedures performed by >25% of hospitals).**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Quartile Based on Overall SSI Rate** | **Quartile Based on Laparoscopic SSI Rate** | | | | | |
| **N/A** | **1** | **2** | **3** | **4** | **Total** |
| **1** | 104 | **428** | 262 | 152 | 76 | 1022 |
| **2** | 330 | 164 | **233** | 224 | 70 | 1021 |
| **3** | 281 | 118 | 175 | **245** | 202 | 1021 |
| **4** | 95 | 109 | 149 | 197 | **472** | 1022 |
| **Total** | 817 | 819 | 819 | 818 | 820 | 4093 |

**Hospital rankings based on all vs. only laparoscopic procedures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Quartile Based on Overall SSI Rate** | **Quartile Based on Open SSI Rate** | | | | | |
| **N/A** | **1** | **2** | **3** | **4** | **Total** |
| **1** | 0 | **884** | 128 | 10 | 0 | 1022 |
| **2** | 14 | 102 | **734** | 163 | 8 | 1021 |
| **3** | 57 | 16 | 134 | **697** | 117 | 1021 |
| **4** | 1 | 2 | 7 | 133 | **879** | 1022 |
| **Total** | 79 | 1004 | 1003 | 1003 | 1004 | 4093 |

**Hospital rankings based on all vs. only**

**open procedures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Quartile Based on Laparoscopic SSI Rate** | **Quartile Based on Open SSI Rate** | | | | | |
| **N/A** | **1** | **2** | **3** | **4** | **Total** |
| **N/A** | 7 | 111 | 335 | 267 | 97 | 817 |
| **1** | 0 | **320** | 161 | 150 | 188 | 819 |
| **2** | 21 | 235 | **200** | 179 | 184 | 819 |
| **3** | 40 | 185 | 188 | **205** | 200 | 818 |
| **4** | 11 | 153 | 119 | 202 | **335** | 820 |
| **Total** | 79 | 1004 | 1003 | 1003 | 1004 | 4093 |

**Hospital rankings based on only laparoscopic vs only open procedures**

*Note:*

*SSI, surgical site infection*

*N/A; values in these columns / rows represent hospitals that did not perform the designated open or laparoscopic procedures*

*1 = best-performing quartile, 4 = worst performing quartile*

*Values in* ***bold*** *represent agreement between each ranking approach*

**Supplementary Table 3. Changes in Hospital Surgical Site Infection Quartile Ranks By All Colon Procedures, Laparoscopic Procedures, and Open Procedures (including only procedures performed either by laparoscopic or open approach [see eTable 1]).**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Quartile Based on Overall SSI Rate** | **Quartile Based on Laparoscopic SSI Rate** | | | | | |
| **N/A** | **1** | **2** | **3** | **4** | **Total** |
| **1** | 103 | **444** | 235 | 144 | 45 | 971 |
| **2** | 343 | 101 | **245** | 220 | 61 | 970 |
| **3** | 246 | 122 | 174 | **238** | 190 | 970 |
| **4** | 131 | 98 | 111 | 162 | **469** | 971 |
| **Total** | 1034 | 765 | 765 | 764 | 765 | 4093 |

**Hospital rankings based on all vs. only laparoscopic procedures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Quartile Based on Overall SSI Rate** | **Quartile Based on Open SSI Rate** | | | | | |
| **N/A** | **1** | **2** | **3** | **4** | **Total** |
| **1** | 0 | **773** | 146 | 48 | 4 | 971 |
| **2** | 20 | 98 | **642** | 195 | 15 | 970 |
| **3** | 65 | 65 | 119 | **563** | 158 | 970 |
| **4** | 8 | 12 | 40 | 140 | **771** | 971 |
| **Total** | 304 | 948 | 947 | 946 | 948 | 4093 |

**Hospital rankings based on all vs. only**

**open procedures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Quartile Based on Laparoscopic SSI Rate** | **Quartile Based on Open SSI Rate** | | | | | |
| **N/A** | **1** | **2** | **3** | **4** | **Total** |
| **N/A** | 211 | 116 | 329 | 238 | 140 | 1034 |
| **1** | 0 | **284** | 121 | 152 | 208 | 765 |
| **2** | 23 | 198 | **177** | 212 | 155 | 765 |
| **3** | 61 | 168 | 184 | **179** | 172 | 764 |
| **4** | 9 | 182 | 136 | 165 | **273** | 765 |
| **Total** | 304 | 948 | 947 | 946 | 948 | 4093 |

**Hospital rankings based on only laparoscopic vs only open procedures**

*Note:*

*SSI, surgical site infection*

*N/A; values in these columns / rows represent hospitals that did not perform the designated open or laparoscopic procedures*

*1 = best-performing quartile, 4 = worst performing quartile*

*Values in* ***bold*** *represent agreement between each ranking approach*

**Supplementary Figure 1: Scatterplots of Hospital Rankings by Laparoscopic and Open Procedures (including only procedures performed by >25% of hospitals)**



**Supplementary Figure 2: Scatterplots of Hospital Rankings by Laparoscopic and Open Procedures (including only procedures that can be performed by either laparoscopic or open approach)**

**