Price Transparency: Let the Data Speak

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Professor of Health Policy & Management, Johns Hopkins Bloomberg School of Public Health
Visiting Scholar, Health Analysis Division, Congressional Budget Office

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Hospital Revenue from Commercial Insured Payers: Colonoscopy

Exhibit 1: Median commercial negotiated price for colonoscopy among 1,225 disclosing hospitals

Source: Turquoise Health.

Jiang, Makary, & Bai
Health Affairs Forefront, 2021
### Commercial Negotiated Prices for CMS-specified 13 Shoppable Radiology Services, as of September 6, 2021

<table>
<thead>
<tr>
<th>Radiology Service</th>
<th>No. of Hospitals</th>
<th>Median No. of Plans</th>
<th>Median Negotiated Price</th>
<th>Price IQR</th>
<th>Price for 10th Percentile to 90th Percentile Range</th>
<th>Medicare Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT examination of head or brain without contrast material (CPT code 70450)</td>
<td>2236 (51)</td>
<td>11</td>
<td>$815</td>
<td>$36.5–$1275 (1.1)</td>
<td>$199–$1882 (2.1)</td>
<td>$137</td>
</tr>
<tr>
<td>MRI examination of brain before and after contrast material administration (CPT code 70558)</td>
<td>2158 (51)</td>
<td>11</td>
<td>$1788</td>
<td>$965–$3033 (1.2)</td>
<td>$550–$4209 (2.0)</td>
<td>$446</td>
</tr>
<tr>
<td>X-ray, lower back, minimum of four views (CPT code 72110)</td>
<td>2192 (51)</td>
<td>11</td>
<td>$291</td>
<td>$166–$453 (1.0)</td>
<td>$103–$657 (1.9)</td>
<td>$114</td>
</tr>
<tr>
<td>MRI examination of lower spinal canal (CPT code 72148)</td>
<td>2183 (51)</td>
<td>11</td>
<td>$1341</td>
<td>$676–$2148 (1.1)</td>
<td>$381–$3050 (2.0)</td>
<td>$269</td>
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<tr>
<td>CT examination of pelvis with contrast material (CPT code 72193)</td>
<td>2077 (51)</td>
<td>10</td>
<td>$1079</td>
<td>$548–$1694 (1.1)</td>
<td>$331–$2433 (1.9)</td>
<td>$221</td>
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<tr>
<td>MRI examination of leg joint (CPT code 73721)</td>
<td>2091 (51)</td>
<td>12</td>
<td>$1276</td>
<td>$690–$2050 (1.1)</td>
<td>$400–$2829 (1.9)</td>
<td>$267</td>
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<tr>
<td>CT examination of abdomen and pelvis with contrast material (CPT code 74177)</td>
<td>2238 (51)</td>
<td>11</td>
<td>$1654</td>
<td>$791–$3024 (1.3)</td>
<td>$453–$3430 (2.3)</td>
<td>$431</td>
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<tr>
<td>US of abdomen (CPT code 76700)</td>
<td>2227 (51)</td>
<td>11</td>
<td>$455</td>
<td>$225–$737 (1.1)</td>
<td>$154–$1008 (1.9)</td>
<td>$129</td>
</tr>
<tr>
<td>Abdominal US of pregnant uterus (CPT code 76805)</td>
<td>1873 (50)</td>
<td>11</td>
<td>$396</td>
<td>$225–$616 (1.0)</td>
<td>$144–$878 (1.9)</td>
<td>$120</td>
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<tr>
<td>US of pelvis through vagina (CPT code 76830)</td>
<td>2190 (51)</td>
<td>11</td>
<td>$359</td>
<td>$203–$562 (1.0)</td>
<td>$137–$783 (1.8)</td>
<td>$120</td>
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<tr>
<td>Mammography of one breast (CPT code 77065)</td>
<td>1708 (50)</td>
<td>12</td>
<td>$230</td>
<td>$157–$323 (0.7)</td>
<td>$102–$426 (1.4)</td>
<td>$101</td>
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<tr>
<td>Mammography of both breasts (CPT code 77066)</td>
<td>1726 (50)</td>
<td>11</td>
<td>$289</td>
<td>$190–$410 (0.8)</td>
<td>$126–$535 (1.4)</td>
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<td>Mammography, screening, bilateral (CPT code 77067)</td>
<td>1793 (50)</td>
<td>12</td>
<td>$235</td>
<td>$161–$333 (0.7)</td>
<td>$111–$428 (1.3)</td>
<td>$104</td>
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</tbody>
</table>

Jiang, Makary, & Bai
*Radiology* 2022
Hospital Revenue from Commercial Insured Payers: Radiology Services

<table>
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<td>$137</td>
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<tr>
<td>MRI examination of brain before and after contrast material administration (CPT code 70553)</td>
<td>2158 (51)</td>
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</tr>
</tbody>
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Jiang, Makary, & Bai
Radiology 2022
### Table 1
Commercial negotiated prices for the 22 CMS-defined shoppable surgery services.

<table>
<thead>
<tr>
<th>Service (CPT/DRG code)</th>
<th># Hospitals (# States)</th>
<th>Median negotiated rate</th>
<th>IQR (QR/median)</th>
<th>P10-P90 (P10-P90)/median</th>
<th>Medicare rate&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removal of 1 or more breast growth (19120)</td>
<td>1022 (92)</td>
<td>$3505</td>
<td>$2237-$5995 (1.1)</td>
<td>$4747-$9298 (2.9)</td>
<td>$2651</td>
</tr>
<tr>
<td>Shaving of donor bone using an endoscope (30636)</td>
<td>634 (45)</td>
<td>$3766</td>
<td>$1266-$7532 (1.7)</td>
<td>$405-$5,340 (8.4)</td>
<td>$5744</td>
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<tr>
<td>Removal of one knee cartilage using an endoscope (32911)</td>
<td>970 (40)</td>
<td>$4637</td>
<td>$2515-$7755 (1.8)</td>
<td>$974-$11,373 (1.9)</td>
<td>$3353</td>
</tr>
<tr>
<td>Removal of a large bowel using an endoscope (11238)</td>
<td>1362 (50)</td>
<td>$1665</td>
<td>$950-$2,090 (1.1)</td>
<td>$332-$2,749 (2.1)</td>
<td>$205</td>
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<tr>
<td>Biopsy of muscle, etc. using an endoscope (45259)</td>
<td>1425 (50)</td>
<td>$1665</td>
<td>$1055-$3,667 (1.0)</td>
<td>$550-$4,907 (2.1)</td>
<td>$503</td>
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<tr>
<td>Diagnostic examination of large bowel using an endoscope (43760)</td>
<td>1360 (50)</td>
<td>$1614</td>
<td>$1060-$3,561 (0.9)</td>
<td>$639-$3,976 (1.3)</td>
<td>$769</td>
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<tr>
<td>Biopsy of large bowel using an endoscope (43500)</td>
<td>1140 (50)</td>
<td>$1910</td>
<td>$1274-$3,012 (0.9)</td>
<td>$796-$4,400 (1.8)</td>
<td>$1011</td>
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<tr>
<td>Removal of pyelonephrectomy using an endoscope (43555)</td>
<td>1507 (51)</td>
<td>$1905</td>
<td>$1253-$3,061 (1.0)</td>
<td>$750-$4,557 (1.9)</td>
<td>$1004</td>
</tr>
<tr>
<td>Ultrasound examination of lower large bowel using an endoscope (43931)</td>
<td>1407 (46)</td>
<td>$2103</td>
<td>$1306-$3,203 (0.9)</td>
<td>$799-$4,060 (1.8)</td>
<td>$1012</td>
</tr>
<tr>
<td>Removal of bladder using an endoscope (43162)</td>
<td>1070 (92)</td>
<td>$5813</td>
<td>$4,220-$10,055 (1.2)</td>
<td>$1,771-$16,791 (2.3)</td>
<td>$4001</td>
</tr>
<tr>
<td>Repair of groin hernia, patient age 5 years or older (49056)</td>
<td>1040 (49)</td>
<td>$4770</td>
<td>$3,204-$7,205 (1.1)</td>
<td>$1,119-$4,11,346 (2.1)</td>
<td>$2900</td>
</tr>
<tr>
<td>Repair of posterior exam (60000)</td>
<td>1040 (49)</td>
<td>$5969</td>
<td>$1,130-$3,427 (1.2)</td>
<td>$307-$7,070 (2.9)</td>
<td>$1956</td>
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<tr>
<td>Surgical removal of prostate using an endoscope (65505)</td>
<td>422 (46)</td>
<td>$11,201</td>
<td>$6,004-$22,317 (0.9)</td>
<td>$3,260-$23,700 (2.3)</td>
<td>$7792</td>
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<tr>
<td>Routine obstetric care for vaginal delivery (60400)</td>
<td>279 (40)</td>
<td>$7700</td>
<td>$4,066-$9,497 (0.7)</td>
<td>$1,281-$7,932 (1.3)</td>
<td>$2108</td>
</tr>
<tr>
<td>Routine obstetric care for cesarean delivery (60510)</td>
<td>221 (38)</td>
<td>$14,111</td>
<td>$5,260-$3,291 (0.9)</td>
<td>$3,060-$20,036 (1.9)</td>
<td>$2992</td>
</tr>
<tr>
<td>Routine obstetric care for cesarean delivery after prior cesarean delivery (69510)</td>
<td>145 (52)</td>
<td>$35,515</td>
<td>$5,351-$7736 (0.9)</td>
<td>$3,730-$5,766 (1.5)</td>
<td>$3558</td>
</tr>
<tr>
<td>Injection of substance into spinal canal of lower back (69323)</td>
<td>696 (49)</td>
<td>$11,121</td>
<td>$7,000-$17,777 (2.0)</td>
<td>$4,372-$23,046 (2.0)</td>
<td>$619</td>
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<tr>
<td>Injection of substance into spinal canal of lower back using guidewire (63225)</td>
<td>1,320 (92)</td>
<td>$11,100</td>
<td>$8,222-$10,163 (0.9)</td>
<td>$4,096-$20,000 (2.9)</td>
<td>$827</td>
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<tr>
<td>Injection of drug into loose or capsule-sheared root (64485)</td>
<td>1,221 (92)</td>
<td>$13,271</td>
<td>$8,707-$1,000 (0.8)</td>
<td>$5,855-$25,075 (2.9)</td>
<td>$703</td>
</tr>
<tr>
<td>Removal of recurrent cysts in limb using laser (69321)</td>
<td>522 (40)</td>
<td>$10,045</td>
<td>$663-$1,601 (0.9)</td>
<td>$471-$1,8259 (1.3)</td>
<td>$507</td>
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<tr>
<td>Removal of cysts with insertion of tube (50043)</td>
<td>736 (40)</td>
<td>$3015</td>
<td>$2,412-$4,845 (0.3)</td>
<td>$1,830-$4,749 (1.5)</td>
<td>$1107</td>
</tr>
<tr>
<td>Inpatient Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac valve and other procedures with extracorporeal circulation (218)</td>
<td>600 (46)</td>
<td>$10,600</td>
<td>$7,240-$16,609 (1.5)</td>
<td>$5,679-$31,820 (2.4)</td>
<td>$70,266</td>
</tr>
<tr>
<td>Spinal fusion except cervical without complications (450)</td>
<td>500 (45)</td>
<td>$45,096</td>
<td>$33,587-$83,510 (1.4)</td>
<td>$3,353-$83,514 (1.4)</td>
<td>$27,516</td>
</tr>
<tr>
<td>Major joint replacement without complications (470)</td>
<td>1,300 (49)</td>
<td>$24,079</td>
<td>$17,062-$53,093 (1.7)</td>
<td>$13,100-$84,584 (1.7)</td>
<td>$31,406</td>
</tr>
<tr>
<td>Cervical spinal fusion without complications (473)</td>
<td>505 (47)</td>
<td>$26,570</td>
<td>$20,355-$40,525 (0.7)</td>
<td>$13,857-$66,151 (1.4)</td>
<td>$17,446</td>
</tr>
<tr>
<td>Uterine and female procedures for non-malignancy without complications (743)</td>
<td>1,019 (49)</td>
<td>$14,200</td>
<td>$10,480-$20,040 (1.6)</td>
<td>$7,466-$30,420 (1.6)</td>
<td>$2956</td>
</tr>
</tbody>
</table>

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*International Journal of Surgery* 2021
### Hospital Revenue from Commercial Payers: Surgery Services

**Outpatient Services**

<table>
<thead>
<tr>
<th>Service (CPT/DRG code)</th>
<th># Hospitals (# State)</th>
<th>Median negotiated rate</th>
<th>IQR (IQR/median)</th>
<th>P10-P90/[(P90-P10)/ median]</th>
<th>Medicare rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal of 1 or more breast growth (19120)</td>
<td>1022 (50)</td>
<td>$3508</td>
<td>$2237-$6039 (1.1)</td>
<td>$847-$9835 (2.6)</td>
<td>$2851</td>
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<tr>
<td>Shaving of shoulder bone using an endoscope (29826)</td>
<td>624 (48)</td>
<td>$3766</td>
<td>$1265-$7532 1.7</td>
<td>$462-$13,249 (3.4)</td>
<td>$3744</td>
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<tr>
<td>Removal of one knee cartilage using an endoscope (29881)</td>
<td>979 (50)</td>
<td>$4983</td>
<td>$2913-$7735 (1.0)</td>
<td>$1574-$11,073 (1.9)</td>
<td>$2663</td>
</tr>
<tr>
<td>Removal of tonsils patient younger than age 12 (42820)</td>
<td>715 (47)</td>
<td>$4530</td>
<td>$2396-$7490 (1.1)</td>
<td>$820-$12,025 (2.5)</td>
<td>$4474</td>
</tr>
<tr>
<td>Diagnostic examination of stomach, etc. using an endoscope (43235)</td>
<td>1353 (50)</td>
<td>$1556</td>
<td>$936-$2509 (1.0)</td>
<td>$532-$3749 (2.1)</td>
<td>$805</td>
</tr>
<tr>
<td>Biopsy of stomach, etc. using an endoscope (43239)</td>
<td>1425 (50)</td>
<td>$1656</td>
<td>$1056-$2667 (1.0)</td>
<td>$592-$4097 (2.1)</td>
<td>$803</td>
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<tr>
<td>Diagnostic examination of large bowel using an endoscope (45378)</td>
<td>1389 (50)</td>
<td>$1644</td>
<td>$1062-$2561 (0.9)</td>
<td>$639-$3676 (1.8)</td>
<td>$769</td>
</tr>
</tbody>
</table>

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*Jiang, Makary, & Bai*  
*International Journal of Surgery 2021*
### Table. Comparison of Hospital Cash Prices and Commercial Negotiated Prices for 70 Centers for Medicare and Medicaid Services-Specified Services (continued)

<table>
<thead>
<tr>
<th>Service</th>
<th>CPT/DRG Code</th>
<th>No. of hospitals (No. of states)</th>
<th>Cash price, median (IQR), $</th>
<th>No. (%) of hospitals</th>
<th>Cash price less than median commercial price</th>
<th>Cash price less than all commercial prices</th>
<th>Cash price equal to minimum commercial price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injections of drug into lower or sacral spine nerve root using imaging guidance</td>
<td>64483</td>
<td>901 (50)</td>
<td>1244 (804-2005)</td>
<td>511 (56.7)</td>
<td>186 (20.6)</td>
<td>24 (2.7)</td>
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</tr>
<tr>
<td>Removal of recurring cataract in lens capsule using laser</td>
<td>66821</td>
<td>329 (46)</td>
<td>1048 (608-1565)</td>
<td>173 (52.6)</td>
<td>72 (21.9)</td>
<td>12 (3.6)</td>
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</tr>
<tr>
<td>Removal of cataract with insertion of lens</td>
<td>66984</td>
<td>448 (49)</td>
<td>3678 (2344-6159)</td>
<td>213 (47.5)</td>
<td>47 (10.5)</td>
<td>9 (2.0)</td>
<td></td>
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<tr>
<td>Electrocardiogram, routine, with interpretation and report</td>
<td>93000</td>
<td>398 (48)</td>
<td>125 (52-144)</td>
<td>182 (45.7)</td>
<td>61 (15.3)</td>
<td>3 (0.8)</td>
<td></td>
</tr>
<tr>
<td>Insertion of catheter into left side of heart for diagnosis</td>
<td>93452</td>
<td>537 (46)</td>
<td>5977 (3816-8617)</td>
<td>329 (61.3)</td>
<td>77 (14.3)</td>
<td>20 (3.7)</td>
<td></td>
</tr>
<tr>
<td>Sleep study</td>
<td>95810</td>
<td>1087 (50)</td>
<td>2476 (1596-3534.7)</td>
<td>529 (48.7)</td>
<td>111 (10.2)</td>
<td>25 (2.3)</td>
<td></td>
</tr>
<tr>
<td>Physical therapy, therapeutic exercise</td>
<td>97110</td>
<td>1426 (51)</td>
<td>87.4 (63-129.8)</td>
<td>716 (50.2)</td>
<td>161 (11.3)</td>
<td>53 (3.7)</td>
<td></td>
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Jiang, Makary, & Bai

*JAMA Network Open* 2021
<table>
<thead>
<tr>
<th>No. (%) of hospitals</th>
<th>Cash price less than median commercial price&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Cash price less than all commercial prices&lt;sup&gt;e&lt;/sup&gt;</th>
<th>Cash price equal to minimum commercial price&lt;sup&gt;f&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>667 (42.1)</td>
<td>141 (8.9)</td>
<td>39 (2.5)</td>
<td></td>
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<tr>
<td>627 (48.0)</td>
<td>129 (9.9)</td>
<td>47 (3.6)</td>
<td></td>
</tr>
<tr>
<td>716 (45.8)</td>
<td>162 (10.4)</td>
<td>40 (2.6)</td>
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<tr>
<td>659 (53.1)</td>
<td>179 (14.4)</td>
<td>43 (3.5)</td>
<td></td>
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<tr>
<td>643 (51.6)</td>
<td>162 (13.0)</td>
<td>38 (3.0)</td>
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<tr>
<td>681 (52.5)</td>
<td>197 (15.2)</td>
<td>37 (2.9)</td>
<td></td>
</tr>
</tbody>
</table>

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**CONCLUSIONS:** Hospitals take into consideration the behavior of their peers in the same market when making price disclosure decisions. Compliant hospitals are likely to have better IT preparedness, more financial resources and personnel expertise to mitigate the cost required for the implementation of the Price Transparency Rule. The compliance cost, therefore, might be a barrier for some hospitals.

Jiang, Polsky, Littlejoin, Wang, Zare, & Bai
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Thank You!