RELATIVE PRICE

Health Care Provider Price Variation in the Massachusetts Commercial Market

February 2015
List of Figures

**Acute Hospitals:**

1. Distribution of Acute Hospital Inpatient Payments, by Relative Price (RP) Quartile, 2011-2013
2. Distribution of Acute Hospital Outpatient Payments, by RP Quartile, 2011-2013
3. Distribution of Acute Hospital Inpatient Relative Prices, by Payer, 2013 (Top 6 commercial payers, ranked by share of inpatient payments)
4. Distribution of Acute Hospital Outpatient Relative Prices, by Payer, 2013 (Top 6 commercial payers, ranked by share of outpatient payments)
5. Acute Hospital Composite RP Percentile (Blended), by Hospital Cohort, 2013
6. Distribution of Acute Hospital Payments, by System Affiliation, 2013
7. Acute Hospital Composite RP Percentile (Blended), by System, 2013
8. Acute Hospitals' Share of Total Hospital Payments, 2013

*Note: Acute hospital inpatient and outpatient relative prices and payments correspond to calendar year 2013 (CY 2013). Data as reported by 12 commercial payers for all commercial products combined.*

**Physician Groups:**

10. Distribution of Physician Group Relative Prices, by Payer, 2012 (Top 6 commercial payers, ranked by share of physician group payments)

*Source: Physician relative prices and payments correspond to calendar year 2012 (CY 2012). Data as reported by 11 commercial payers (no Network Health) for all commercial products combined.*

*Note: Calculated values reported in these figures are based on Relative Price values prior to rounding. Network Health did not report commercial business in 2012.*
Acute Hospitals
Commercial payments for inpatient services remained concentrated among the highest-priced acute hospitals. The distribution of payments fluctuated slightly in the last three years.

Figure 1: Distribution of Acute Hospital Inpatient Payments, by Relative Price Quartile

2011-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>4.1%</td>
<td>10.2%</td>
<td>20.7%</td>
<td>65.1%</td>
</tr>
<tr>
<td>2012</td>
<td>3.9%</td>
<td>11.9%</td>
<td>21.9%</td>
<td>62.4%</td>
</tr>
<tr>
<td>2013</td>
<td>4.4%</td>
<td>10.0%</td>
<td>21.6%</td>
<td>64.0%</td>
</tr>
</tbody>
</table>

Q1 (lowest RP) | Q2 | Q3 | Q4 (highest RP)

Percentages may not sum to 100% because of rounding.

Note: Celticare and United are excluded from 2012 and 2013, and Network Health is excluded from 2013, to align with 2011 data as reported. Celticare and United were excluded in 2011 because of data quality issues, and Network Health only reported commercial business in 2013.
Similarly, commercial payments for outpatient services also remained concentrated among higher-priced acute hospitals, though the share of payments to these hospitals declined slightly in recent years.

Figure 2: Distribution of Acute Hospital Outpatient Payments, by Relative Price Quartile
2011-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1 (lowest RP)</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4 (highest RP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>7.5%</td>
<td>17.3%</td>
<td>31.0%</td>
<td>44.1%</td>
</tr>
<tr>
<td>2012</td>
<td>8.4%</td>
<td>16.9%</td>
<td>29.0%</td>
<td>45.7%</td>
</tr>
<tr>
<td>2013</td>
<td>9.1%</td>
<td>18.2%</td>
<td>28.4%</td>
<td>44.3%</td>
</tr>
</tbody>
</table>

Note: Celticare and United are excluded from 2012 and 2013, and Network Health is excluded from 2013, to align with 2011 data as reported. Celticare and United were excluded in 2011 because of data quality issues, and Network Health only reported commercial business in 2013. Percentages may not sum to 100% because of rounding.
In each of the top six payers networks, more than half of total acute hospital payments for inpatient care were concentrated among hospitals that had relative prices that were at least 20% higher than the network average.

Figure 3: Distribution of Acute Hospital Inpatient Relative Prices, by Payer, 2013
(Top 6 commercial payers, ranked by share of total inpatient payments)

Note: Figure excludes six hospitals that serve specific patient populations, based either on age or type of medical condition. These "Other Specialty" hospitals are not considered comparable with other full-service acute hospitals and are not depicted in the figure. However, payments to these hospitals are incorporated into payers’ shares of total inpatient payments. Percentages may not sum to 100% because of rounding.
For the top three payers, outpatient payments similarly were more concentrated among hospitals with relative prices near the network median than inpatient payments.

Note: Figure excludes six hospitals that serve specific patient populations, based either on age or type of medical condition. These "Other Specialty" hospitals are not considered comparable with other full-service acute hospitals and are not depicted in the figure. However, payments to these hospitals are incorporated into payers’ shares of total outpatient payments. Percentages may not sum to 100% because of rounding.
All six academic medical centers, most teaching hospitals, and nearly all geographically isolated hospitals had prices that were higher than the network median across all payers’ networks.

Figure 5: Acute Hospital Composite RP Percentile (Blended), by Hospital Cohort, 2013

Note: Composite RP percentile for each hospital is equal to the simple average of all payers’ Blended RP percentiles for that hospital. “Blended” denotes that inpatient and outpatient RP results are combined. Bubbles denote each hospital’s composite RP percentile and are sized according to providers’ shares of total hospital payments. Note that the percentages do not sum to 100%: six hospitals were excluded because they deliver care to specific patient populations, based either on age or type of medical condition. These "Other Specialty" hospitals are not considered comparable with other cohorts, and are omitted from the analysis. These hospitals accounted for approximately 12% of total hospital payments in 2013. Grey bubbles denote “geographically isolated” hospitals, where the provider is the sole acute hospital within a 20-mile radius.
Nearly 70% of total acute hospital payments from commercial payers went to system-affiliated hospitals in 2013. Partners-affiliated hospitals received the largest share (31%), more than three times the share of the next largest system, CareGroup (10%).

Figure 6: Distribution of Total Acute Hospital Payments, by System Affiliation, 2013

Note: “Other Affiliated” includes acute hospitals affiliated with the following health systems: Baystate Health, Berkshire Health System, Cape Cod Health Care, Circle Health, Heywood Healthcare, Shriners Hospitals for Children, and Vanguard (now Tenet, as of November, 2013).
As in previous years, Partners-affiliated hospitals consistently had prices above each payer’s network median. Most Steward-affiliated hospitals had prices below the network median.

**Figure 7: Acute Hospital Composite RP Percentile (Blended), by System, 2013**

Note: Composite RP percentile for each hospital is equal to the simple average of all payers’ Blended RP percentiles for that hospital. “Blended” denotes that inpatient and outpatient RP results are combined. “Other Affiliated” includes hospitals affiliated with the following systems: Baystate, Berkshire, Cape Cod, Circle Health, Shriners, and Vanguard. Bubbles denote each hospital’s composite RP percentile, and are sized according to providers’ shares of total hospital payments. Note that percentages do not sum to 100%; six hospitals were excluded because they deliver care to specific patient populations, based either on age or type of medical condition. These "Other Specialty" hospitals are not considered comparable with other cohorts, and are omitted from the analysis. “Geographically isolated” indicates that the hospital was the sole acute hospital within a 20-mile radius.
Higher-priced hospitals tended to represent a larger share of all payments to acute hospitals

Figure 8a: Acute Hospitals’ Share of Total Commercial Hospital Payments, 2013

Note: Composite RP percentile for each hospital is equal to the simple average of all payers’ Blended RP percentiles for that hospital. “Blended” denotes that inpatient and outpatient RP results are combined. An asterisk at the end of the hospital name label denotes a “geographically isolated” facility, defined as a sole acute hospital within a 20-mile radius.
Higher-priced hospitals tended to represent a larger share of all payments to acute hospitals

Figure 8b: Acute Hospitals’ Share of Total Commercial Hospital Payments, 2013

Composite RP Percentile (Blended)

- Nantucket Cottage Hospital (91)*
- Cooley Dickinson Hospital (76)
- North Adams Regional Hospital (71)*
- South Shore Hospital (71)
- Newton-Wellesley Hospital (67)
- Jordan Hospital (47)
- Hallmark Health (47)
- Milford Regional Medical Center (45)
- MetroWest Medical Center (44)
- Beth Israel Deaconess Hospital - Needham (43)
- Nashoba Valley Medical Center (43)
- Norwood Hospital (43)
- Winchester Hospital (41)
- Baystate Mary Lane Hospital (40)
- Emerson Hospital (40)
- Northeast Hospital (39)
- Saints Medical Center (37)
- Lowell General Hospital (32)
- Anna Jaques Hospital (23)
- Beth Israel Deaconess Hospital - Milton (14)

Note: Composite RP percentile for each hospital is equal to the simple average of all payers' Blended RP percentiles for that hospital. “Blended” denotes that inpatient and outpatient RP results are combined. An asterisk at the end of the hospital name label denotes a “geographically isolated” facility, defined as a sole acute hospital within a 20-mile radius.
Higher-priced hospitals tended to represent a larger share of all payments to acute hospitals

Figure 8c: Acute Hospitals’ Share of Total Commercial Hospital Payments, 2013

Note: Composite RP percentile for each hospital is equal to the simple average of all payers’ Blended RP percentiles for that hospital. “Blended” denotes that inpatient and outpatient RP results are combined. An asterisk at the end of the hospital name label denotes a “geographically isolated” facility, defined as a sole acute hospital within a 20-mile radius.
Physician Groups
More than three-quarters of payments were clustered among the higher-priced physician groups, though the share of payments to these providers declined slightly in the last three years.

Figure 9: Distribution of Physician Group Payments, by Relative Price Quartile, 2010-2012

Note: This figure includes only payments made to physician groups that were included in the relative price calculation after thresholds were applied, accounting for 87% of total commercial payments to physician groups. An additional $0.77 billion was paid to individual physicians and groups for which relative prices were not computed. Celticare and Cigna are excluded from 2011 and 2012, to align with 2010 data as reported. Physician Group RP data reported by Cigna and Celticare were not included in 2010 because of data quality concerns. Percentages may not sum to 100% because of rounding.
Physician group prices clustered near the network median price in most payers’ networks. For HPHC and Tufts, roughly half of total payments to physician groups were concentrated among the three highest-priced physician groups.

Figure 10: Distribution of Physician Group Relative Prices, by Payer, 2012
(Top 6 commercial payers, ranked by share of physician group payments)

Blue Cross Blue Shield of Massachusetts
- (52%) - 52%
  - N=5: 5%
  - N=8: 28%
  - N=7: 45%
  - N=3: 21%

Harvard Pilgrim Health Care
- (22%) - 22%
  - N=5: 1%
  - N=11: 9%
  - N=10: 37%
  - N=3: 52%

Tufts Health Plan
- (12%) - 12%
  - N=4: 5%
  - N=11: 9%
  - N=2: 3%
  - N=4: 12%

Fallon
- (3%) - 3%
  - N=4: 5%
  - N=11: 9%
  - N=2: 3%
  - N=4: 12%

Health New England
- (3%) - 3%
  - N=10: 28%
  - N=4: 66%
  - N=1: <1%
  - N=4: 6%

Aetna
- (2%) - 2%
  - N=11: 12%
  - N=11: 36%
  - N=3: 12%
  - N=5: 40%

Relative Price

Note: Percentages may not sum to 100% because of rounding.
Seventy percent of all physician payments from commercial payers went to system-affiliated physician groups in 2012. Partners-affiliated physician groups received the largest share (26%), more than double the share of the next largest system, Atrius (11%).

Figure 11: Distribution of Physician Group Payments, by System Affiliation, 2012

Note: “Other Affiliated” includes physician groups affiliated with the following health systems: Baystate Health, Berkshire Health System, Circle Health, Lahey Health, UMass, and Vanguard (now Tenet, as of November, 2013).
System-affiliated physician groups tended to have prices that were above the network median for all payers, whereas most unaffiliated physician groups had prices that fell below the network median.

Figure 12: Physician Group Composite RP Percentile (Blended), Top 30 Physician Groups, by System Affiliation, 2012

Note: Composite RP percentile for each physician group is equal to the simple average of all payers’ RP percentiles for that group. “Other Affiliated” includes physician groups affiliated with the following health systems: UMass, Baystate, Lahey Health, Circle Health, Berkshire, and Vanguard (now Tenet, as of November, 2013). This figure depicts the Top 30 physician groups, according to share of total physician payments across all payers.
Higher-priced physician groups tended to represent a larger share of all payments to physicians.

Figure 13: Physician Groups’ Share of Total Commercial Physician Group Payments, 2012

Note: Composite RP percentile for each physician group is equal to the simple average of all payers’ RP percentiles for that physician group. This figure depicts the Top 30 physician groups, according to share of total physician payments across all payers.