Commonwealth
of Massachusetts

Center for Health
Information and Analysis

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Executive Director

# Health Care Provider Price Variation in the Massachusetts Commercial Market

## Baseline Report Chartpack

November 2012

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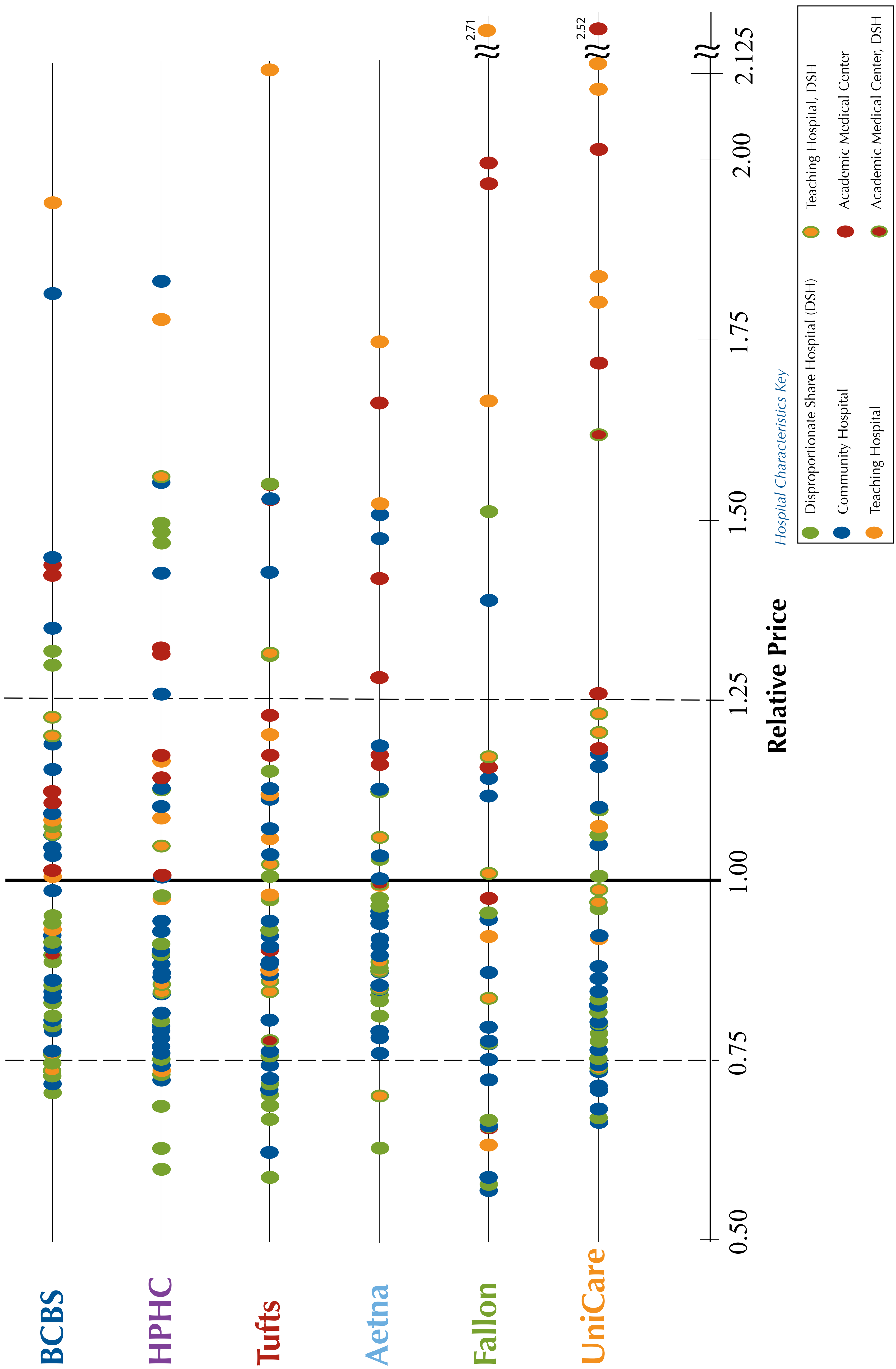
Center for Health
Information and Analysis

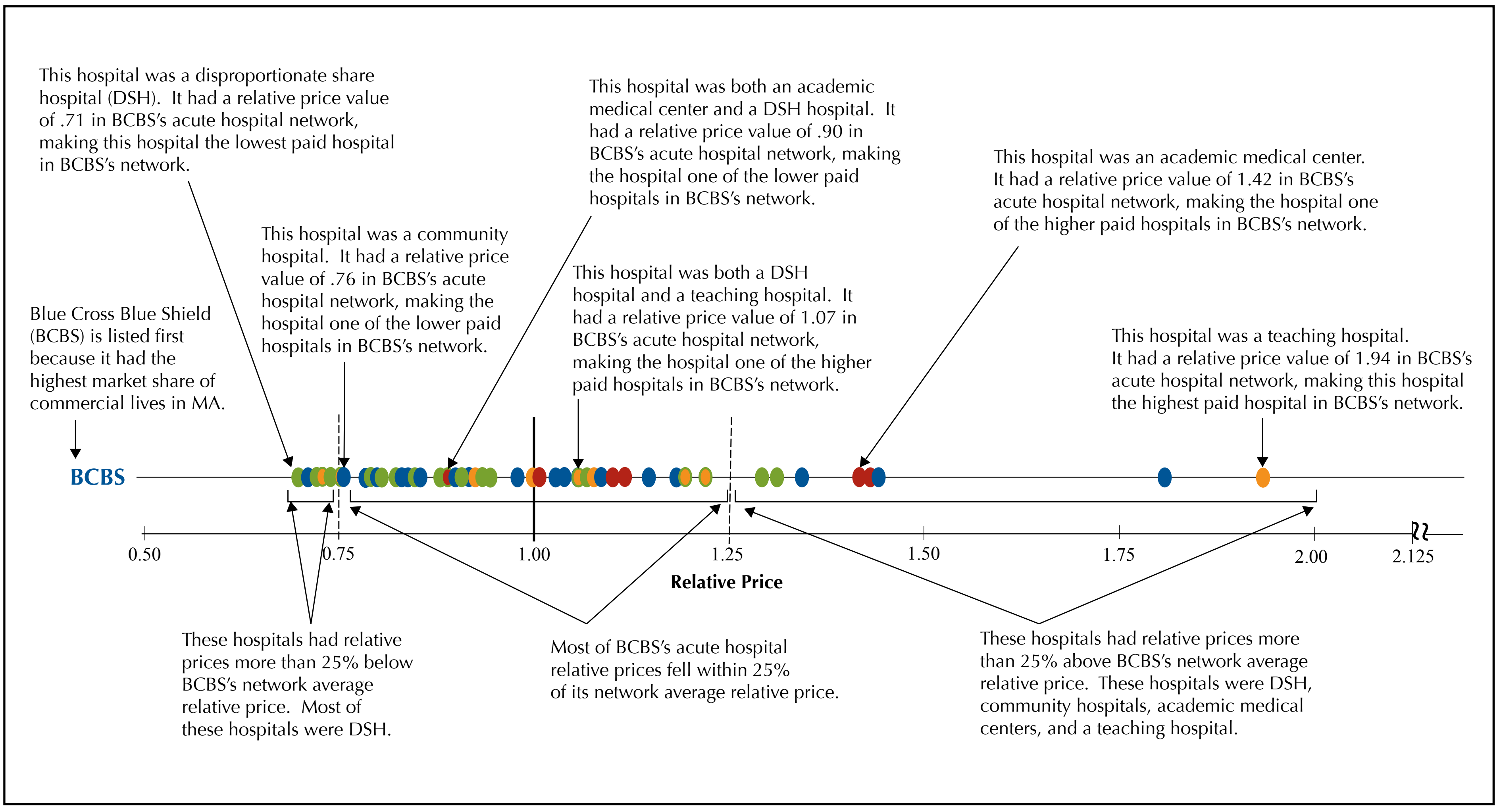
## Figure 1 – Distribution of 2010 Acute Hospital Blended Relative Prices by Payer



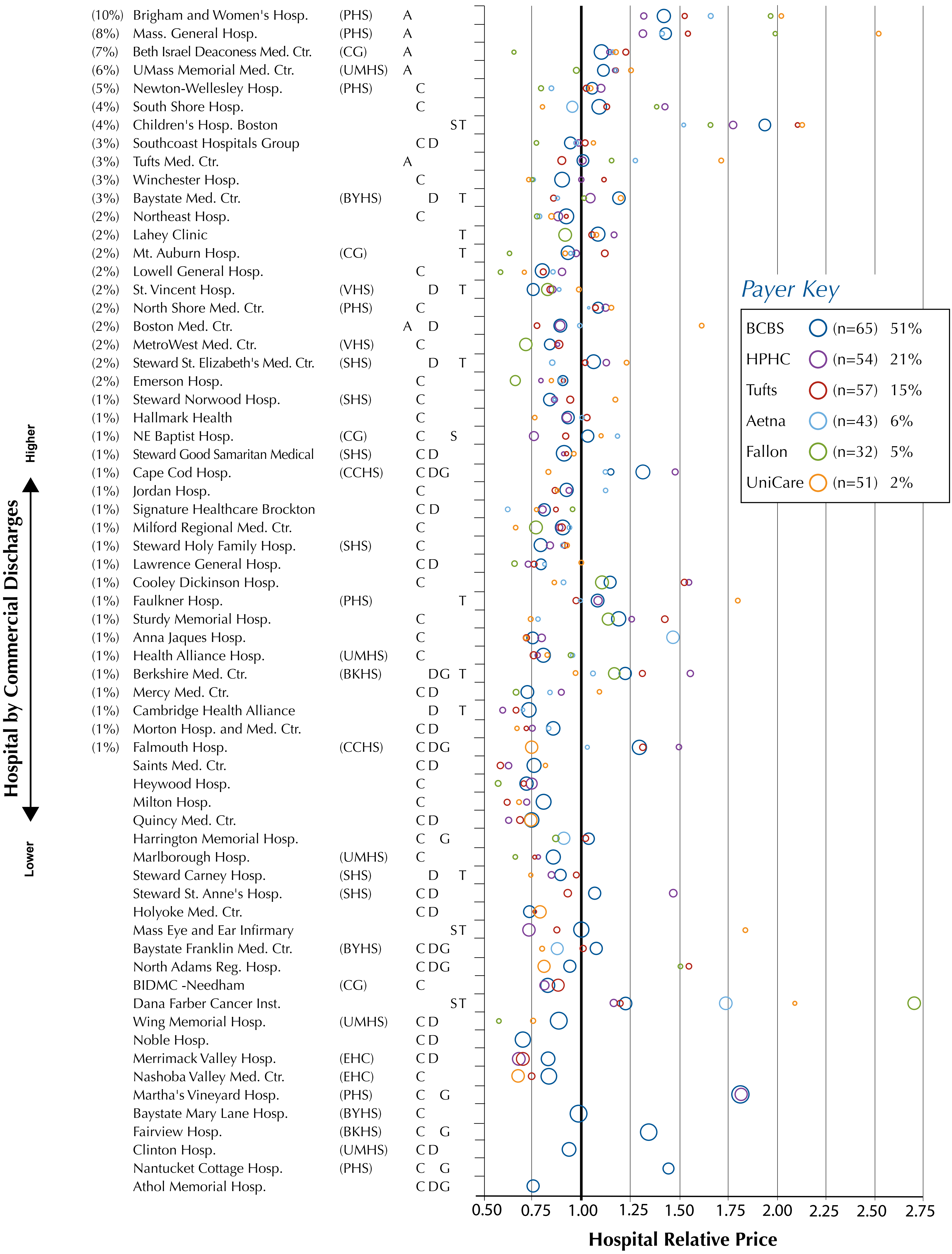
## How to Read Figure 1:

This figure shows the distribution of acute hospitals' blended relative prices for each payer. The payers are ordered by market share (i.e. number of covered lives), with the payer with the highest market share on top. The circles located within the two dashed lines represent hospitals within 25% of each payer's network average relative price. Hospitals are distinguished by their hospital characteristics, as described in the legend.

### *Figure 1 Sample*



# Figure 2 - 2010 Acute Hospital Blended Relative Prices



# How to Read Figure 2:

This figure shows the relative price for each hospital, for each payer. Data is displayed for acute hospitals where the amount of revenue from a payer met the applicable revenue threshold. The hospitals are ordered by market share, with the percentage of that hospital's share of statewide inpatient discharges of commercially insured patients listed on the left. The characteristics of each hospital and the system affiliation are shown to the right of the hospital's name.

## *Hospital Characteristics Key*

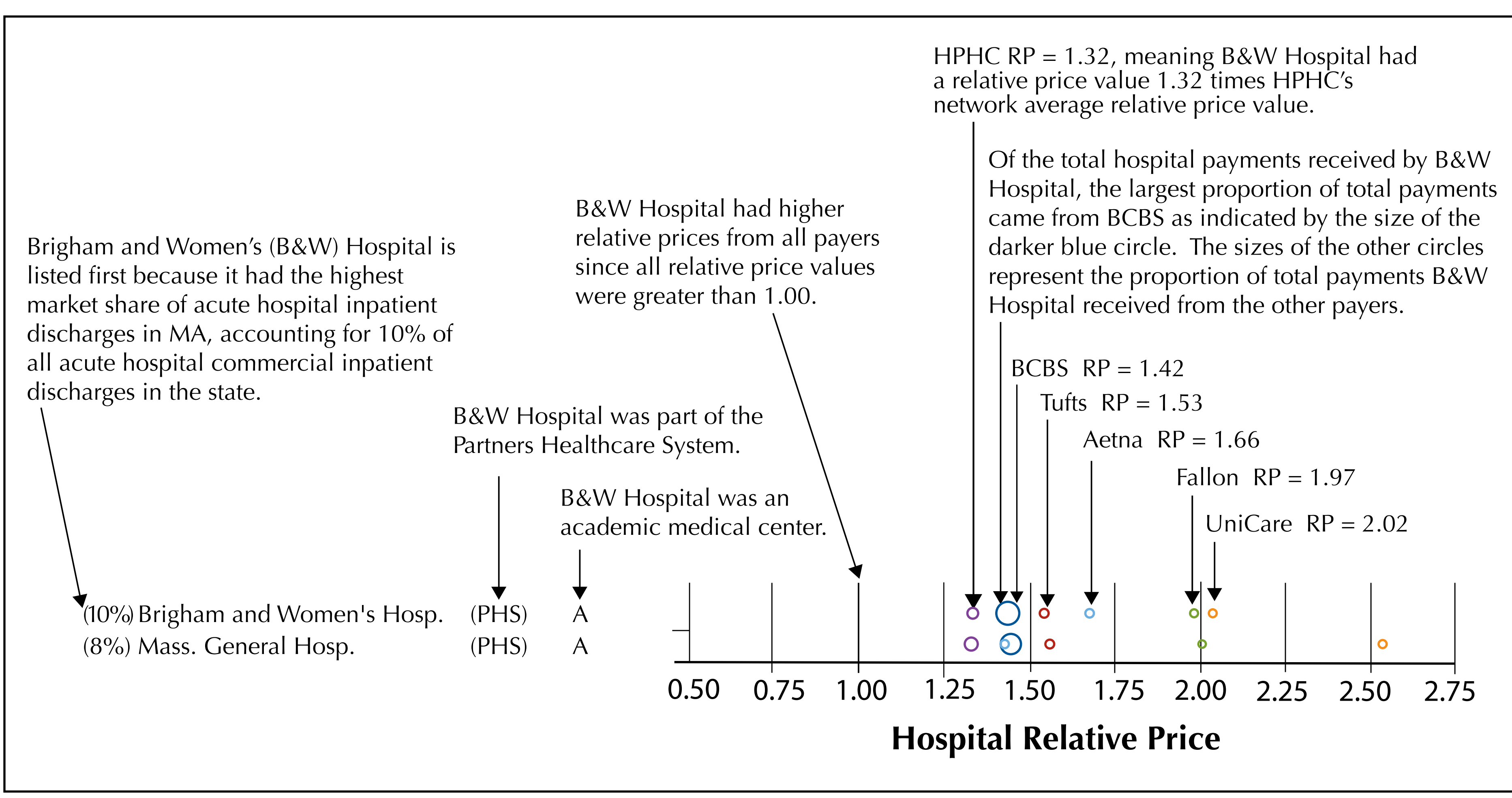
A = Academic Medical Center (n=6)
C = Community Hospital (n=47)
D = Disproportionate Share Hospital (n=26)
G = Geographically Isolated Hospital (n=10)
S = Specialty Hospital (n=4)
T = Non-Academic, Teaching Hospital (n=12)

## *System Affiliation Key*

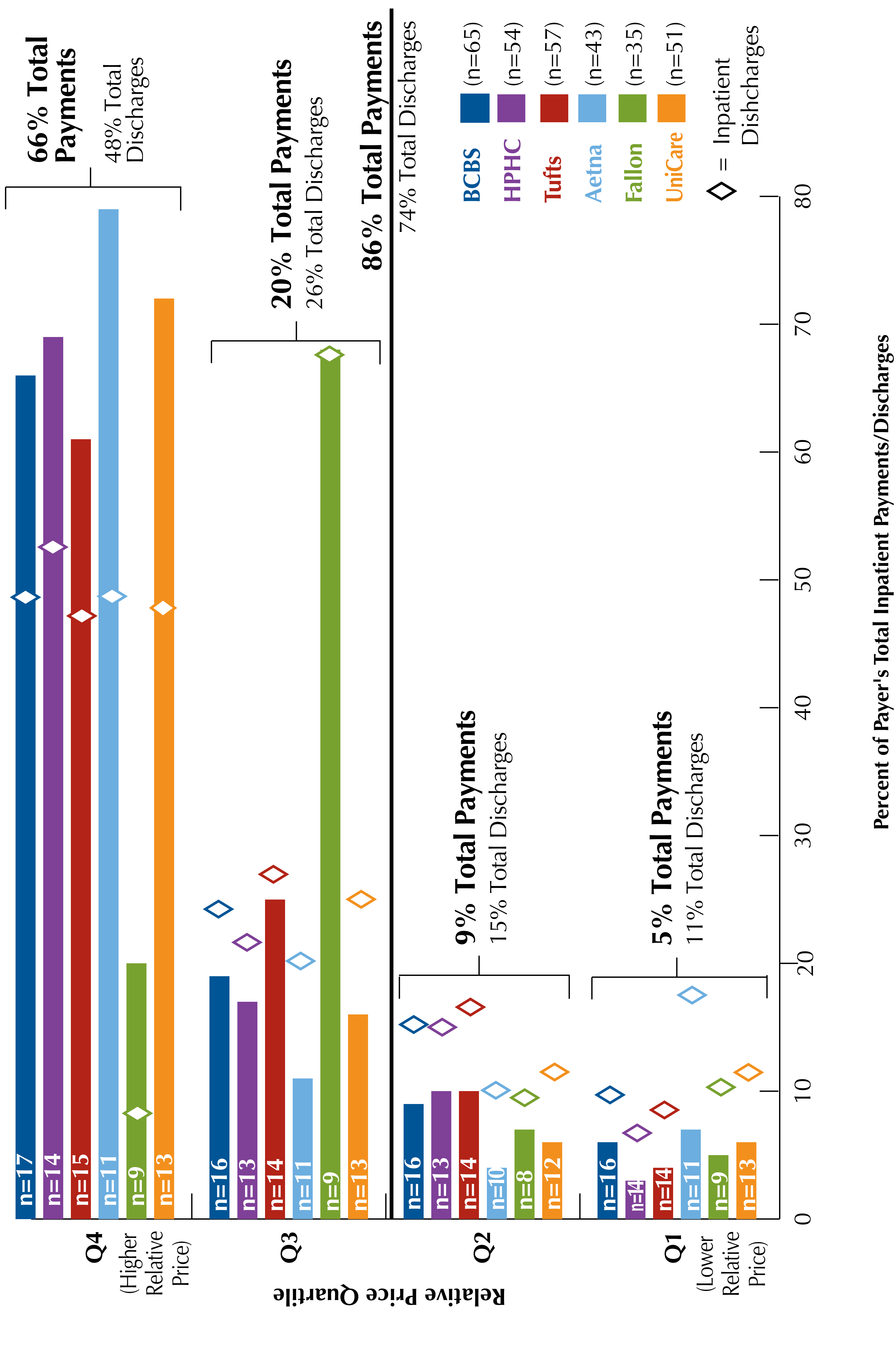
BKHS = Berkshire Health System (n=2)
BYHS = Baystate Health System (n=3)
CCHS = Cape Cod Health System (n=2)
CG = CareGroup (n=4)
EHC = Essent Health Care (n=2)
PHS = Partners HealthCare System (n=7)
SHS = Steward Health System (n=6)
UMHS = UMass Health System (n=5)
VHS = Vanguard Health System (n=2)

On the plot area, each circle represents the relative price value for a hospital; the size of the circle represents the size of that payer in the hospital's payer mix by payments received from studied payers. The bold line represents the average relative price within each payer's network: 1.0. The circles falling to the right side of the bold line represent higher than average relative price within a payer's network, and the circles to the left of the bold line represent lower than average relative price within a payer's network. Some hospitals have only one circle for a single payer; the Technical Appendix describes why other data may not have been available. Because relative price is a ratio dependent on a specific payer's particular price scale, the relative price values can only be directly compared within that payer's network, and not between networks.

## *Figure 2 Sample*



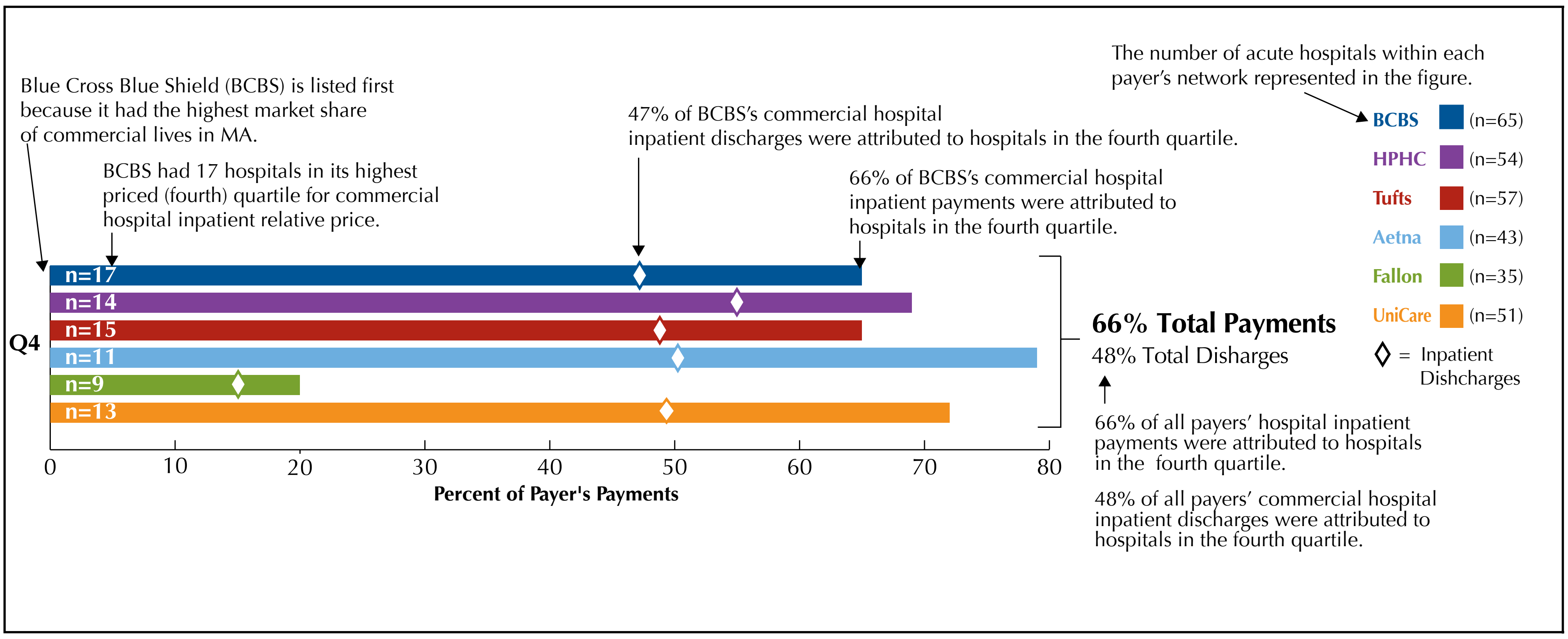
## Figure 3 - 2010 Acute Hospital Inpatient Payments and Inpatient Discharges by Inpatient Relative Price Quartile



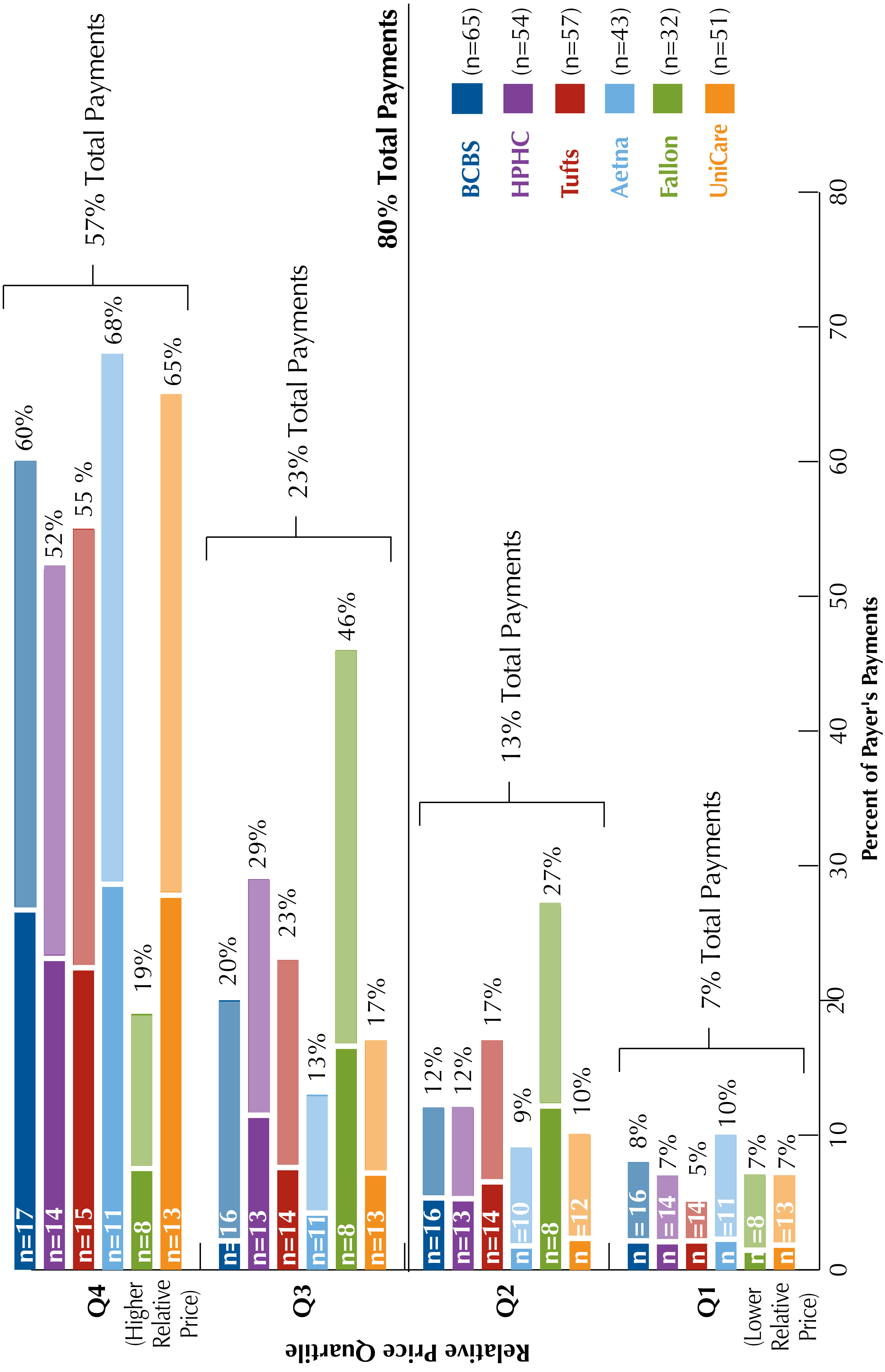
# How to Read Figure 3:

Each bar on this figure indicates, for each payer, the percent of total inpatient payments made to hospitals in each quartile for that payer, where the quartiles are based on inpatient relative price values. The diamond represents the percent of total inpatient discharges attributed to those hospitals in that quartile for that payer. The number inside of the bar represents the number of hospitals for that payer within that quartile. Because relative prices may vary between payers, a given hospital may appear in different quartiles for different payers. The fourth quartile (Q4) represents the highest priced hospitals for a given payer, while the first quartile (Q1) represents the lowest priced hospitals.

## *Figure 3 Sample*



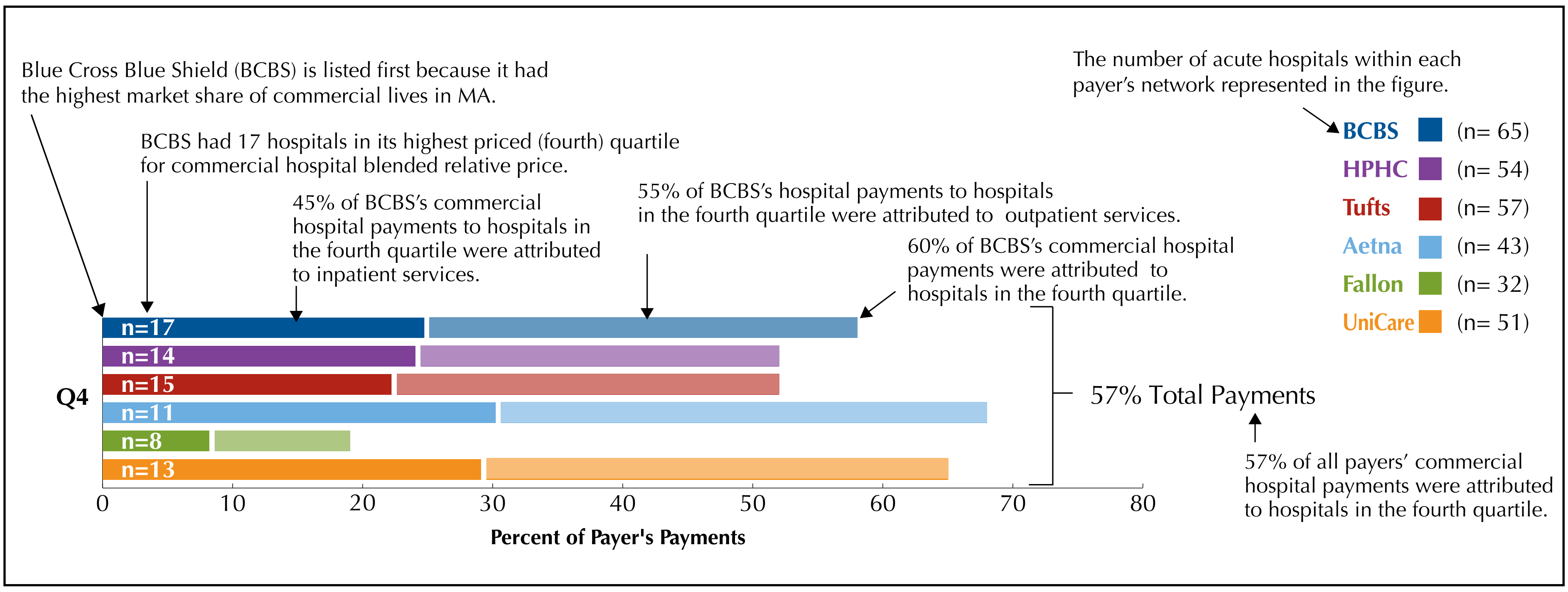
## Figure 4 – 2010 Acute Hospital Inpatient and Outpatient Payments by Blended Relative Price Quartile



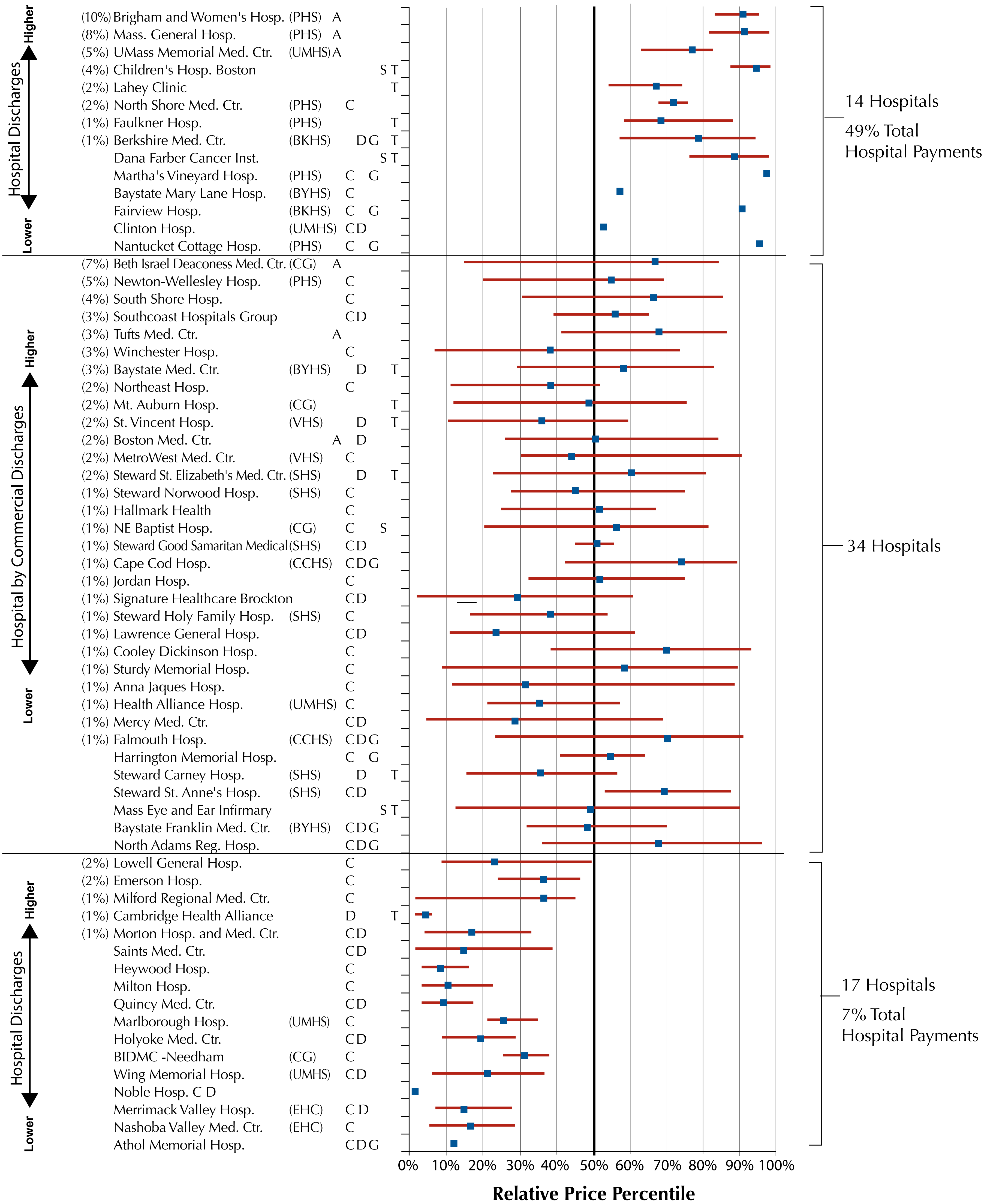
# How to Read Figure 4:

Each bar on this figure indicates the percent of total inpatient and outpatient payments made to hospitals in that quartile for that payer, where the quartiles are based on blended relative price values. The darker shade on the left side of the bar represents the percent of that payer's quartile payments attributed to inpatient payments, and the lighter shade on the right side of the bar represents the percent of that payer's quartile payments attributed to outpatient payments. Because relative prices may vary between payers, a given hospital may appear in different quartiles for different payers. The fourth quartile (Q4) represents the highest relative priced hospitals for a given payer, while the first quartile (Q1) represents the lowest relative priced hospitals.

## *Figure 4 Sample*



# Figure 5 – Range of Percentile Ranks of 2010 Acute Hospital Blended Relative Prices



# How to Read Figure 5:

For each hospital, the variation in ranking, or percentile, between payers is indicated by a horizontal line that spans from lowest rank to highest rank. Accordingly, short lines indicate hospitals that had consistent rankings across payers, and long lines show wide variation in ranking. The box in the middle shows the average percentile rank. Hospitals with only one box value represent hospitals that had only one relative price percent rank value reported for a single payer.[1] The vertical bold line highlights the 50th percentile. On the right side of the 50th percentile line are hospitals that had relative prices from all payers in the top half of the relative price distribution.

This figure is arranged into three sections. The top section includes the 14 hospitals that had relative prices above the network median for all payers. Conversely, the bottom section shows the 17 hospitals that had relative prices below the median for all payers. The rest of the hospitals appear in the middle, and their lines span across the 50th percentile.

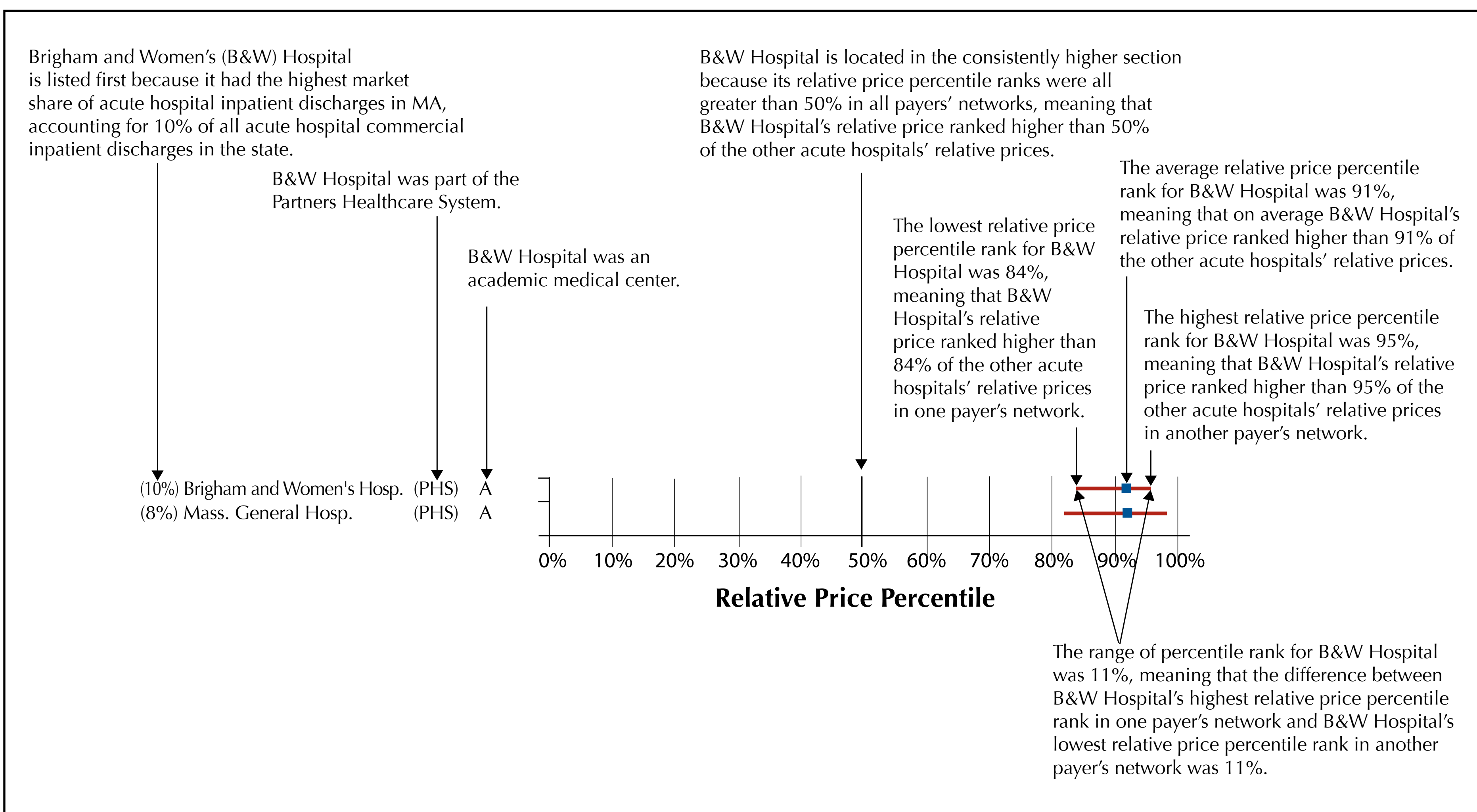
## *Hospital Characteristics Key*

A = Academic Medical Center (n=6)
C = Community Hospital (n=47)
D = Disproportionate Share Hospital (n=26)
G = Geographically Isolated Hospital (n=10)
S = Specialty Hospital (n=4)
T = Non-Academic, Teaching Hospital (n=12)

## *System Affiliation Key*

| | | |
|---|---|---|
| BKHS | = | Berkshire Health System (n=2) |
| BYHS | = | Baystate Health System (n=3) |
| CCHS | = | Cape Cod Health System (n=2) |
| CG | = | CareGroup (n=4) |
| EHC | = | Essent Health Care (n=2) |
| PHS | = | Partners HealthCare System (n=7) |
| SHS | = | Steward Health System (n=6) |
| UMHS | = | UMass Health System (n=5) |
| VHS | = | Vanguard Health System (n=2) |

## *Figure 5 Sample*




[1] Other payers may have also reported relative price values for these hospitals that were not included in this analysis because these values did not meet reporting thresholds.

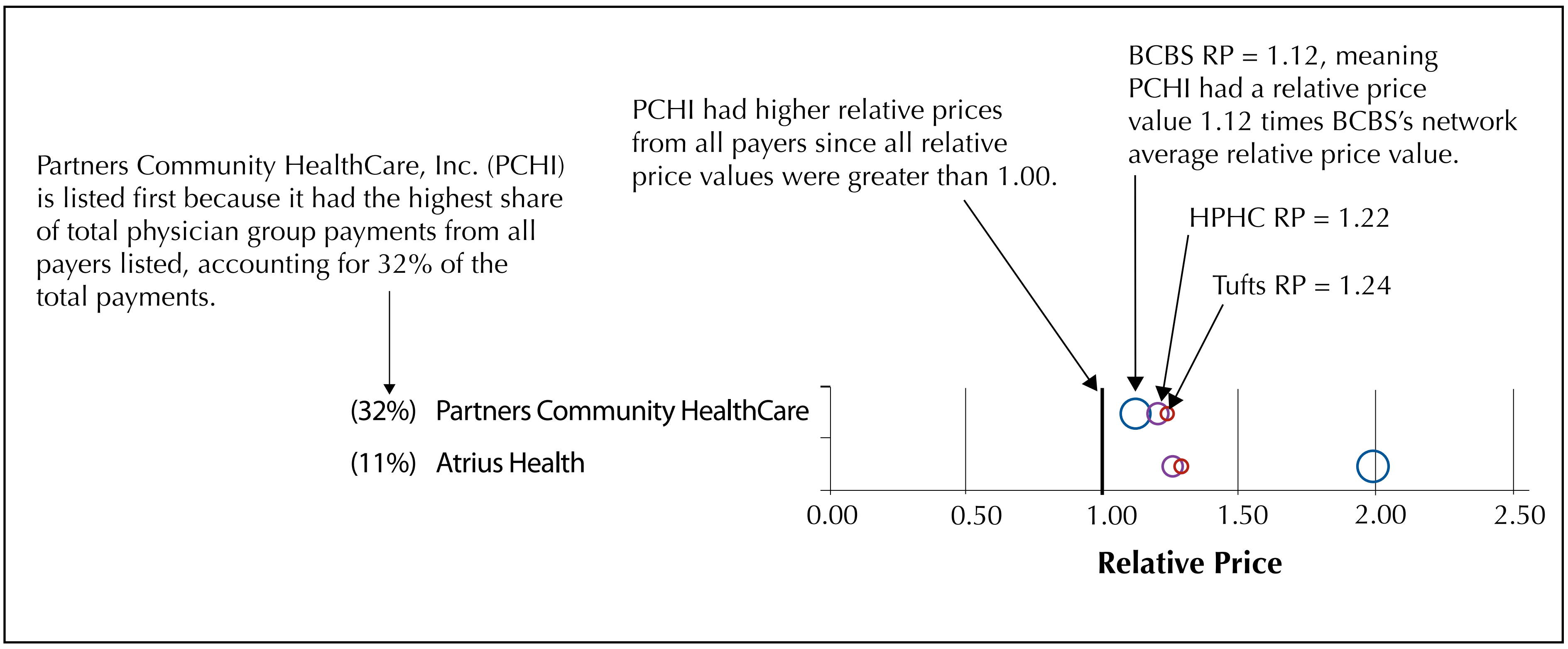
# Figure 6 - 2009 Physician Group Relative Prices

## How to Read Figure 6:

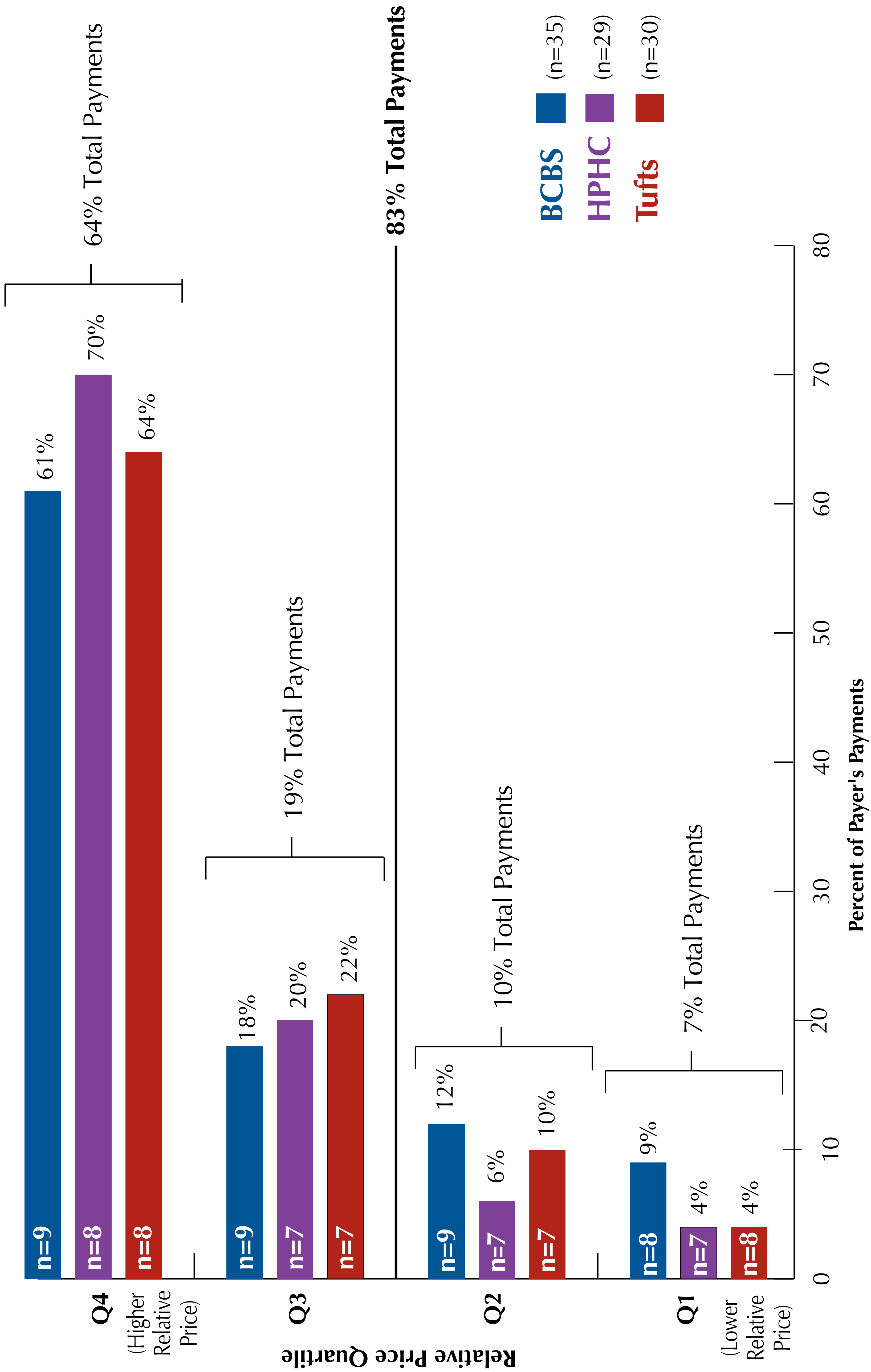
This figure shows the relative price for each physician group, for each payer. Data is displayed for physician groups where the amount of revenue from a payer met the applicable revenue threshold. The physician groups are ordered by market share, with the proportion of total payments going to one physician group compared to the amount of total payments going to all physician groups shown to the left.

On the plot area, each circle represents the relative price value for each physician group, and the size of the circle represents the size of that payer's payments to the physician group as a proportion of the amount of total payments the physician group received from studied payers. The bold line represents the average relative price within each payer's network: 1.0. The circles falling to the right side of the bold line represent higher than average relative prices within a payer's network. Some physician groups have only one point for a single payer; the Technical Appendix describes why other data may not have been available. Because relative price is a ratio dependent on a specific payer's particular price scale, the relative price values can only be directly compared within that payer's network.

### *Figure 6 Sample*



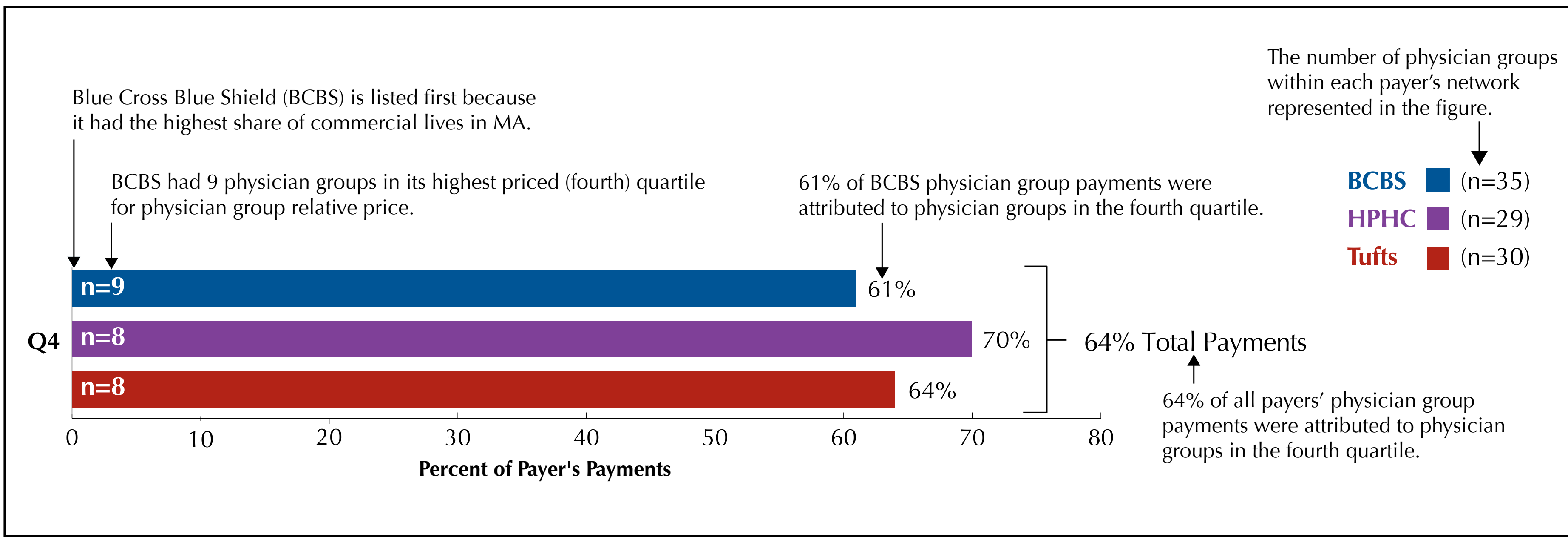
## Figure 7 - 2009 Physician Group Payments by Relative Price Quartile



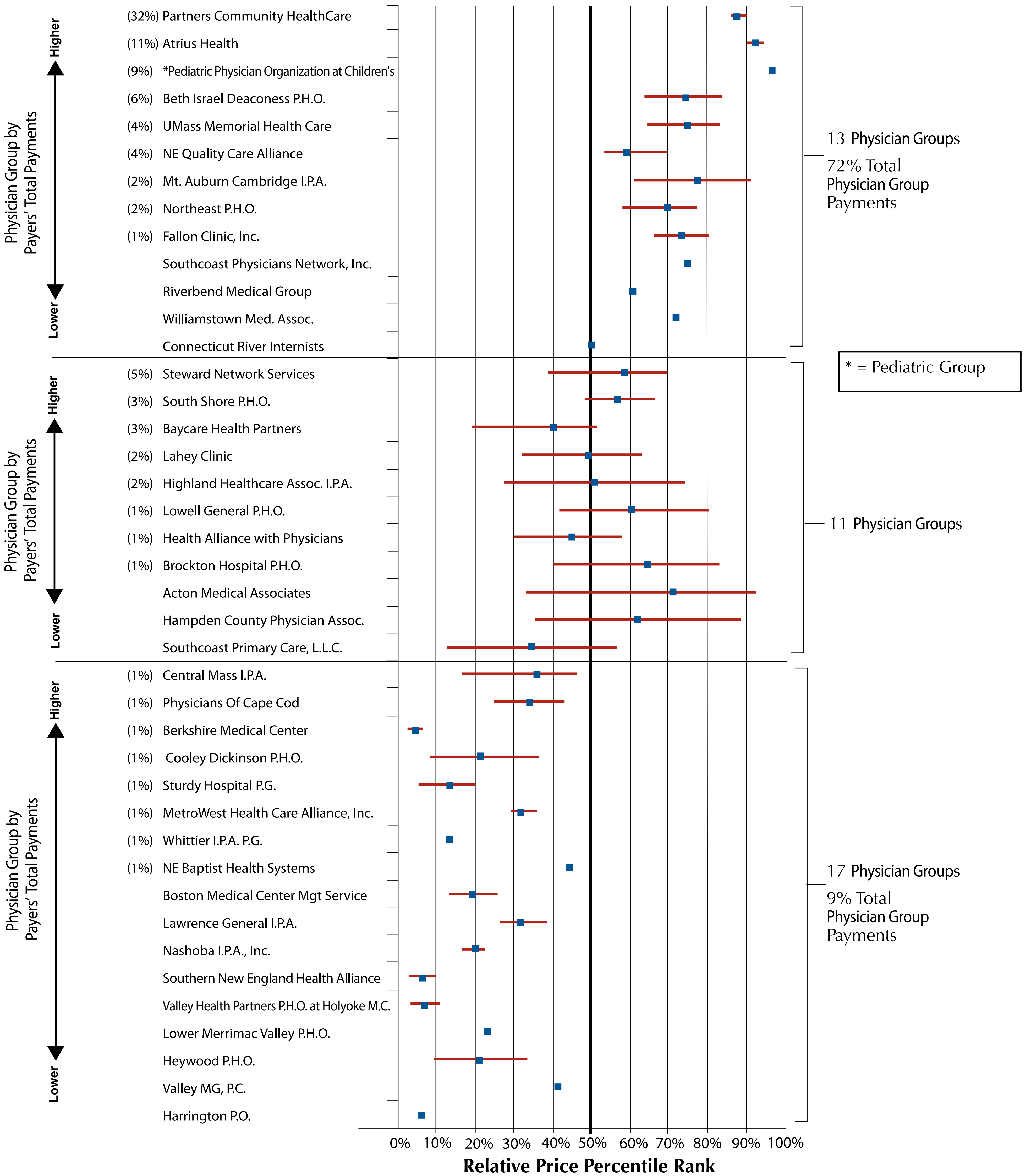
## How to Read Figure 7:

Each bar on this figure indicates the percent of total payments made to physician groups in that quartile for that payer, where the quartiles are based on relative price values. Because relative prices may vary between payers, a given physician group may appear in different quartiles for different payers. The fourth quartile (Q4) represents the highest relative priced physician groups for a given payer, while the first quartile (Q1) represents the lowest relative priced physician groups. The percentage at the end of each bar represents the proportion of each payer's network payments attributed to the providers within each respective relative price quartile.

### *Figure 7 Sample*



# Figure 8 – Range of Percentile Ranks of 2009 Physician Group Relative Prices



## How to Read Figure 8:

For each physician group, the variation in ranking, or percentile, between payers is indicated by a horizontal line that spans from lowest rank to highest rank. Accordingly, short lines indicate physician groups that had consistent rankings across payers, and long lines show wide variation in ranking. The box in the middle shows the average percentile rank. Physician groups with only one box value represent physician groups that had only one relative price percent rank value reported for a single payer.[2] The vertical bold line highlights the 50th percentile. The right side of the 50th percentile line indicates the physician groups that received relative prices from all payers in the top half of the relative price distribution.

Figure 8 is arranged into three sections. The top section includes the 13 physician groups that had relative prices above the network median for all payers. Conversely, the bottom section shows the 17 physician groups that had relative prices from all payers below the median. The rest of the physician groups appear in the middle, and their lines span the 50th percentile.

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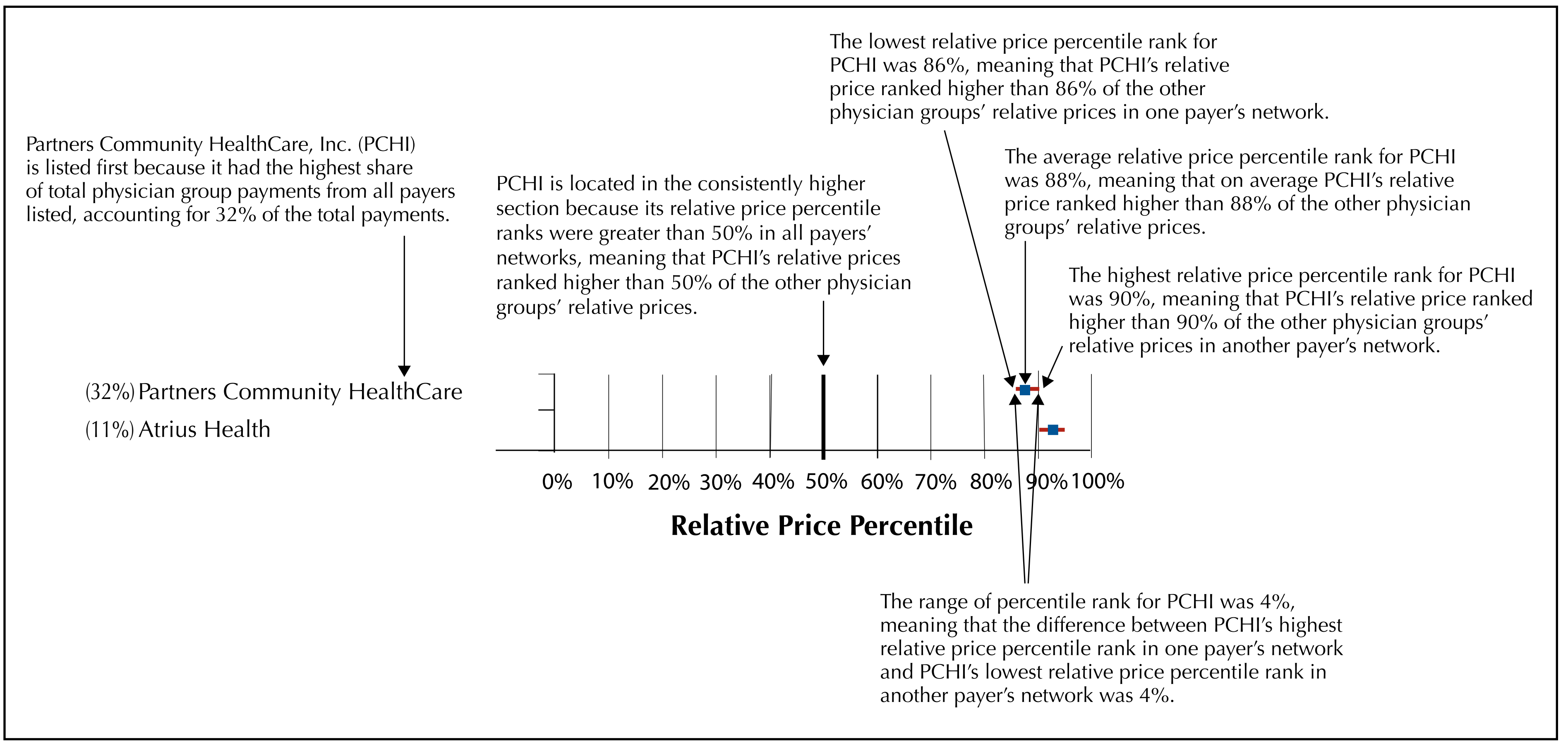
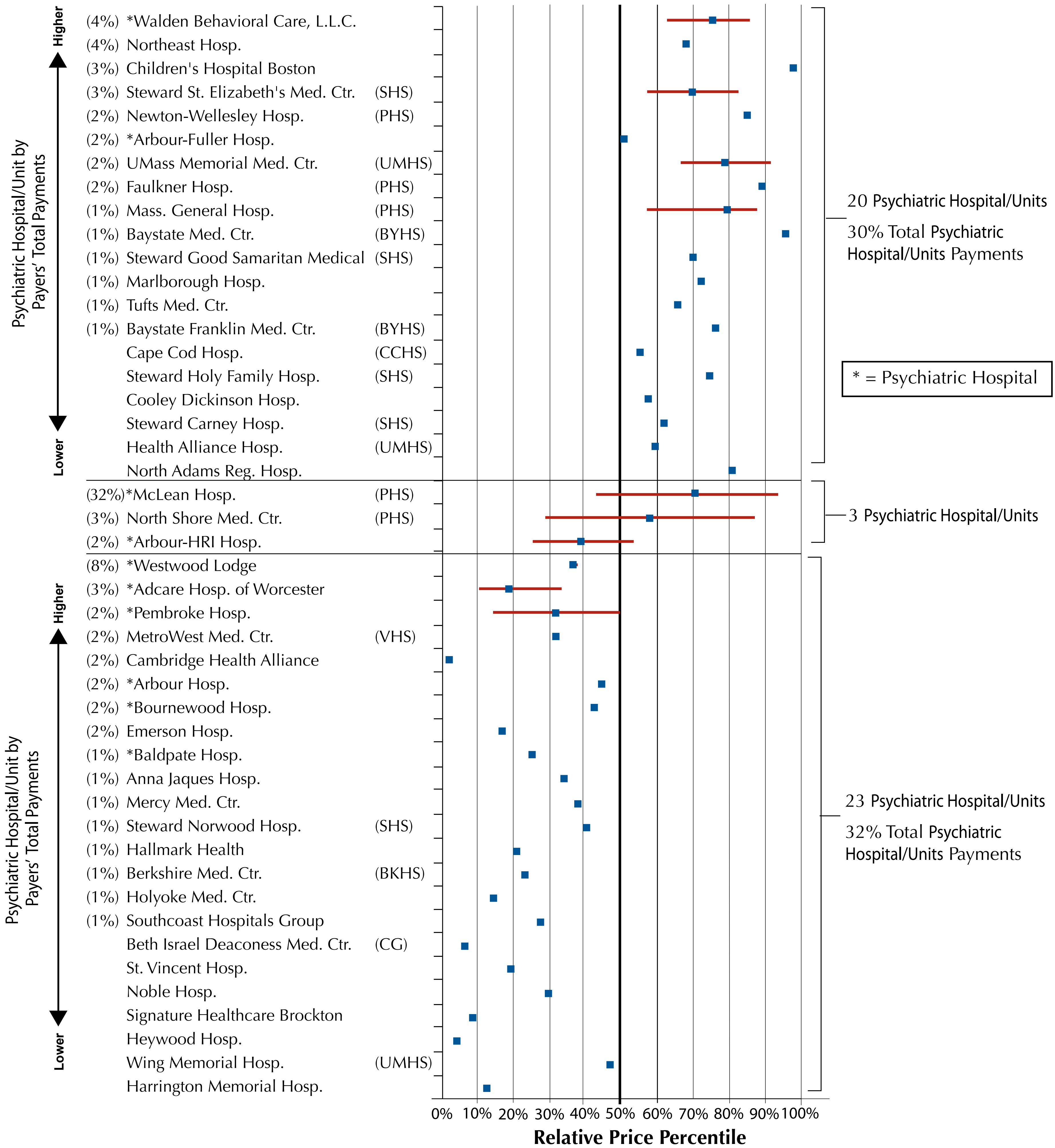
### *Figure 8 Sample*




2 Other payers may have also reported relative price values for these physician groups that were not included in this analysis because these values did not meet reporting thresholds.

# Figure 9 - Range of Percentile Ranks of 2010 Psychiatric Hospitals and Acute Hospital Behavioral Health Units Relative Prices



# How to Read Figure 9:

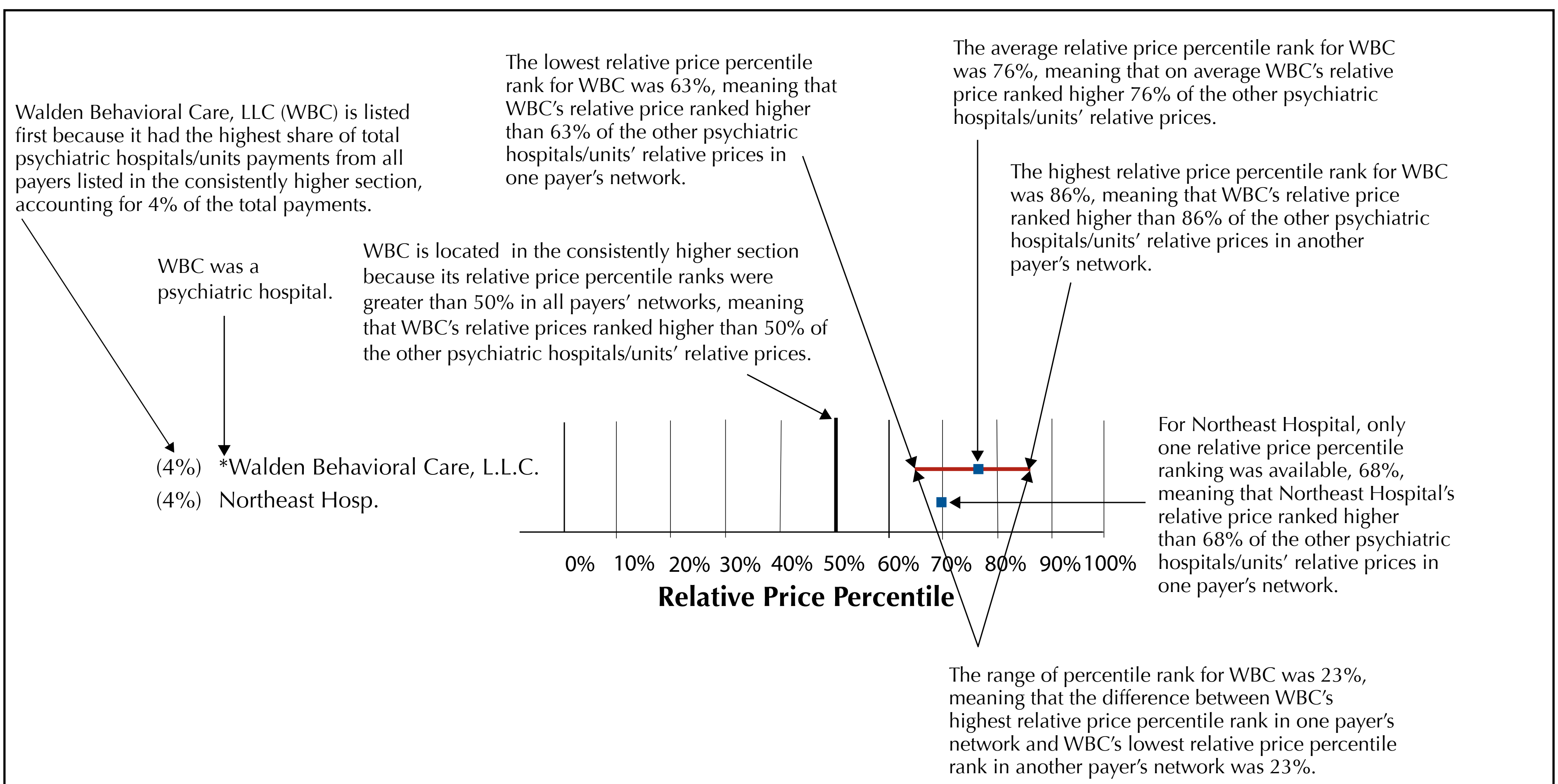
For each psychiatric hospital/unit, the variation in ranking, or percentile, between payers is indicated by a horizontal line that spans from lowest rank to highest rank. Accordingly, short lines indicate psychiatric hospitals/units that had consistent rankings across payers, and long lines show wide variation in ranking. The box in the middle shows the average percentile rank. Psychiatric hospitals/units with only one box value represent psychiatric hospitals/units that had only one relative price percent rank value reported for a single payer.[3] The vertical bold line highlights the 50th percentile. The right side of the 50th percentile line indicates the psychiatric hospitals/units that received relative prices from all payers in the top half of the relative price distribution.

This figure is arranged into three sections. The top section includes the 20 psychiatric hospitals/units that had relative prices above the network median for all payers. Conversely, the bottom section shows the 23 psychiatric hospitals/units that had relative prices from all payers below the median. The rest of the psychiatric hospitals/units appear in the middle, and their lines span the 50th percentile, meaning that they received higher relative prices from some payers and lower relative prices from other payers.

## *System Affiliation Key*

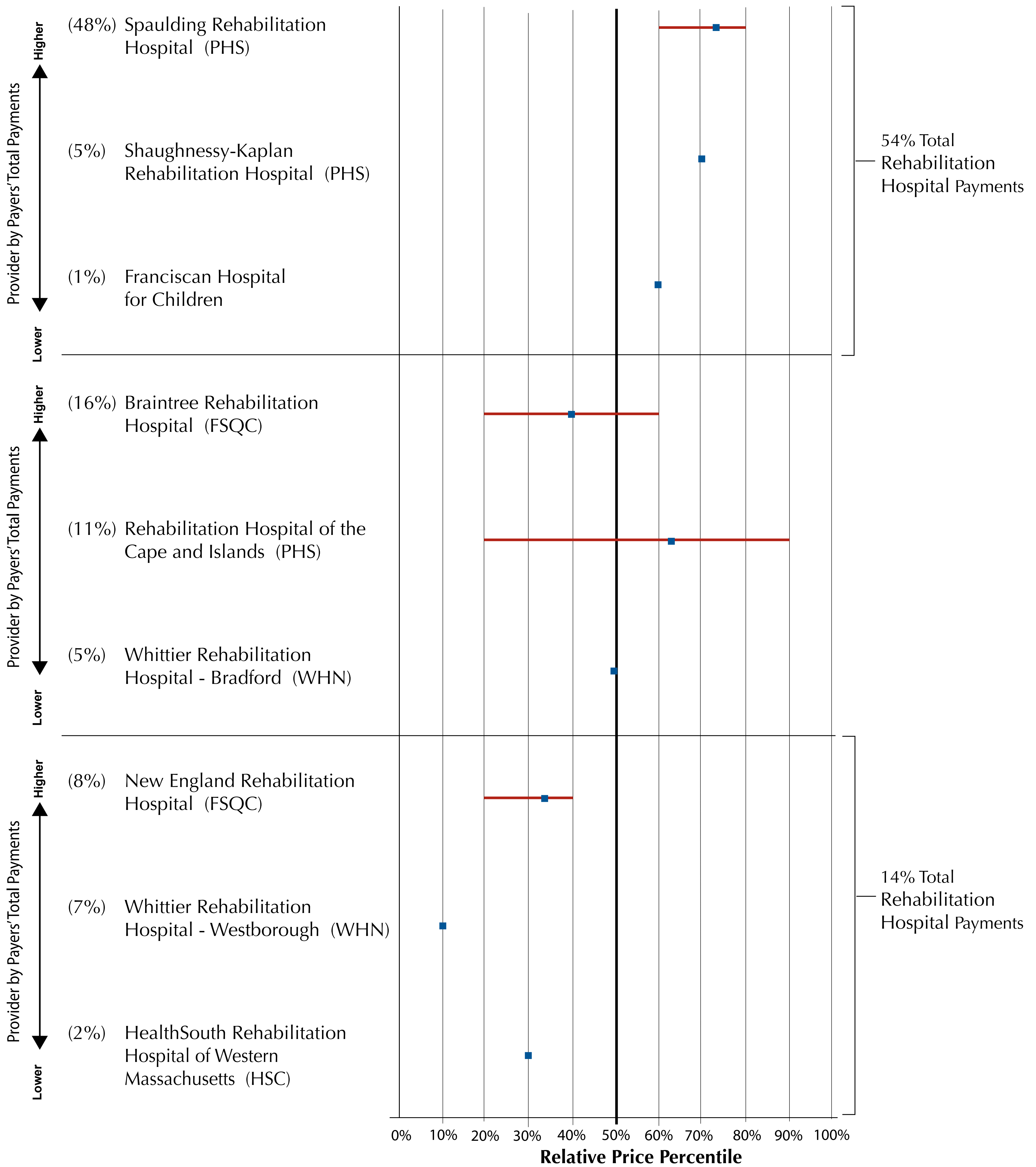
| | | |
|---|---|---|
| BKHS | = | BerkshireHealthSystem (n=1) |
| BYHS | = | Baystate Health System (n=2) |
| CCHS | = | Cape Cod Health System (n=1) |
| CG | = | CareGroup (n=1) |
| PHS | = | Partners HealthCare System (n=5) |
| SHS | = | Steward Health System (n=5) |
| UMHS | = | UMass Health System (n=3) |
| VHS | = | Vanguard Health System (n=1) |

## *Figure 9 Sample*




3 Other payers may have also reported relative price values for these hospitals that were not included in this analysis because these values did not meet reporting thresholds.

# Figure 10 – Range of Percentile Ranks of 2010 Rehabilitation Hospitals Relative Prices



## How to Read Figure 10:

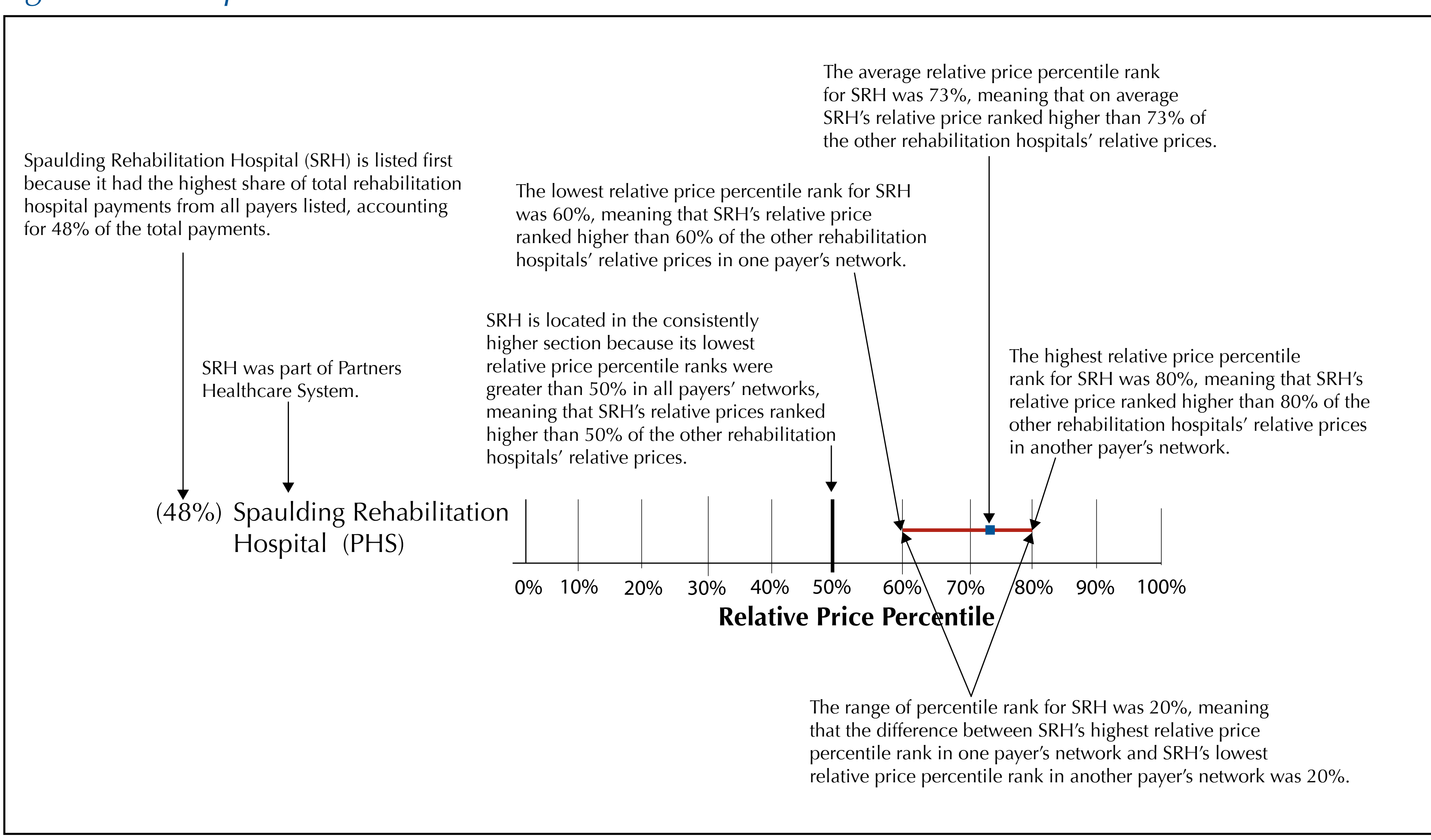
For each rehabilitation hospital, the variation in ranking, or percentile, between payers is indicated by a horizontal line that spans from lowest rank to highest rank. Accordingly, short lines indicate hospitals that had consistent rankings across payers, and long lines show wide variation in ranking. The box in the middle shows the average percentile rank. Rehabilitation hospitals with only one box value represent rehabilitation hospitals that had only one relative price percent rank value reported for a single payer.[4] The vertical bold line highlights the 50th percentile. The lines on the right side of the 50th percentile line indicate the rehabilitation hospitals that received relative prices from all payers in the top half of the relative price distribution.

This figure is arranged into three sections. The top section includes the 3 rehabilitation hospitals that had relative prices above the network median for all payers. Conversely, the bottom section shows the 3 rehabilitation hospitals that had relative prices from all payers below the median. The rest of the rehabilitation hospitals appear in the middle, and their lines span across the 50th percentile.

### *System Affiliation Key*

| | |
|---|---|
| FSQC = | Five Star Quality Care (n=2) |
| HSC = | HealthSoulth Corporation (n=1) |
| PHS = | Partners Healthcare System (n=3) |
| WHN = | Whittier Health Network (n=2) |

### *Figure 10 Sample*




4 Other payers may have also reported relative price values for these rehabilitation hospitals that were not included in this analysis because these values did not meet reporting thresholds.

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