Comments on "The Accuracy of Hospital Merger Screening Methods"
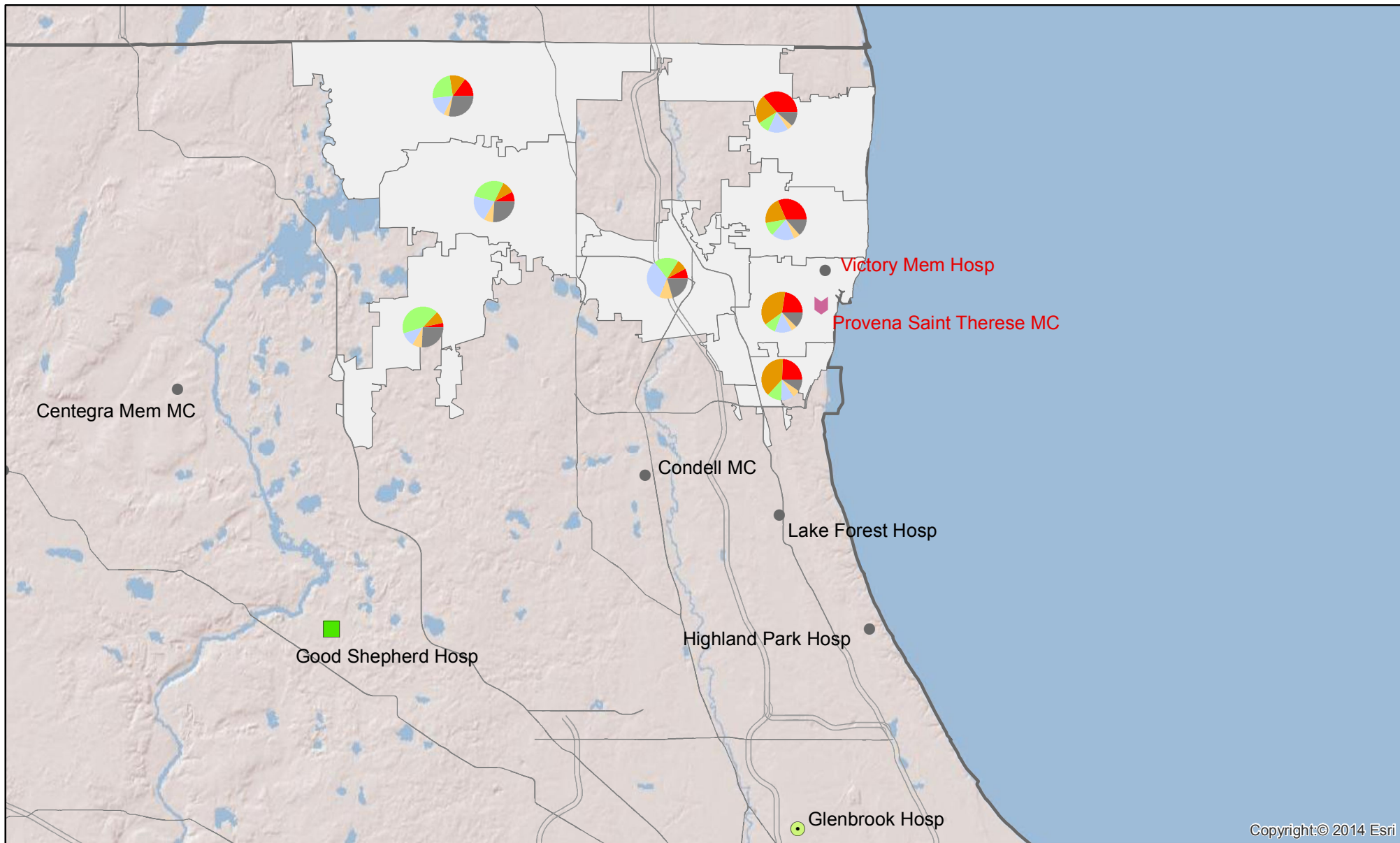
Sean May

October 17, 2014
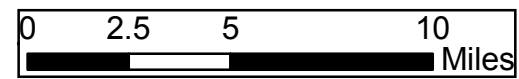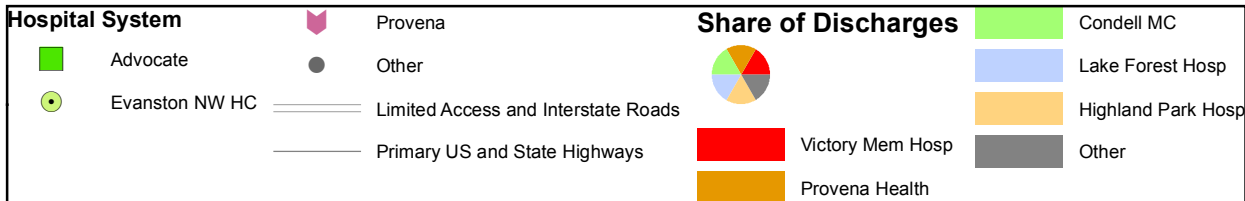
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Agenda

- How well can any hospital merger screening method do?
- How reliable are the hospital price data used to calculate the actual post-merger price changes?

Victory Memorial Hospital and Provena Health
Share of Discharges for ZIP Codes in the 80% Service Area

Victory Mem Hosp

Provena Saint Therese MC

Centegra Mem MC

Condell MC

Lake Forest Hosp

Highland Park Hosp

Good Shepherd Hosp

Glenbrook Hosp

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Hospital System				Share of Discharges		
Advocate		Provena				Condell MC
Evanston NW HC		Other				Lake Forest Hosp
		Limited Access and Interstate Roads				Highland Park Hosp
		Primary US and State Highways		Victory Mem Hosp		Other
				Provena Health		

0   2.5   5   10
Miles

Evanston Northwestern Healthcare and Highland Park Hospital
Share of Discharges for ZIP Codes in the 80% Service Area

Northern Illinois MC

Centegra Mem MC

Victory Mem Hosp

Provena Saint Therese MC

Condell MC

Lake Forest Hosp

Good Shepherd Hosp

Highland Park Hosp

Sherman Hosp

Hoffman Estates MC

Glenbrook Hosp

Evanston Hosp

Northwest Community HC

Holy Family MC

Rush North Shore MC

St. Francis Hosp

Provena Saint Joseph Hosp

Alexian Brothers MC

Lutheran General Hosp

Resurrection MC

Edgewater MC

Swedish Covenant Hosp

Methodist Hosp of Chicago

Ravenswood Hosp MC

Louis A. Weiss Mem Hosp

Our Lady of The Resurrection MC

Thorek Hosp & MC

Norwegian-American Hosp

Kindred Hosp-Chicago Northlake

Columbia Grant Hosp

Children's Mem Hosp

Glenoaks Hosp

Elmhurst Mem Hosp

Gottlieb Mem Hosp

Saint Mary Of Nazareth

West Suburban HospMC

St. Elizabeth's Hosp

Sacred Heart Hosp

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0 2.5 5 10 Miles

Hospital System

- ● Adventist Health
- ■ Advocate
- ▲ Alexian Brothers Health Sys
- ✳ Ancilla
- ⬡ Catholic Health Partners
- ☆ Columbia/HCA
- ⦿ Evanston NW HC
- ⬠ Provena
- ▲ Rush-Presbyterian
- ⊕ Sisters of the Holy Family
- ⬡ University of Chicago Health System
- ● Other
- Limited Access and Interstate Roads
- Primary US and State Highways

Share of Discharges

- 🔴 Evanston NW HC
- 🟠 Highland Park Hosp
- 🟢 NW Comm HC
- 🔵 Rush Presbyterian
- 🔵 Resurrection MC
- 🟢 Advocate
- 🟢 NW Mem Hosp
- 🔵 Sisters of the Holy Family
- 🟣 St. Francis Hosp
- 🟡 Illinois Masonic MC
- 🟣 Condell MC
- 🟣 Lake Forest Hosp
- 🟣 U of Chicago
- 🟤 Provena Health
- 🟡 Swedish Covenant Hosp
- 🟣 Victory Mem Hosp
- ⬜ Other

Hospital Mergers on the North Shore of Chicago

	ENH/Highland Park	St. Therese/Victory Memorial
Increase in WTP	3%	24%
Diversion from A ➔ B	4%	30%
Diversion from B ➔ A	14%	39%
Actual price increases		
Payer A	21 to 26%***	4 to 7%
Payer B	17 to 25%***	-21 to -13%***
Payer C	-1 to 0%	-8 to -6%***
Payer D	56 to 65%***	17 to 22%***
Payer E	11 to 16%***	-22 to -18%***

Sources: May (2013); Haas-Wilson and Garmon (2011), Tables 2 and 3. Significance level: ***1%.

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Histogram of STAC Hospital Prices (Inpatient Revenue per Case-Mix-Adjusted Discharge)

Fiscal Year 2009

No. of Hospitals	3,250
Mean	$6,501
Min	$1,066
Max	$23,789
Standard Deviation	$3,411
10th Percentile	$3,073
25th Percentile	$4,434
Median	$5,969
75th Percentile	$7,793
90th Percentile	$9,950

Percent of Hospitals (y-axis) vs. Inpatient Revenue per Case-Mix-Adjusted Discharge (x-axis)
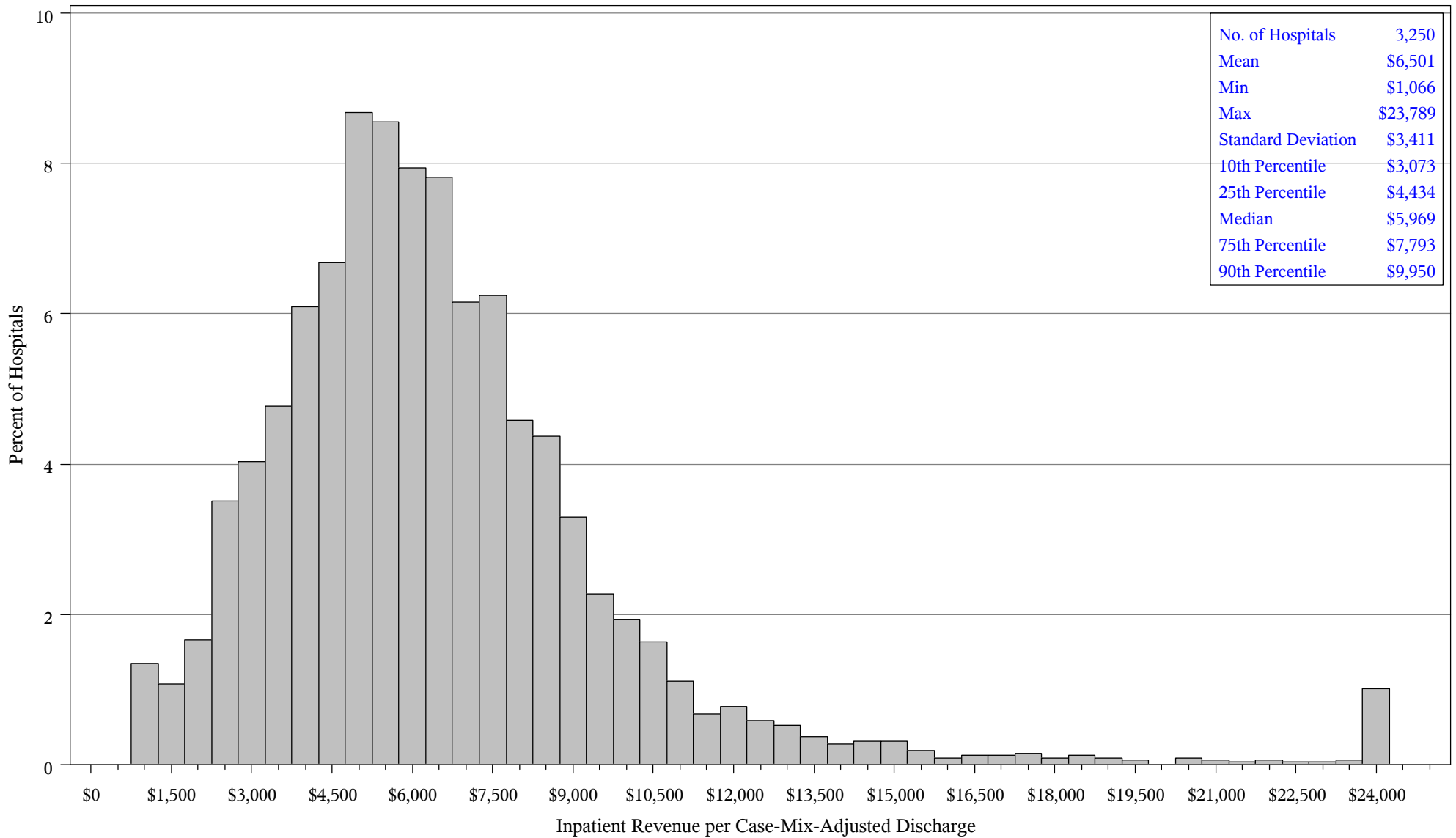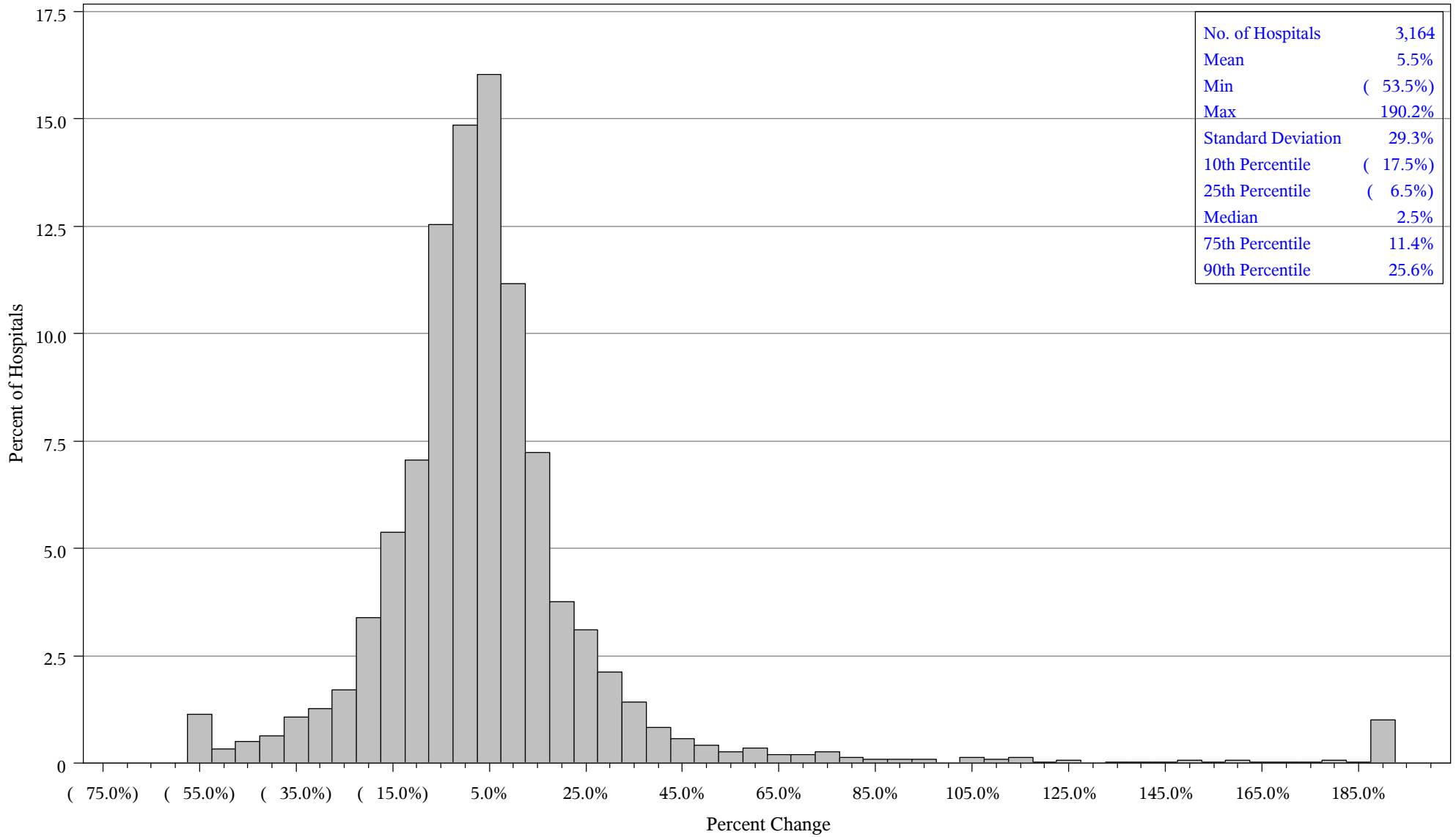
Notes:
1. Hospitals with prices above the 99th percentile are capped at the 99th percentile [$23,789].
2. Hospitals with prices below the 1st percentile are assigned the 1st percentile [$1,066].

Source: Centers for Medicare & Medicaid Services, Hospital Cost Report, Fiscal Year 2009.

Histogram of Year-Over-Year Changes in STAC Hospital Prices (Inpatient Revenue per Case-Mix-Adjusted Patient Day)
Fiscal Year 2008 to 2009

No. of Hospitals	3,164
Mean	5.5%
Min	(53.5%)
Max	190.2%
Standard Deviation	29.3%
10th Percentile	(17.5%)
25th Percentile	(6.5%)
Median	2.5%
75th Percentile	11.4%
90th Percentile	25.6%

Notes:
1. Hospitals with percent price changes above the 99th percentile are capped at the 99th percentile [190.2%].
2. Hospitals with percent price changes below the 1st percentile are assigned the 1st percentile [(53.5%)].

Sources: Centers for Medicare & Medicaid Services, Hospital Cost Report, Fiscal Year 2009.