



# Price Impact of WC Physician Fee Schedules

Barry Lipton, FCAS, MAAA  
Practice Leader and Senior Actuary

CLRS  
September 10, 2015

# Antitrust Notice

- The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Seminars conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings.
- Under no circumstances shall CAS seminars be used as a means for competing companies or firms to reach any understanding – expressed or implied – that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition.
- It is the responsibility of all seminar participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.





# Key Findings

# Key Findings

- Large discounts off the WC physician fee schedule maximum allowable reimbursements (MARs) do not ensure low prices
- WC fee schedule MARs not only limit payments, they may also become common WC prices—the median WC price is always at or very near the MAR
- Surgery has higher fee schedules than Evaluation and Management (E&M) relative to Group Health (GH) payments
- Similar WC discounts do not necessarily imply similar prices relative to GH

# Large Discounts Off WC MARs Do Not Ensure Low Prices

- In some states, even after large discounts off the state physician fee schedule, the prices for some services may remain high relative to GH payments
- In other states, a smaller discount off the fee schedule may produce prices closer to GH payments

# WC Fee Schedule MARs Do More Than Limit Payments

- WC fee schedules have been shown to be effective at controlling costs
- However, MARs set too high (relative to GH) lessen that effectiveness
- High proportions of WC payments at (or near) the MAR suggest that fee schedules wind up becoming market prices for WC
- High MARs (relative to GH) may result in some providers charging WC claimants more than they would patients covered under GH



# Comparing Surgery with E&M

- Surgery has WC physician fee schedule MARs that are high relative to GH payments
  - Many WC payments are well below the MAR but are well above GH
    - One-fourth of WC payments are 30% or more below the MAR
    - One-fourth of GH payments are 63% or more below the MAR
- E&M has lower MARs than Surgery relative to GH prices
  - WC payments are closer to the MAR than those for Surgery and are more in line with those for GH
    - One-fourth of WC payments are 10% or more below the MAR
    - One-fourth of GH payments are 30% or more below the MAR
- At the 25<sup>th</sup> percentile, WC pays 89% more than GH for surgery, compared with 29% more for E&M

Based on billings processed from July 1, 2010 to June 30, 2012;  
See Appendix, Methodology: Data, for more information.



# What Can You Tell From the Fee Schedule Discount?

## Radiology Services

- Similar WC discounts for Radiology do not necessarily imply similar prices relative to GH
  - The 25th percentile\* of WC payments is 10% below the fee schedule in both D.C. and Hawaii
  - However, relative to GH
    - The 25th WC percentile is 110% above in D.C.
    - The 25th WC percentile is 20% above in Hawaii

\*The  $p$ -th percentile refers to a payment amount for which the probability of a payment being that amount or smaller is  $p$ ; e.g., 25% of payments are equal to or smaller than the 25th percentile.

Based on billings processed from July 1, 2010 to June 30, 2012;  
See Appendix, Methodology: Data, for more information.





# What Can You Tell From the Fee Schedule Discount?

## Radiology Services

- Different WC discounts for Radiology do not necessarily imply different relationships between WC and GH prices
  - Relative to the fee schedule
    - ▣ The 25th WC percentile is 36% below in Arizona
    - ▣ The 25th WC percentile is 5% below in Idaho
  - The 25th percentile of WC payments is about five-thirds of the 25th percentile for GH in both states

Based on billings processed from July 1, 2010 to June 30, 2012;  
See Appendix, Methodology: Data, for more information.





# Surgery

# Surgery

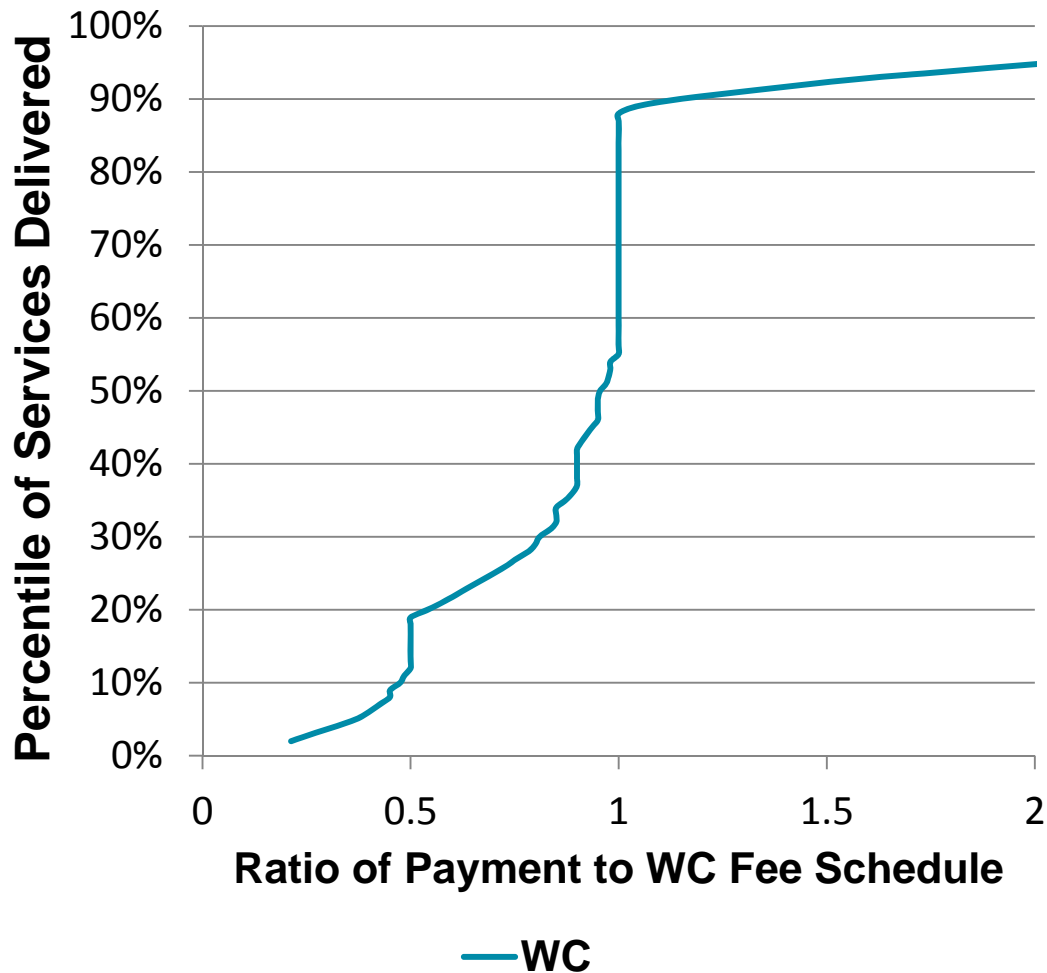
- For Workers Compensation
  - More than half of surgical services are paid below the MAR
  - About one-third are paid at the MAR
  - 25% of surgical services are discounted 30% or more off the MAR
- WC often pays more than GH for comparable surgical services
  - Nearly three-fourths of GH payments for surgery are below the MAR
  - 25% of surgical services in GH are paid at 63% or more below the MAR

Based on billings processed from July 1, 2010 to June 30, 2012;  
See Appendix, Methodology: Data, for more information.



# Surgery

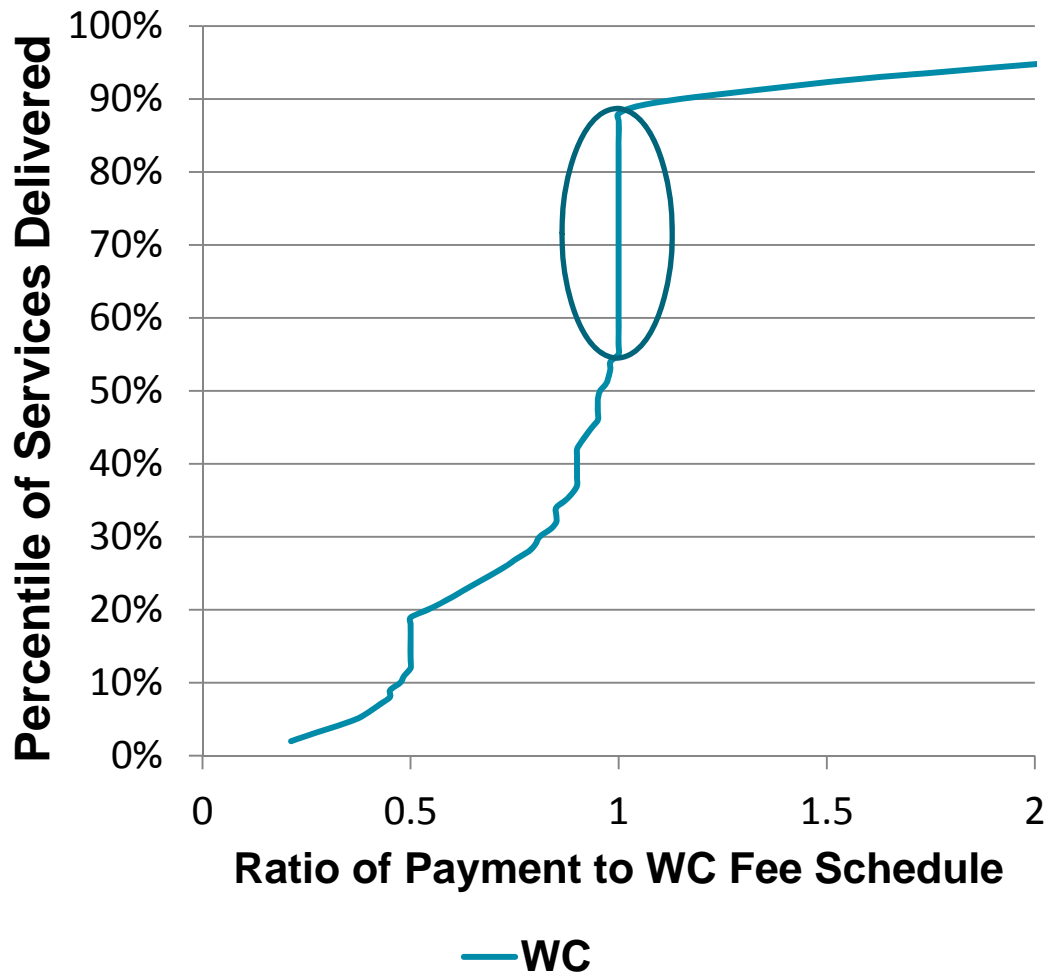
## Multi-State Distribution of Reimbursements for Surgery



The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# Surgery

## Multi-State Distribution of Reimbursements for Surgery

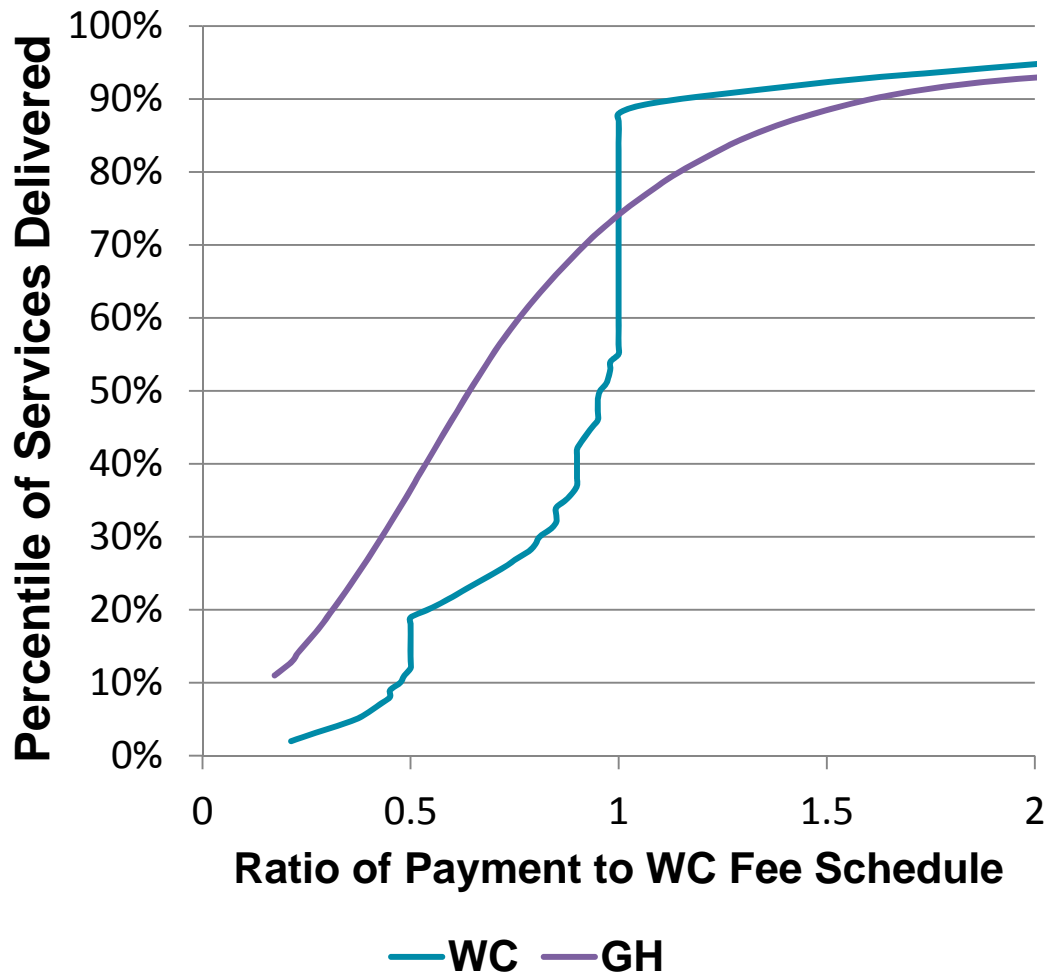


- One-third of WC payments for Surgery are at the MAR

The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# Surgery

## Multi-State Distribution of Reimbursements for Surgery

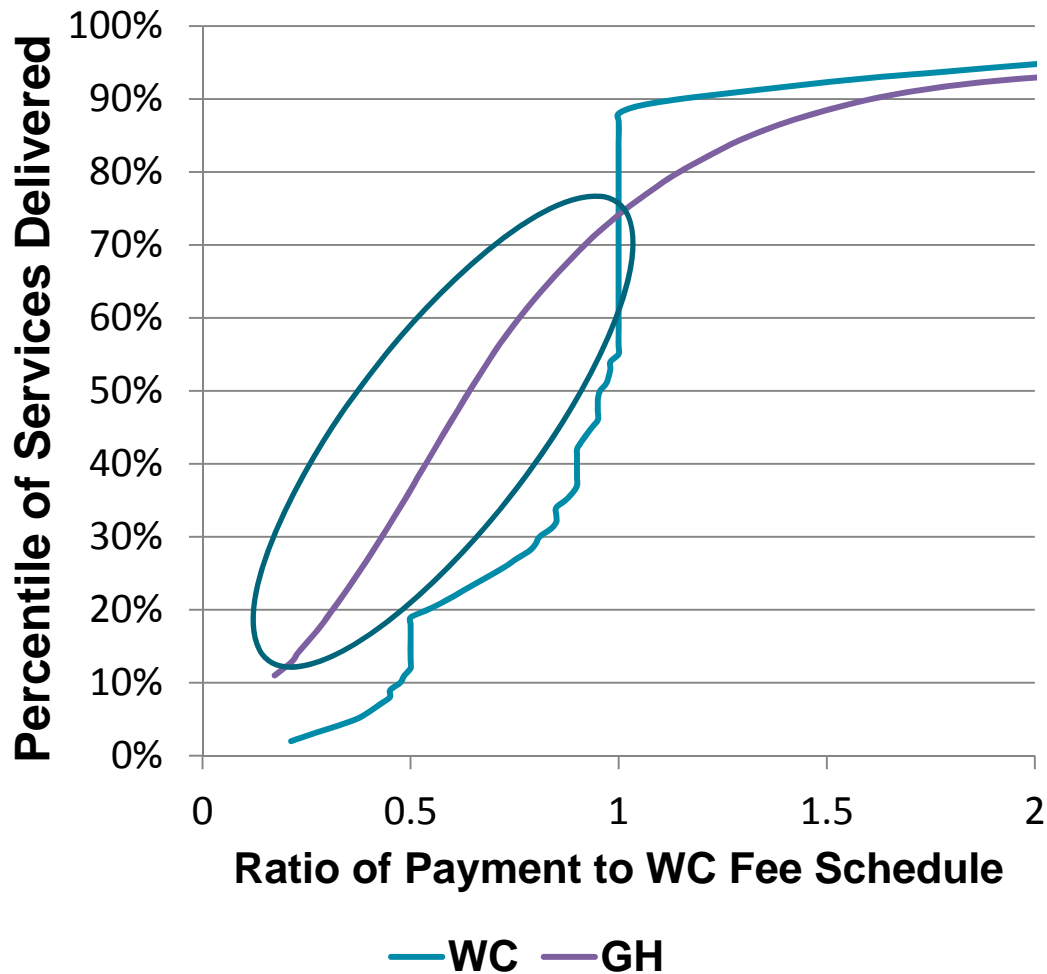


- One-third of WC payments for Surgery are at the MAR
- WC often pays more than GH for comparable surgical services

The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# Surgery

## Multi-State Distribution of Reimbursements for Surgery

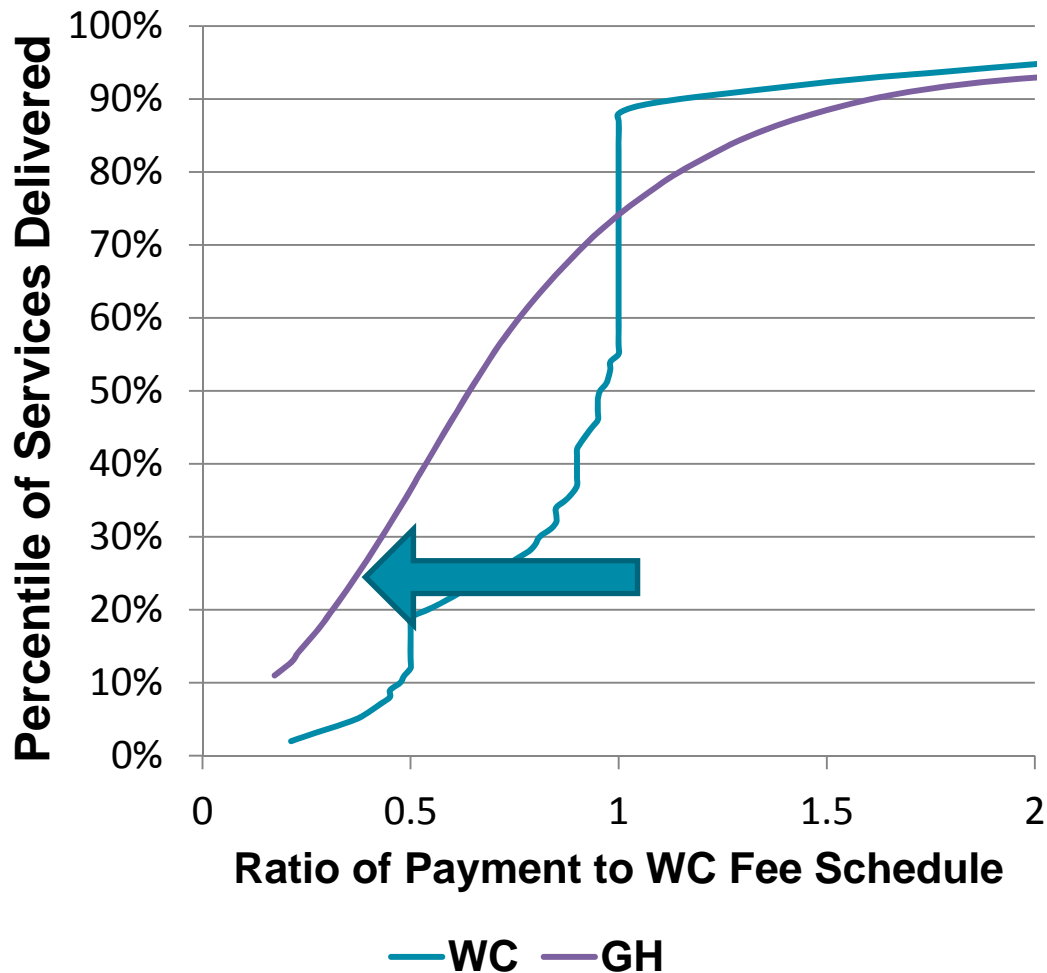


- One-third of WC payments for Surgery are at the MAR
- WC often pays more than GH for comparable surgical services
  - About three-fourths of GH payments for Surgery are below the MAR

The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# Surgery

## Multi-State Distribution of Reimbursements for Surgery



- One-third of WC payments for Surgery are at the MAR
- WC often pays more than GH for comparable surgical services
  - About three-fourths of GH payments for Surgery are below the MAR
  - 25% of surgical services in GH are paid at 63% or more below the MAR

The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.



# Surgery

- Workers Compensation prices are concentrated at the MAR
- WC prices paid below the MAR are still well above Group Health and Medicare (MC) prices
- Some WC prices paid at the MAR are below prices paid by Group Health and Medicare

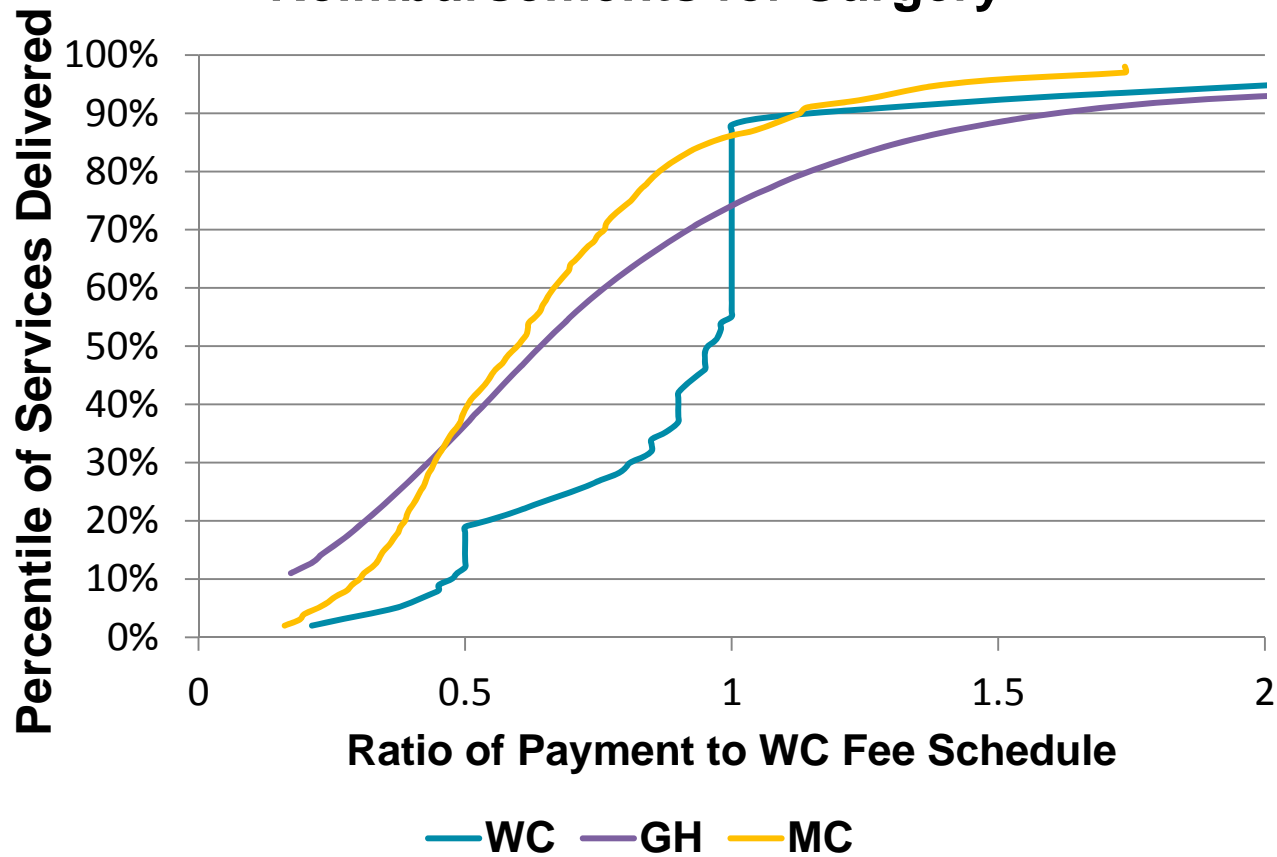
Based on billings processed from July 1, 2010 to June 30, 2012;  
See Appendix, Methodology: Data, for more information.



# WC Fee Schedules

## Concentrate WC Payments

### Multi-State Distribution of Reimbursements for Surgery

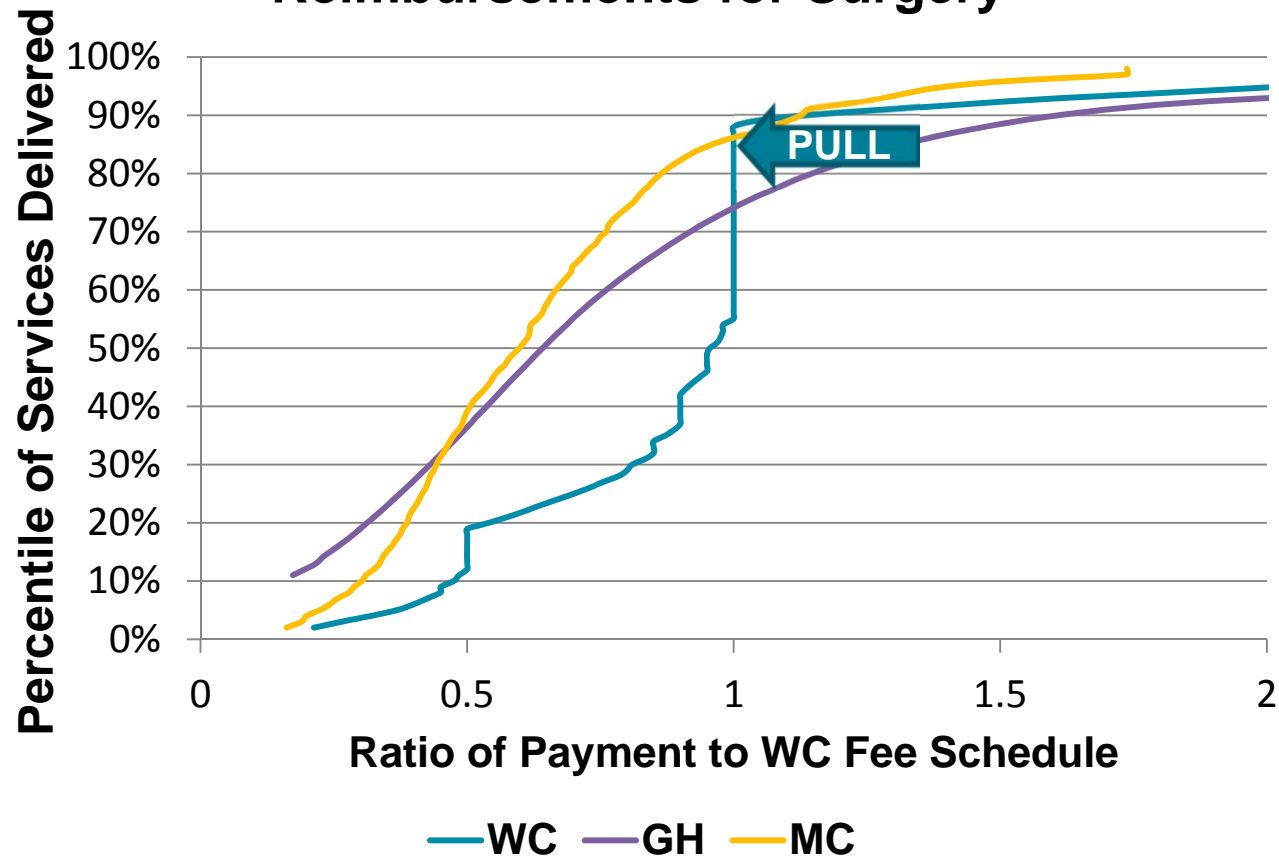


The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health and Medicare reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# WC Fee Schedules

## Concentrate WC Payments

### Multi-State Distribution of Reimbursements for Surgery

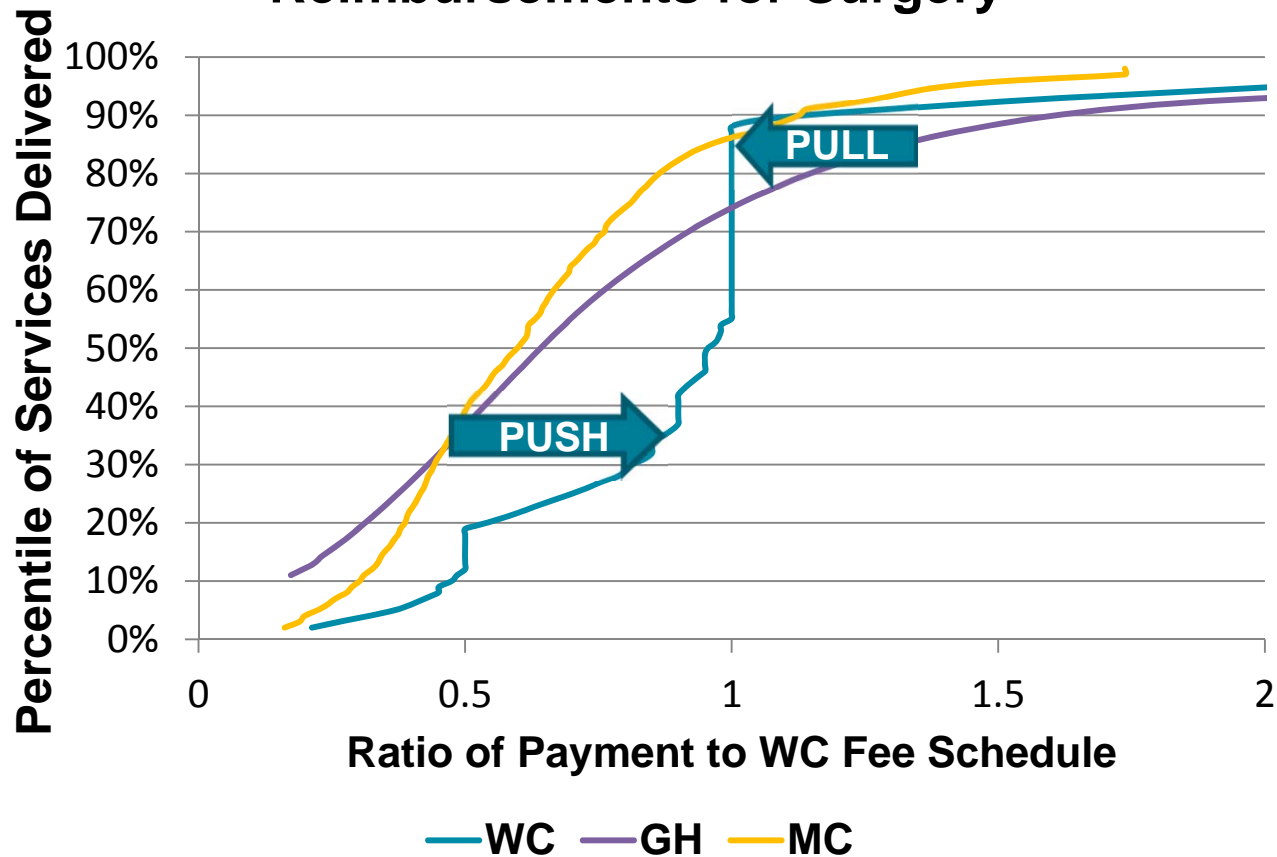


The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health and Medicare reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# WC Fee Schedules

## Concentrate WC Payments

### Multi-State Distribution of Reimbursements for Surgery



The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health and Medicare reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# Surgery

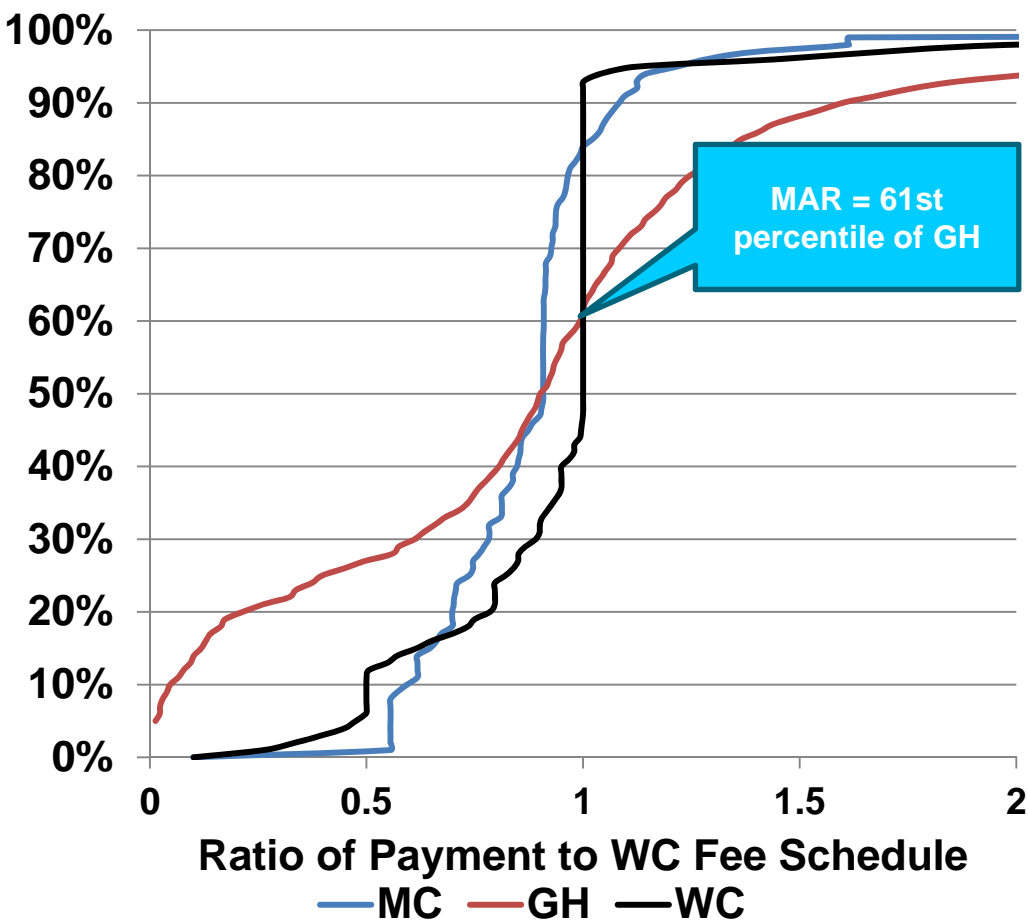
- State experience may vary:
  - Degree of concentration at the MAR
  - Relativity to GH
- Hawaii generally follows the multi-state pattern for Surgery
  - Somewhat more concentration of WC at the MAR
  - Similar relativity to GH
    - 61% of GH payments are below the MAR
- Illinois differs from the multi-state pattern for Surgery
  - Somewhat less concentration of WC at the MAR
  - WC payments are higher relative to GH than WC payments relative to GH countrywide
    - 93% of GH payments are below the MAR

Based on billings processed from July 1, 2010 to June 30, 2012;  
See Appendix, Methodology: Data, for more information.

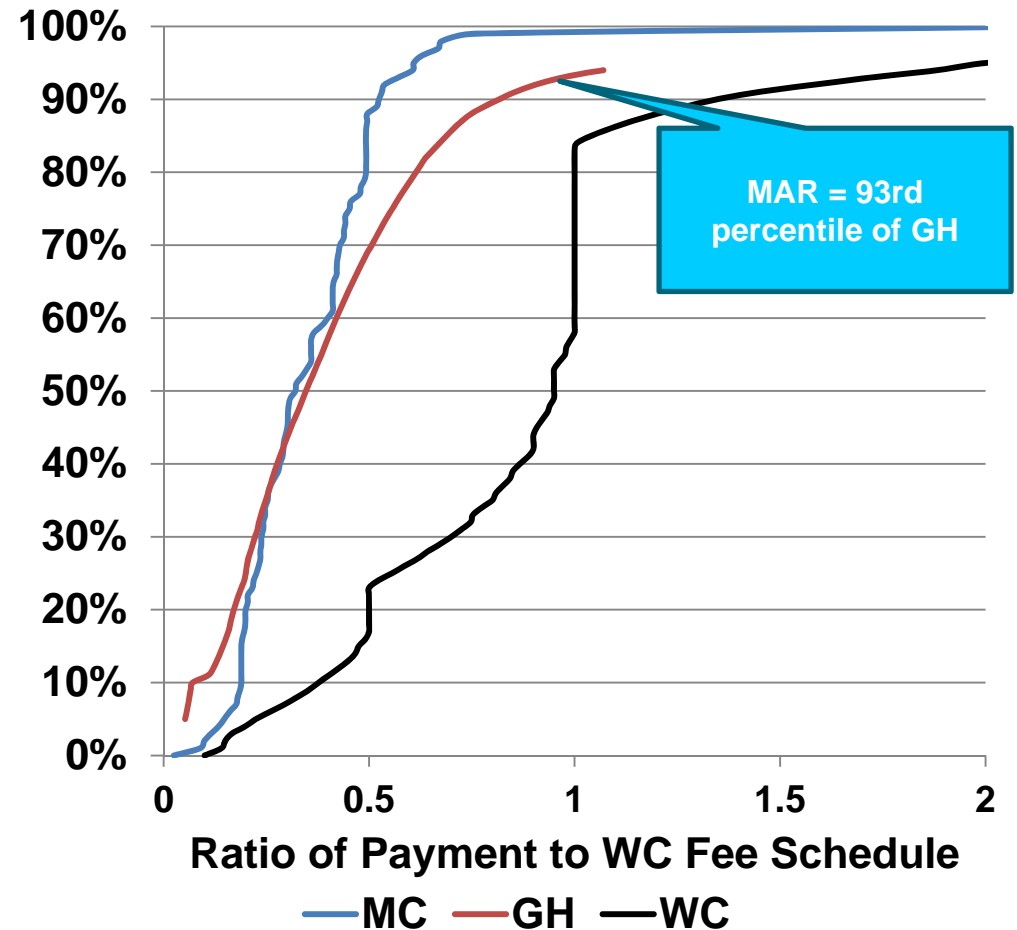


# Surgery

**Distribution of Reimbursements:  
Surgery  
Hawaii**



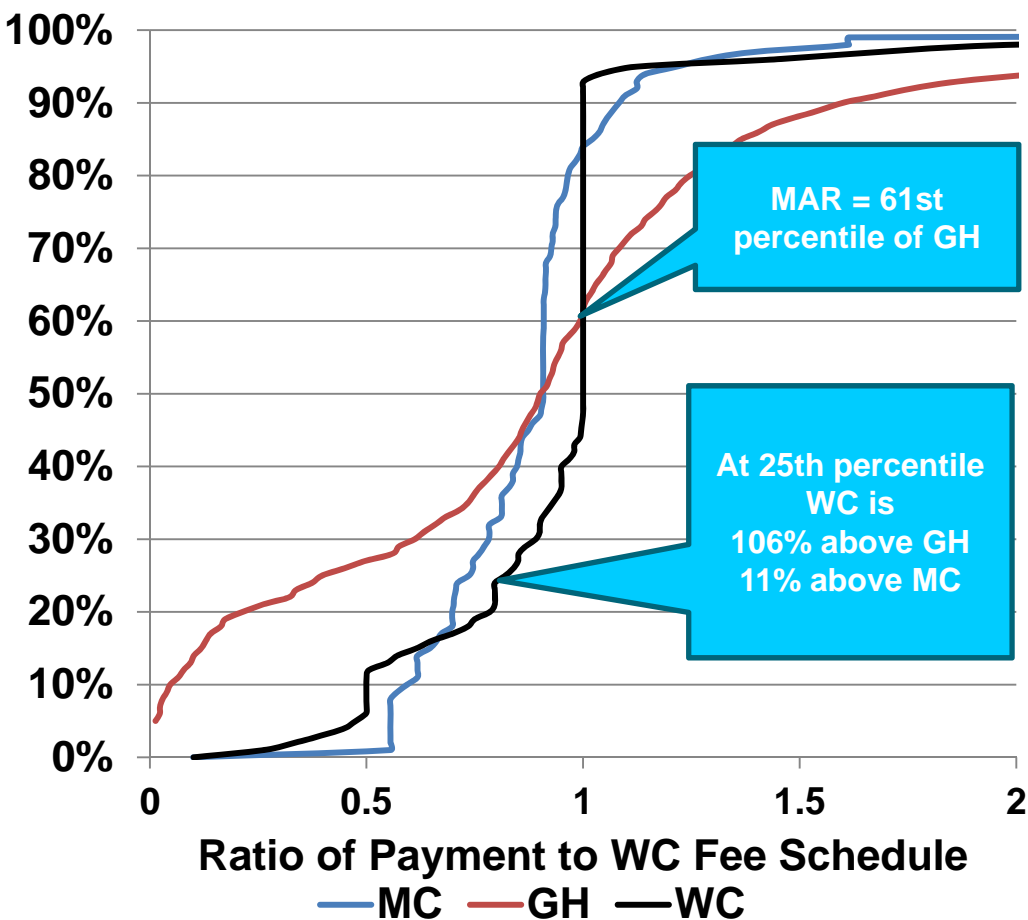
**Distribution of Reimbursements:  
Surgery  
Illinois**



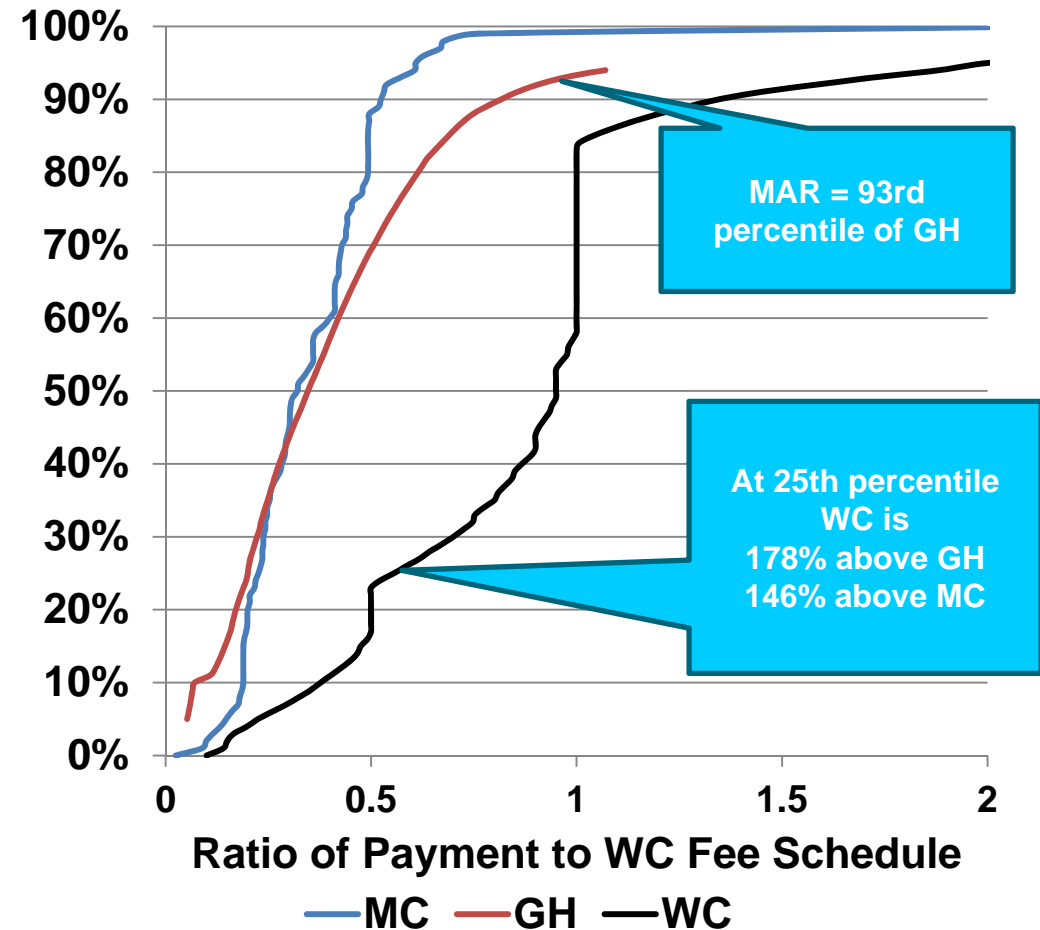
The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health and Medicare reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# Surgery

**Distribution of Reimbursements:  
Surgery  
Hawaii**



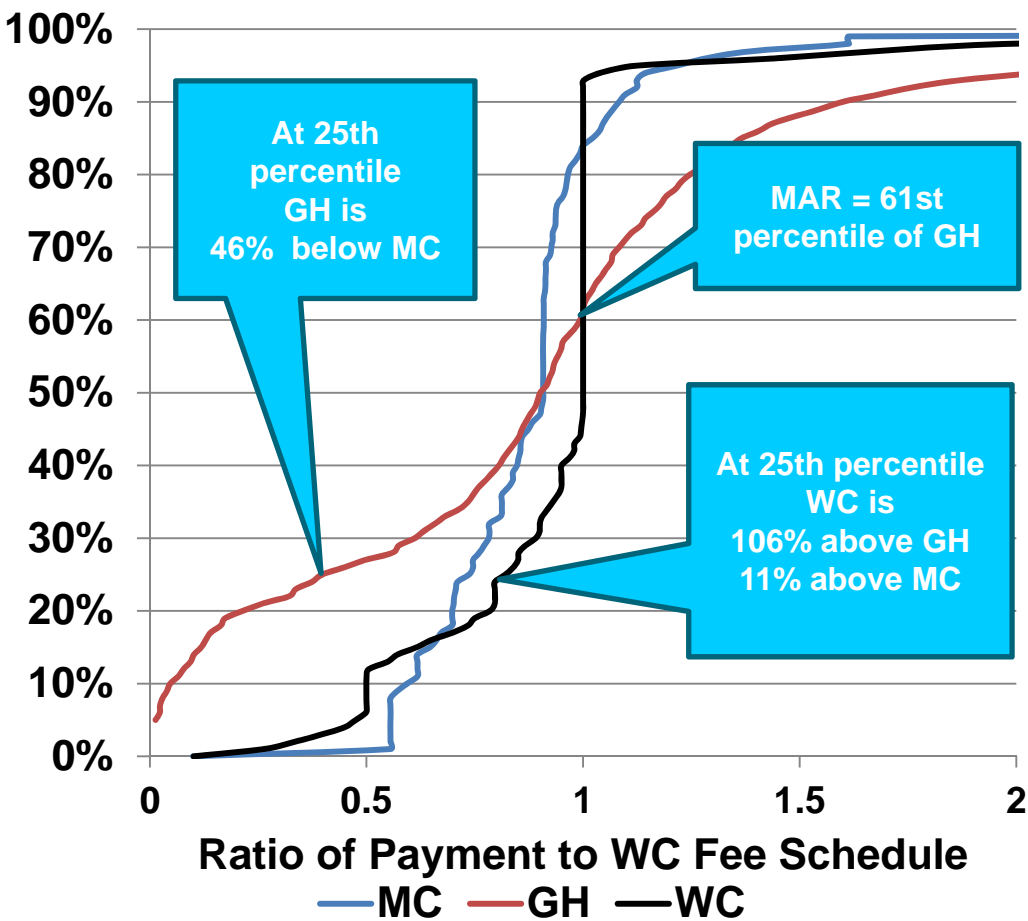
**Distribution of Reimbursements:  
Surgery  
Illinois**



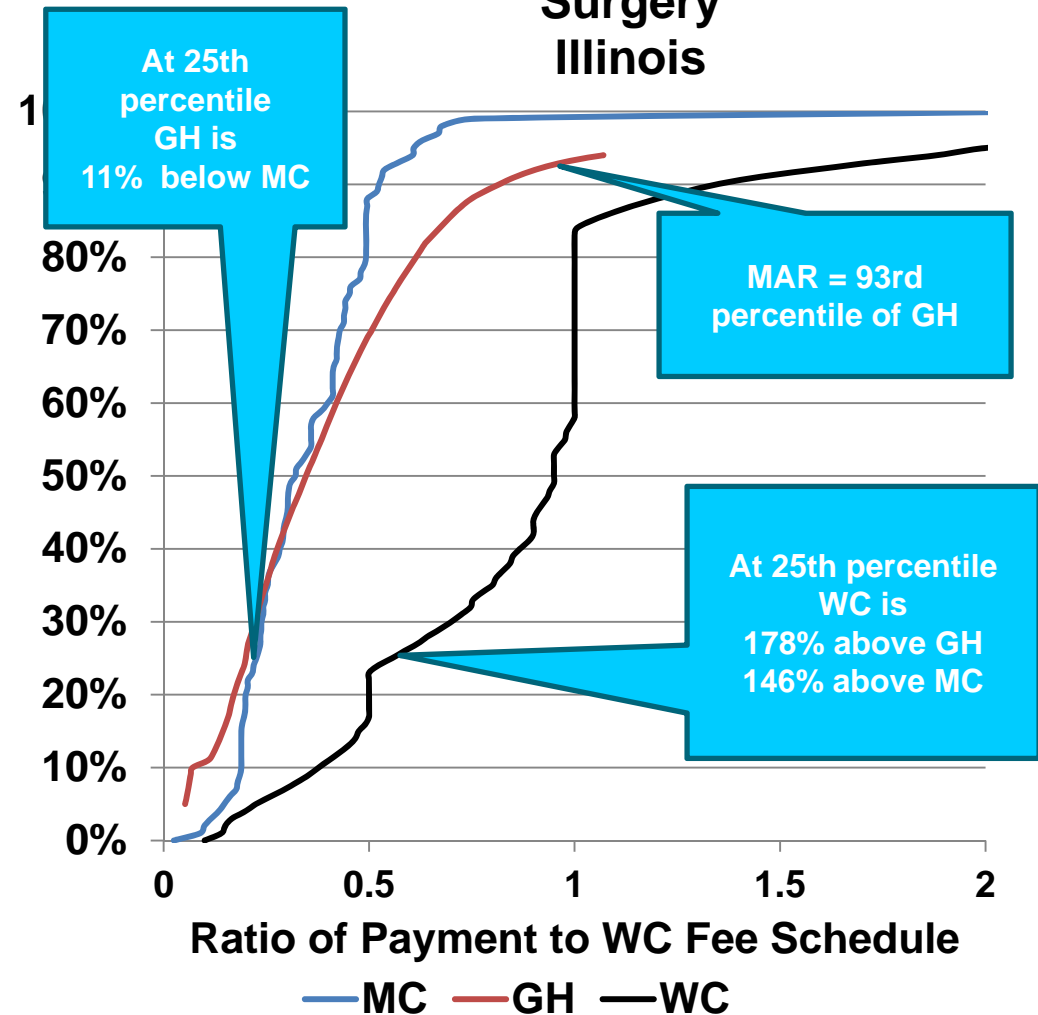
The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health and Medicare reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# Surgery

**Distribution of Reimbursements:  
Surgery  
Hawaii**



**Distribution of Reimbursements:  
Surgery  
Illinois**



The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health and Medicare reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.





# Evaluation and Management

# Evaluation and Management

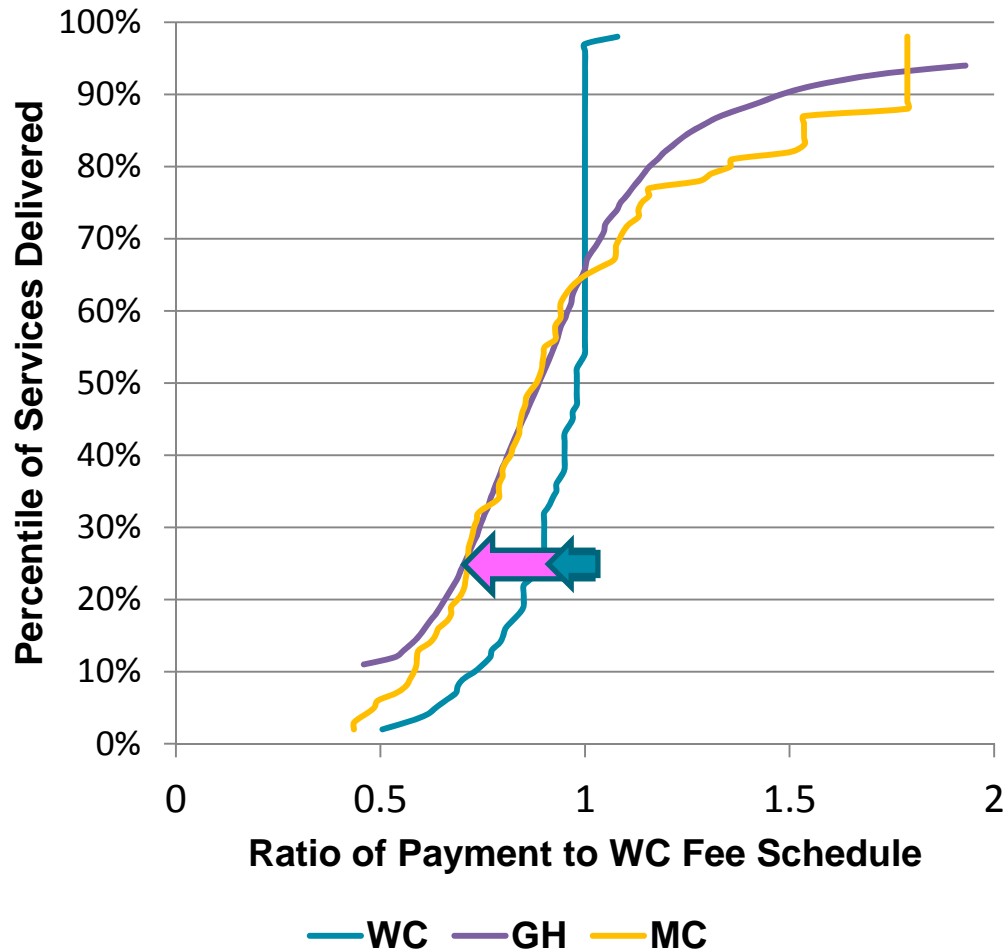
- For Workers Compensation
  - More than half of Evaluation and Management (E&M) services are paid below the MAR
  - More than 40% of E&M services are paid at the MAR
  - 25% of E&M services are discounted 10% or more off the MAR
- WC often pays more than GH for comparable E&M services
  - 65% of GH payments for E&M services are below the MAR
  - 25% of E&M services in GH are paid at 30% or more below the MAR

Based on billings processed from July 1, 2010 to June 30, 2012;  
See Appendix, Methodology: Data, for more information.



# Evaluation and Management

## Multi-State Distribution of Reimbursements for E&M Services



At the 25th percentile

- WC is 10% below the MAR
- GH is 30% below the MAR

The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health and Medicare reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.

# Surgery Versus Evaluation and Management

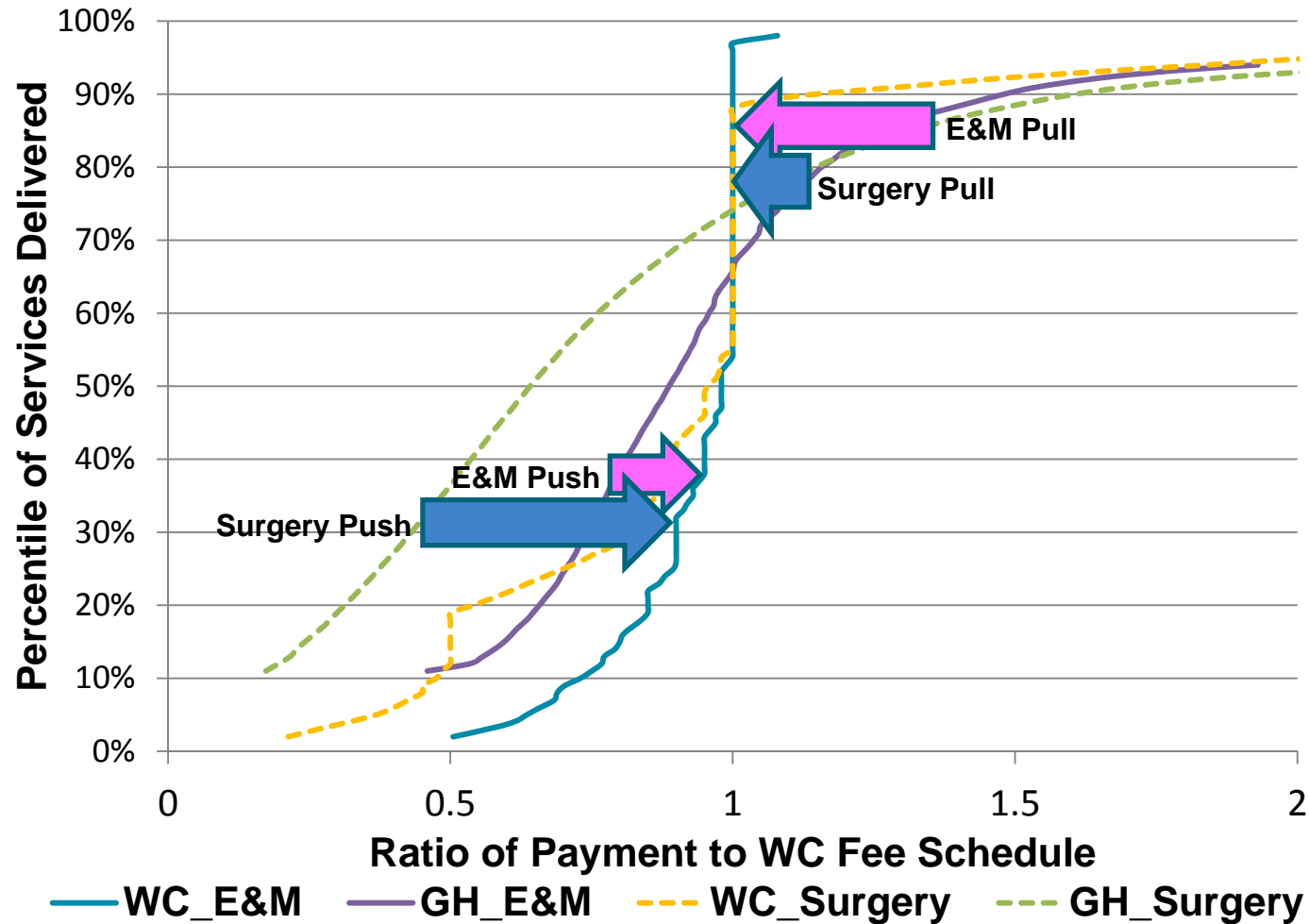
- The influence of fee schedules is quite different between the high-volume Evaluation and Management and the small-volume Surgery categories
- For both Surgery and E&M, the WC fee schedule is near the 70th percentile of GH payments
- WC discounts are similar but Surgery is reimbursed at a higher price relative to GH
- A higher share of WC payments for Surgery are above the MAR than for E&M

Based on billings processed from July 1, 2010 to June 30, 2012;  
See Appendix, Methodology: Data, for more information.



# WC Fee Schedules Work More as Intended for E&M Than for Surgery

## Multi-State Distribution of Reimbursements E&M vs. Surgery



The chart shows the percentiles of payments relative to the MAR. Percentiles for Group Health and Medicare reflect the same mix of services as WC. Based on billings processed from July 1, 2010 to June 30, 2012; See Appendix, Methodology: Data, for more information.



# Conclusions

# Conclusions

- Fee schedules influence more than just the small portion of charges that exceed the MAR
- Fee schedules may have the unintended consequence of increasing some payments
- A discount from a fee schedule amount does not ensure a competitive price
- To determine the effectiveness of fee schedules, it is important to consider market rates
- The full research report as well as additional research can be found at [ncci.com](http://ncci.com)



**Thank You**





# Other Relevant Studies

# Bibliography

- F. Schmid, N. Lord, *The Impact of Physician Fee Schedules in Workers Compensation*, NCCI, August 2012
- O. Fomenko, T. Liu, *Designing Workers' Compensation Fee Schedules*, WCRI, June 2012
- D. Corro, J. Robertson, *The Impact on Physician Reimbursement of Changes to Workers Compensation Medical Fee Schedules*, NCCI, March 2011
- B. Lipton, J. Robertson, D. Corro, *Medicare and Workers Compensation Medical Cost Containment*, NCCI, January 2010
- B. Lipton, D. Corro, N. Moore, J. Robertson, *Effectiveness of Workers Compensation Fee Schedules—A Closer Look*, NCCI, February 2009
- J. Robertson, D. Corro, *Making Workers Compensation Medical Fee Schedules More Effective*, NCCI, December 2007



# APPENDIX



# Methodology (Appendix)

# Methodology: Service Categories

Professional services, identified by CPT codes\*, are organized into three levels of increasing specificity

- The major groupings of the AMA billing codes
- Each major grouping is broken down into several more specialized groups, again conforming with AMA publications
- The CPT code is the finest level of detail
- Study looks at frequency distributions of payments
  - While surgery accounts for 5% of payments, those payments make up 35% of the total amount paid
  - Physical Medicine dominates the Medicine category (93% of services and 85% of payments)

\*CPT codes are the intellectual property of the AMA

Based on billings processed from July 1, 2010 to June 30, 2012;



# Methodology: Data

Workers Compensation data is from NCCI's Medical Data Call (MDC) for transaction-level medical billings data

- Jurisdictions included in this study are AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, ID, IL, KS, KY, LA, MA, MD, ME, MN, MS, MT, NC, NE, NM, NV, NY, OK, OR, RI, SC, SD, TN, UT, VT, and WV
- Workers compensation data is transactions reported to NCCI from July 1, 2010 to June 30, 2012
- Study based on about 40 million WC medical payment transactions

# Methodology: Data

- Group Health prices are from FAIR Health
  - Geographically dispersed with large market share
    - More than 125 million covered lives
    - Includes various GH products (HMO, PPO, FFS)
  - Data is prices paid at certain percentiles (10th, 15th, 20th, ..., 95th), by CPT code and three-digit zip code
- Medicare reimbursement amounts are determined from relative values and conversion factors published by the federal government
- GH and MC are adjusted to the WC mix of services

# Methodology: Data

- Anesthesia was not included
  - GH data was not available for anesthesia services
  - Challenges quantifying the volume of services provided
- We studied between three and five minor service categories for each major service category
- We studied between five and twenty CPT codes for the largest minor service category within each major service category



# Study Data

Service Category	Share of Total Number of Services and Amounts Paid	
	Number of Services	Amount Paid
Evaluation and Management	20.0%	21.9%
Surgery	5.3%	35.3%
Radiology	7.8%	11.6%
Pathology and Laboratory	1.8%	0.5%
Medicine	65.1%	30.7%
<b>Total*</b>	<b>100.0%</b>	<b>100.0%</b>

\*Total does not include anesthesia or drugs

Based on billings processed from July 1, 2010 to June 30, 2012



# Methodology: Service Categories

## Frequency Distribution of Data Used in Study by Major and Minor Service Category

Evaluation and Management (20.0%)	office/other outpatient services (87.2%)
	emergency department services (5.3%)
	consultations (3.9%)
	hospital inpatient services (2.4%)
	other evaluation and management (1.2%)
Surgery (5.3%)	musculoskeletal system (54.9%)
	nervous system (25.2%)
	integumentary system (16.4%)
	other surgery (7.5%)
Radiology (7.8%)	diagnostic imaging (93.4%)
	radiologic guidance (4.2%)
	other radiology (2.4%)
Pathology and Laboratory (1.8%)	chemistry (24.6%)
	hematology & coagulation (23.1%)
	other pathology and laboratory (52.3%)
Medicine (65.1%)	physical medicine & rehabilitation (88.2%)
	chiropractic manipulative treatment (4.9%)
	neurology & neuromuscular procedures (2.2%)
	other medicine (4.7%)

Based on billings processed from July 1, 2010 to June 30, 2012



# Price Relativities by State (Appendix)

# Price Relativities by State

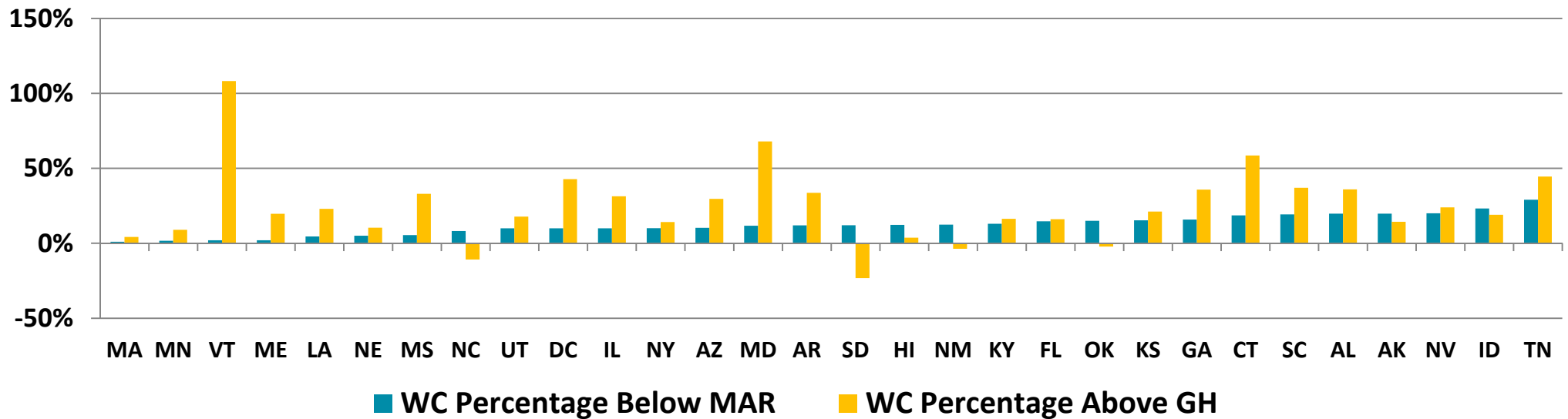
- For a given service, the WC prices relative to the MAR do not correlate with WC prices relative to GH
- Radiology and E&M illustrate this:
  - At the 25th percentile, WC prices for most states are at a significant markup over GH payments
  - At the 25th percentile, those markups bear little relation to the discounts off the MAR by state
  - Despite bigger discounts, Radiology shows bigger markups than E&M

Based on billings processed from July 1, 2010 to June 30, 2012



# WC Prices Relative to MAR Do Not Correlate with WC Prices Relative to GH

## Evaluation and Management 25<sup>th</sup> Percentile WC Price Relativity to MAR and WC Relativity to GH

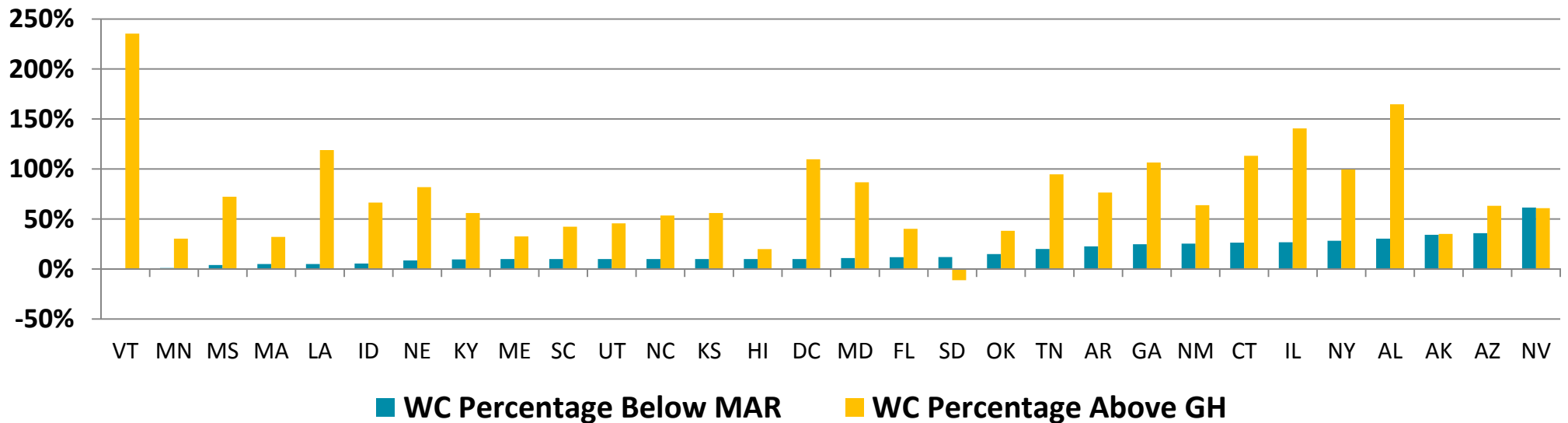


Based on billings processed from July 1, 2010 to June 30, 2012



# WC Prices Relative to MAR Do Not Correlate with WC Prices Relative to GH

**Radiology**  
**25<sup>th</sup> Percentile WC Price Relativity to MAR and WC Relativity to GH**



Based on billings processed from July 1, 2010 to June 30, 2012

