



Efficacy of Medical Networks

Barry Lipton, FCAS, MAAA
Practice Leader and Senior Actuary
NCCI

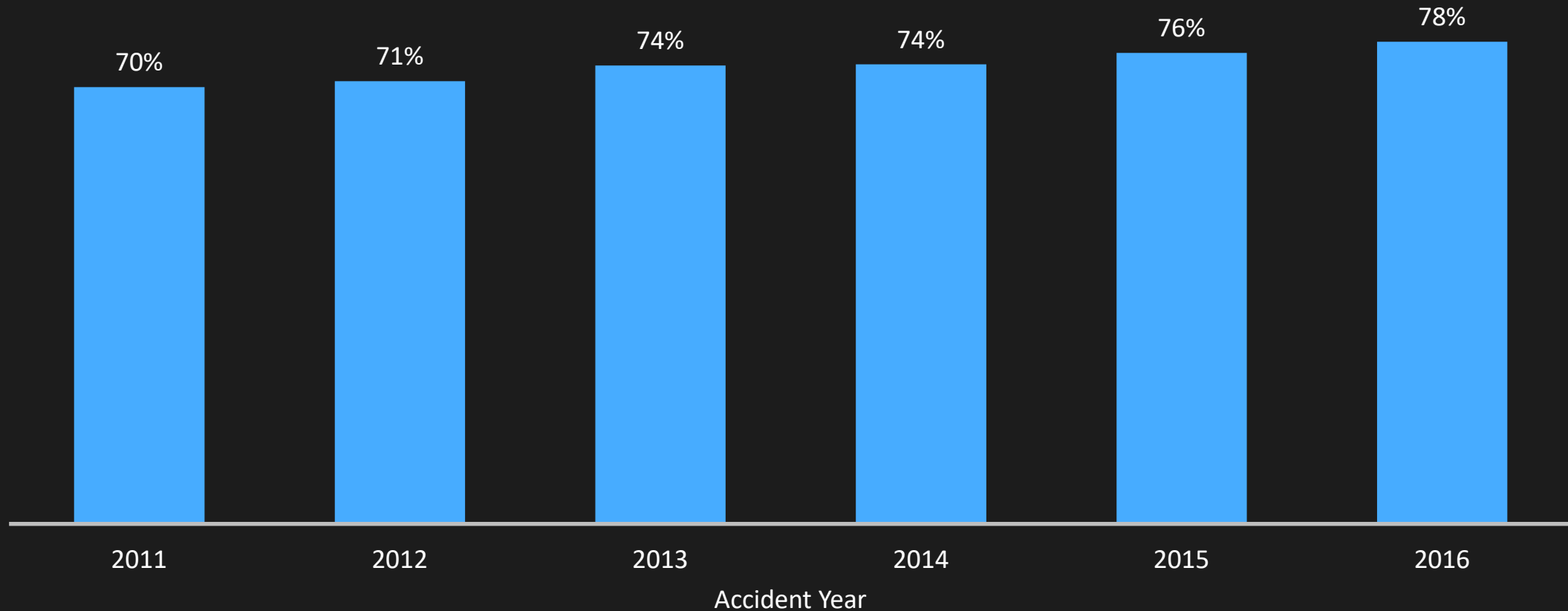
AIS
2018
30th Anniversary

Agenda

- ◆ Are in-network price departures greater in states with more generous fee schedules?
- ◆ How does utilization compare in-network to out-of-network?
- ◆ Has the Affordable Care Act (ACA) affected the time to first treatment?
- ◆ What are the latest trends in mega claims?

Medical Provider Networks Have Seen Steady Growth in Recent Years

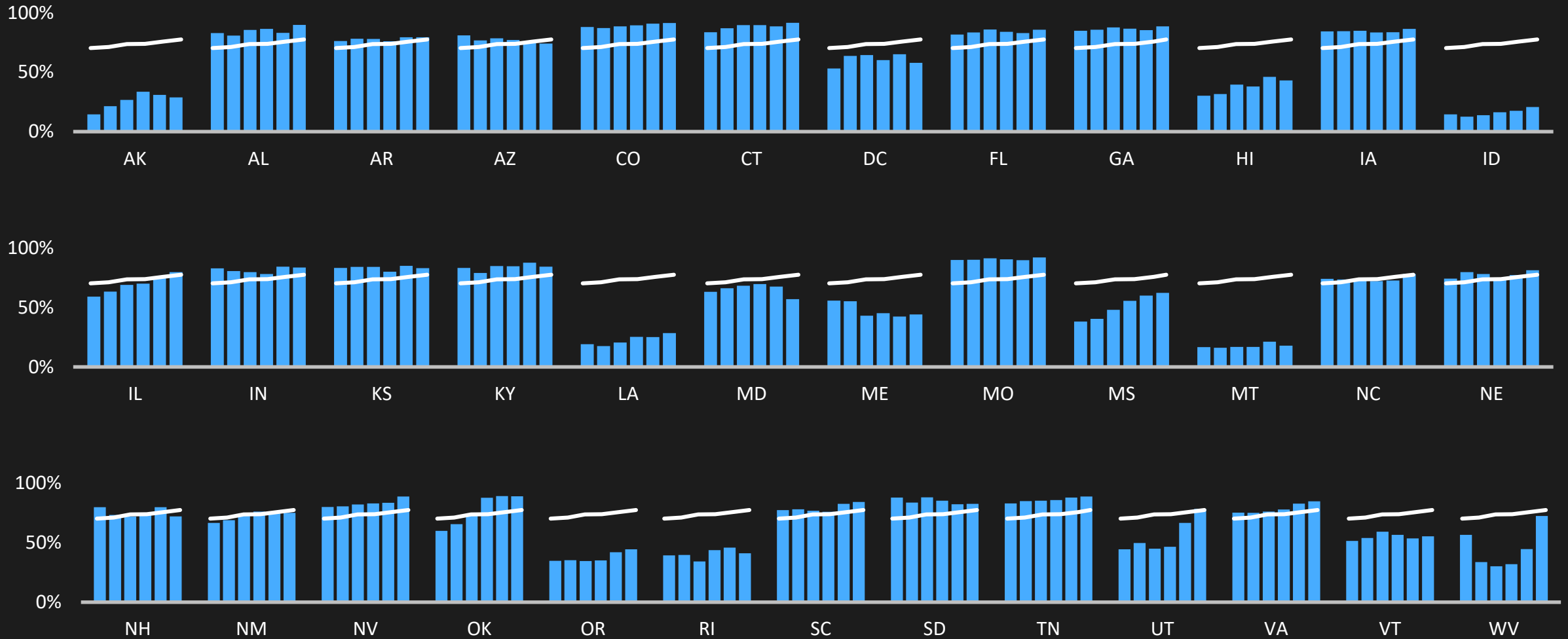
Share of In-Network Payments by Accident Year



Source: NCCI's Medical Data Call for 37 states—states where NCCI provides ratemaking services, excluding TX. Includes lost-time and medical-only claims.

In-Network Payment Share Varies by State

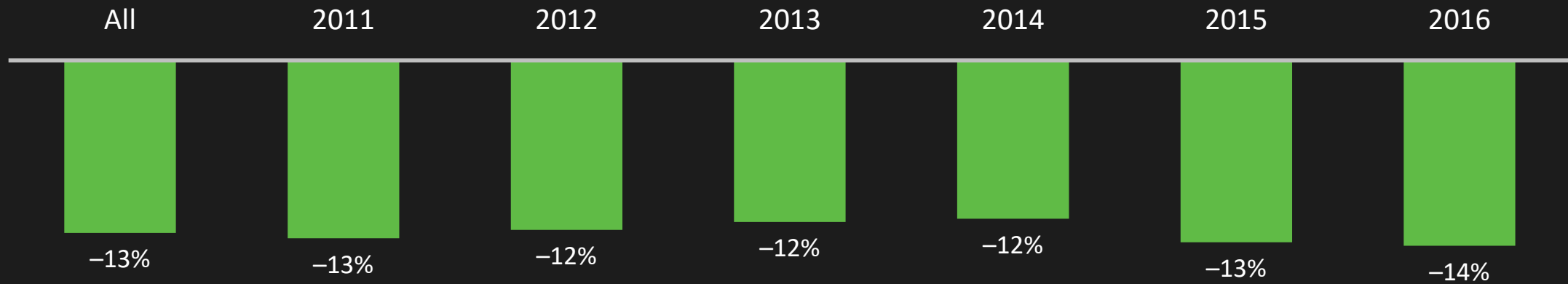
Accident Years 2011–2016



Source: NCCI's Medical Data Call for 37 states—states where NCCI provides ratemaking services, excluding TX. Includes lost-time and medical-only claims. White lines represent weighted averages across all states.

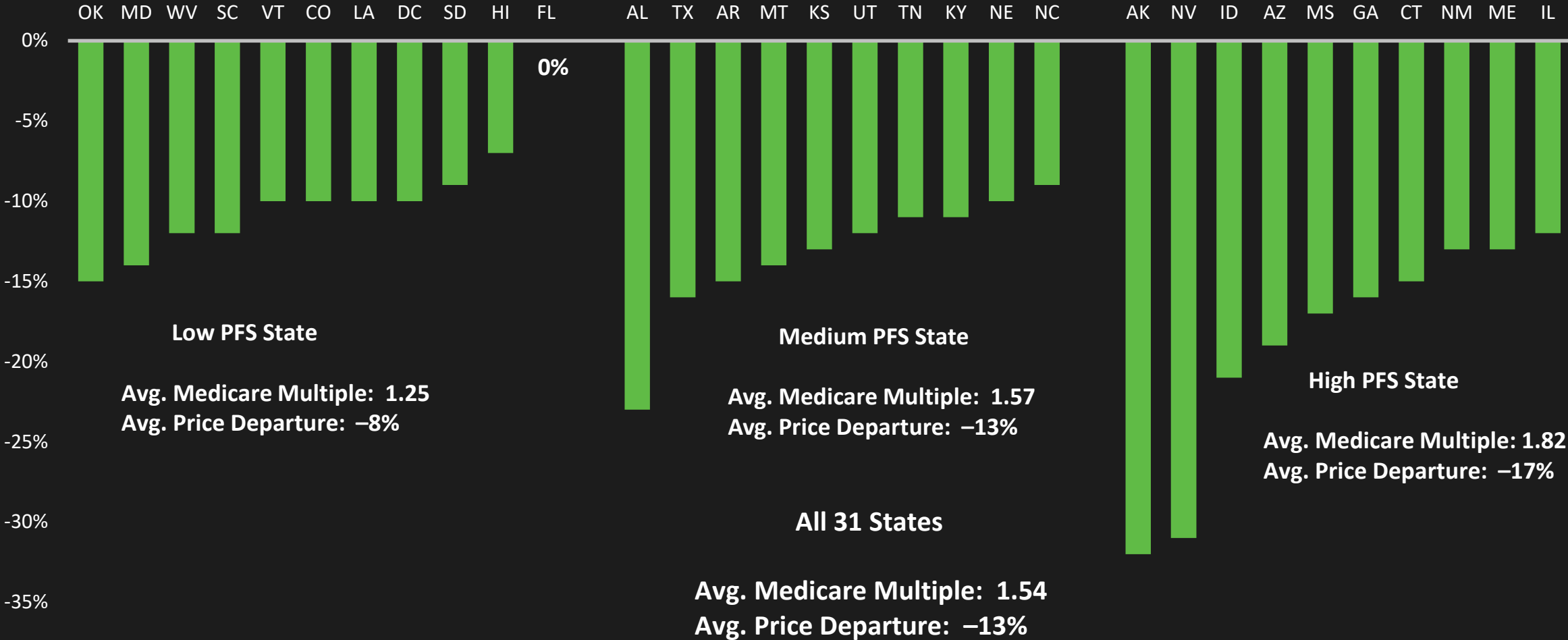
In-Network Price Departures Have Been Stable

Physician Services by Service Year



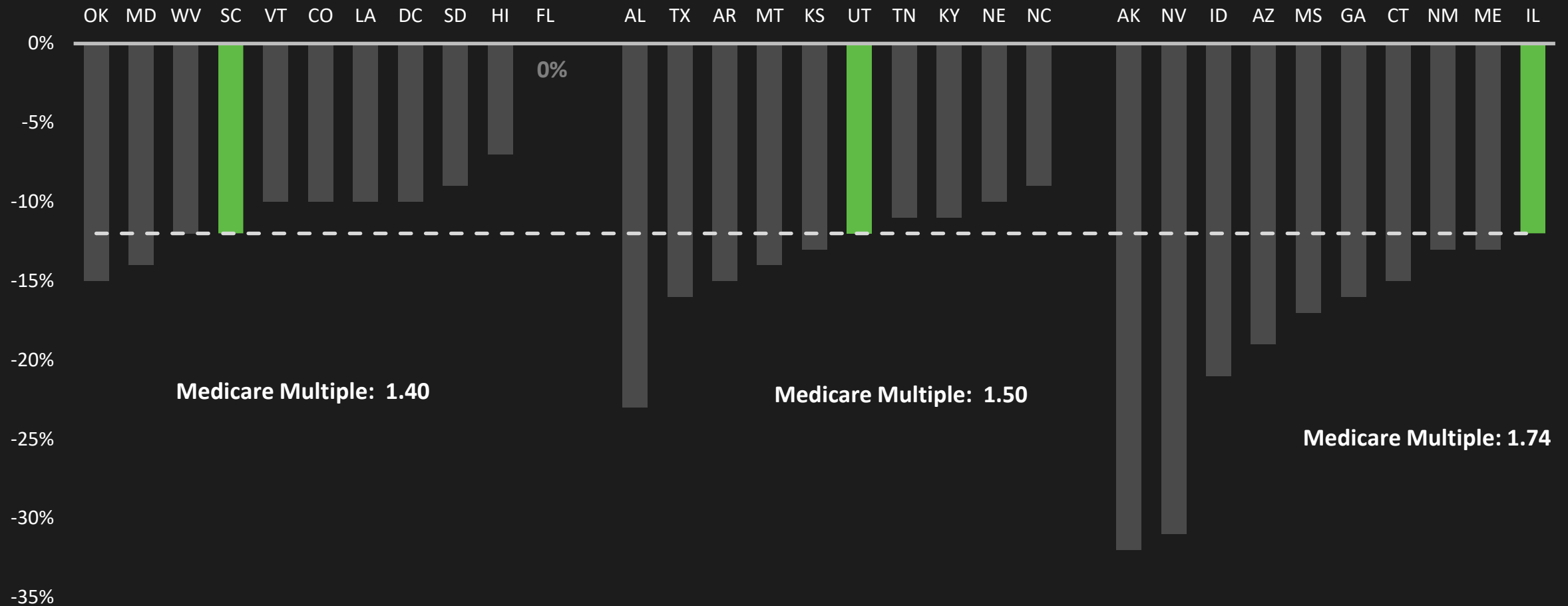
Sources: NCCI's Medical Data Call and Texas DWC's Medical State Reporting Public Use Data File. Includes lost-time and medical-only claims for 33 states: states where NCCI provides ratemaking services, excluding five states without a physician fee schedule (PFS)—IA, IN, MO, NH, and VA. Price Departure is the average of the ratios of actual paid to Maximum Amount Reimbursable (MAR) set by the PFS.

In-Network Price Departures Sometimes Reflect Differences Between State MARs Physician Services 2011–2016



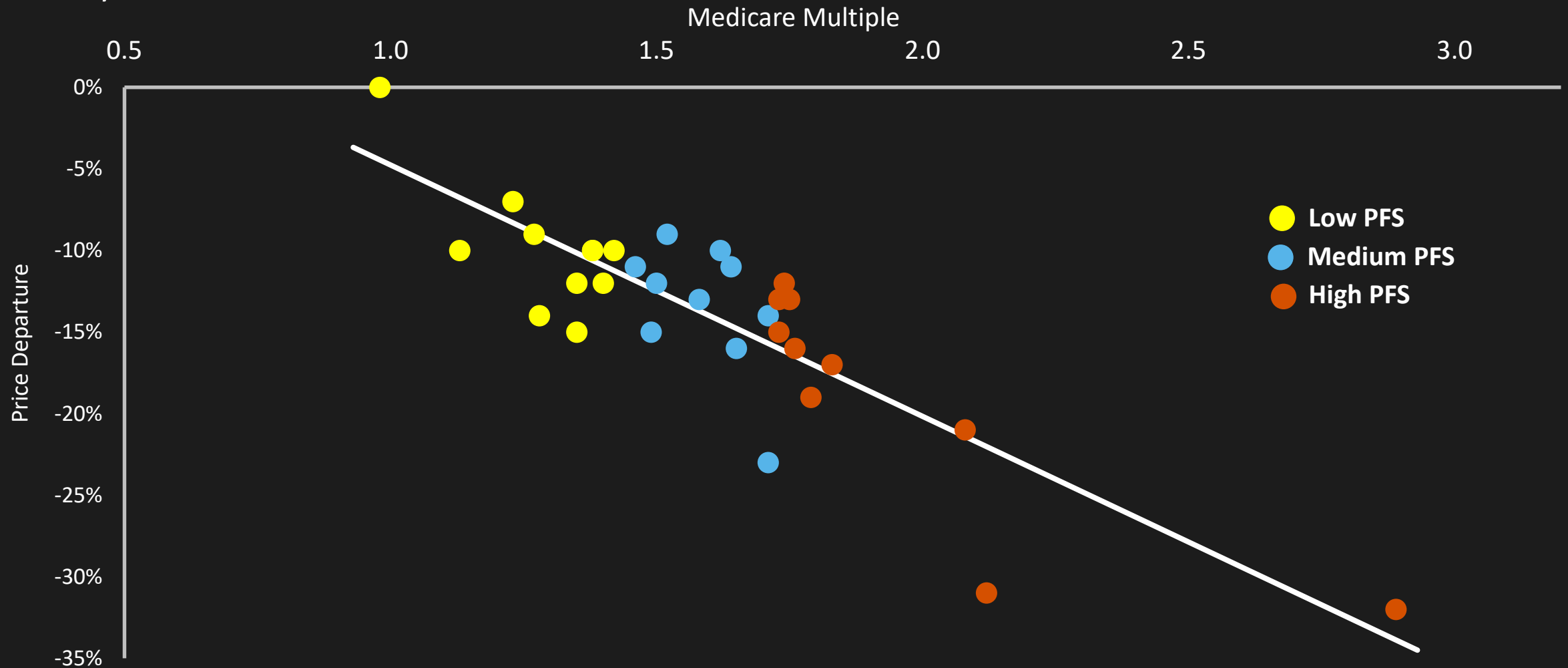
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In-Network Price Departures Don't Always Reflect Differences Between State MARs Physician Services 2011–2016



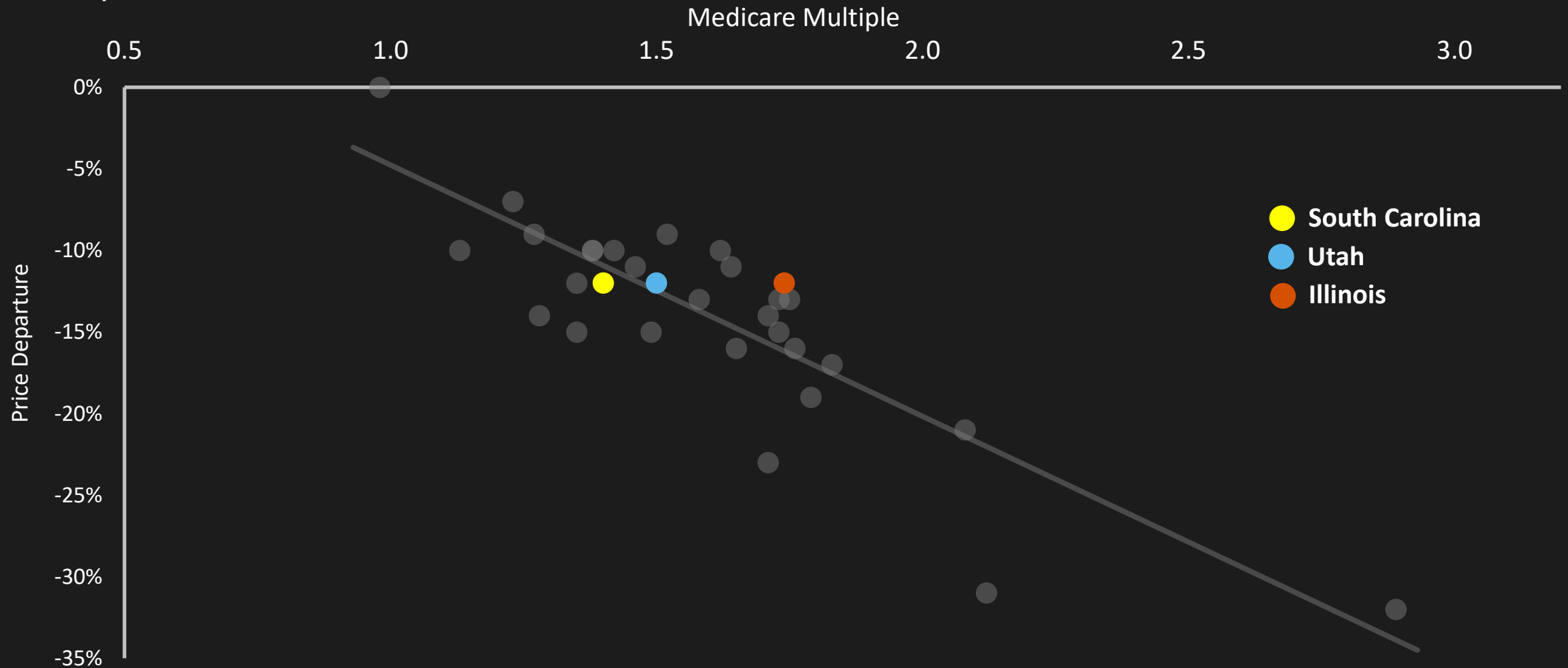
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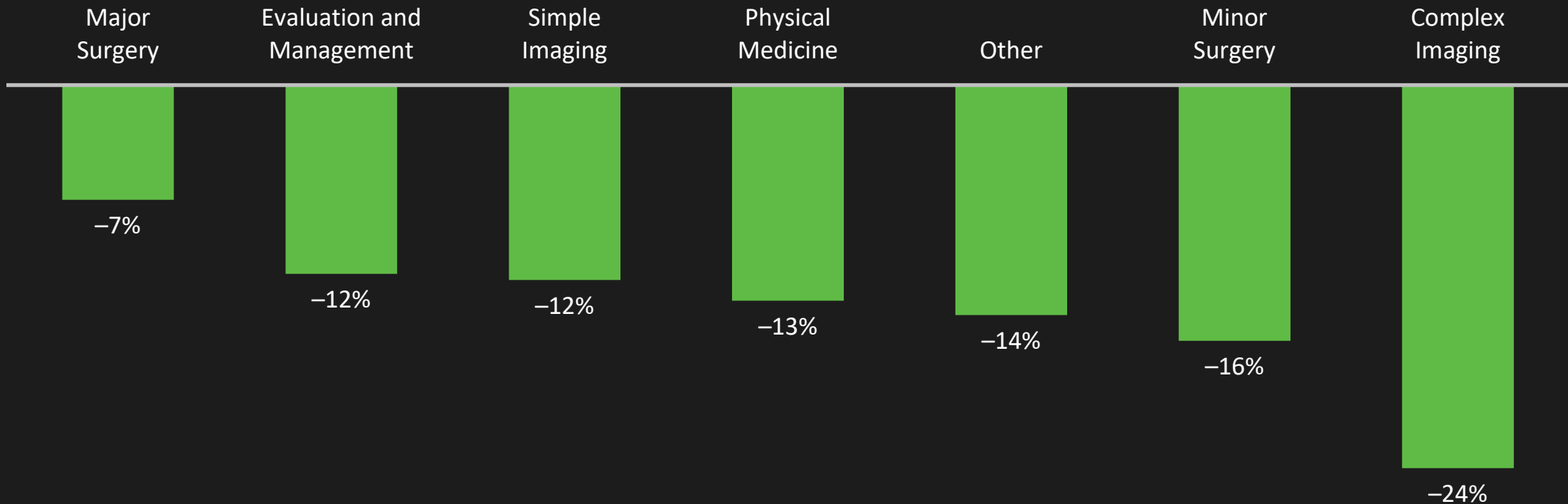
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In-Network Price Departures Vary by Service Type

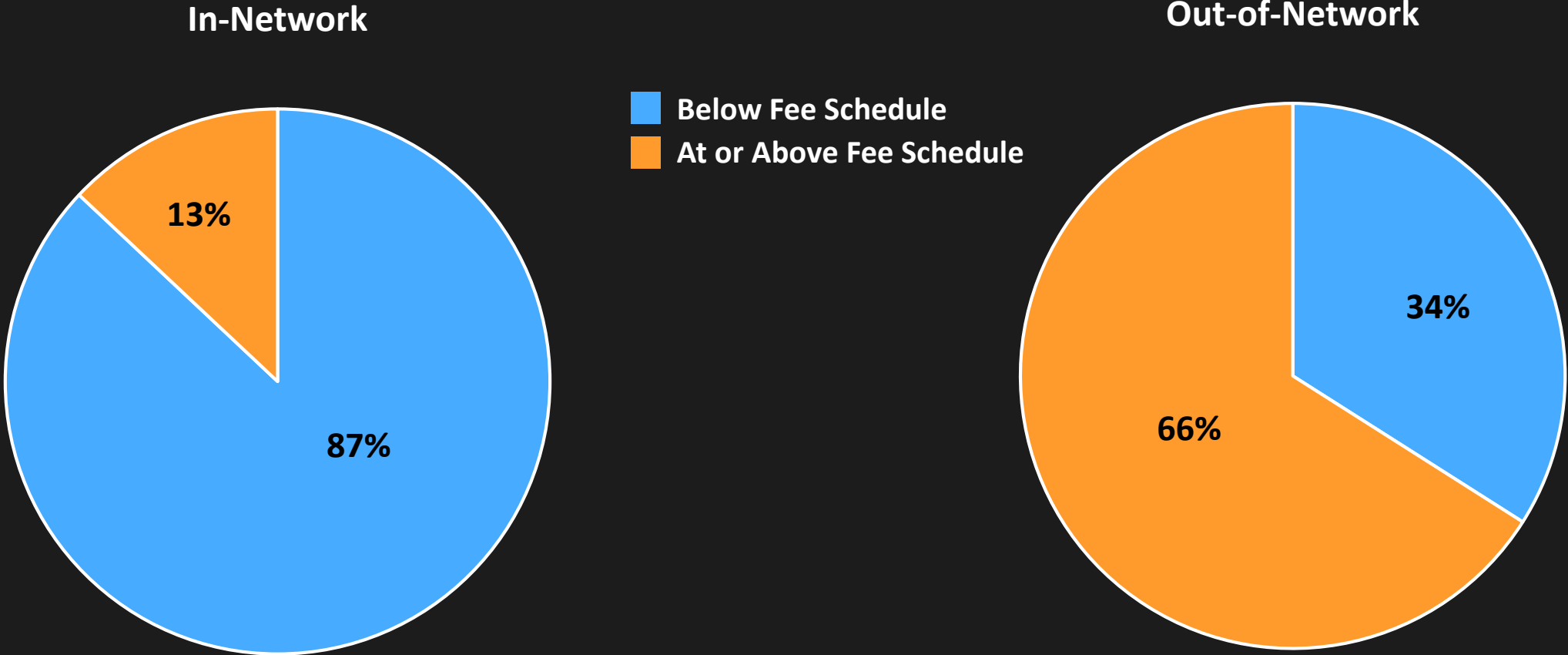
Physician Services 2011–2016



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Share of Payments Below MAR Is Much Larger In-Network

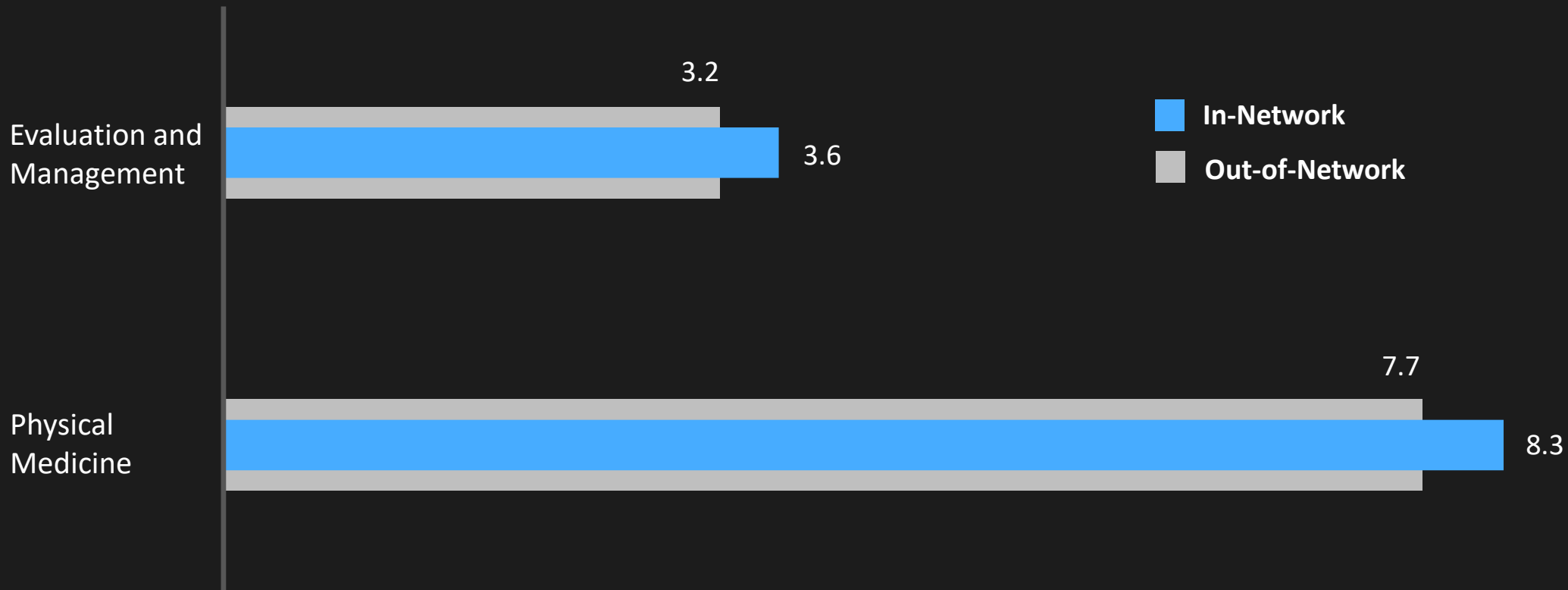
Physician Services 2011–2016



Source: NCCI’s Medical Data Call and Texas DWC’s Medical State Reporting Public Use File. Includes lost-time and medical-only claims for 33 states: states where NCCI provides ratemaking services, excluding five states without a PFS—IA, IN, MO, NH, and VA. In-network share of payments above MAR is 3%. Out-of-network share of payments above MAR is 4%.

In-Network Providers Use More Evaluation and Management and Physical Medicine Services per Claim

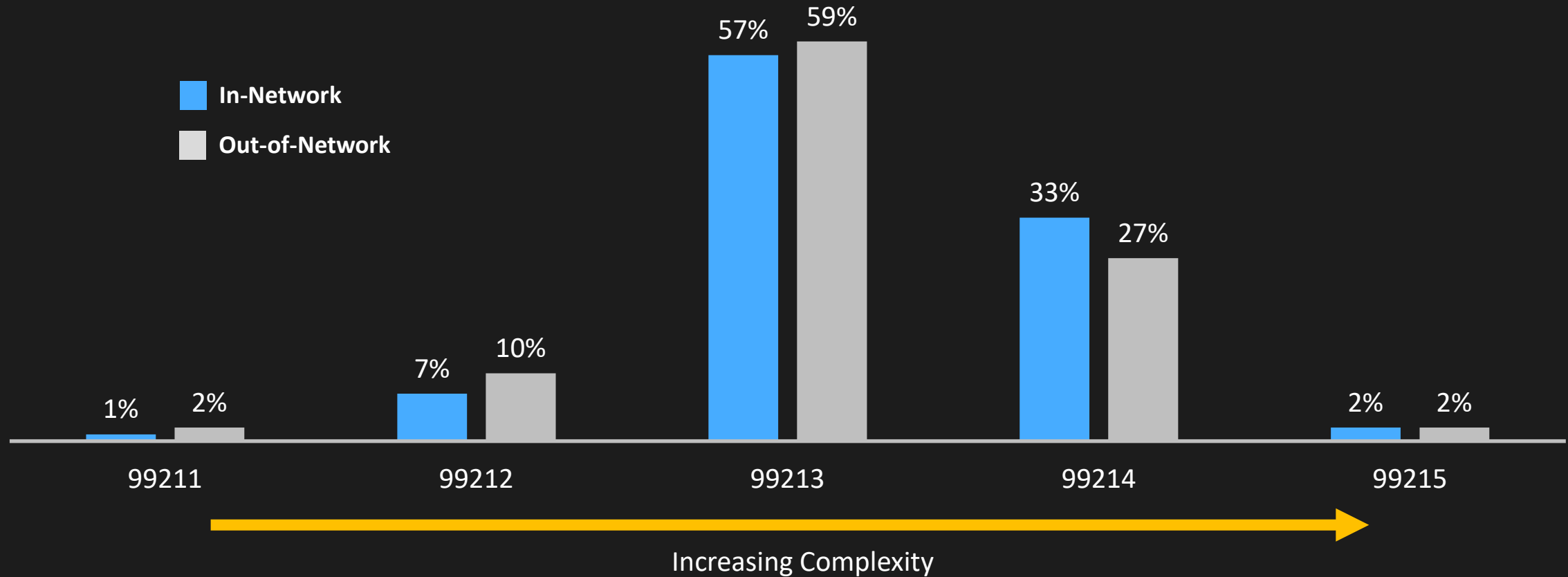
Number of Physician Services Within 90 Days of Injury



Source: NCCI's Medical Data Call for Accident Years 2011 to 2016 for 37 states—states where NCCI provides ratemaking services, excluding TX. Includes lost-time and medical-only claims. Adjusted for mix of claims. A claim is in-network if at least 80% of payments for services through 2016 are in-network. A claim is out-of-network if at most 20% of such payments are in-network.

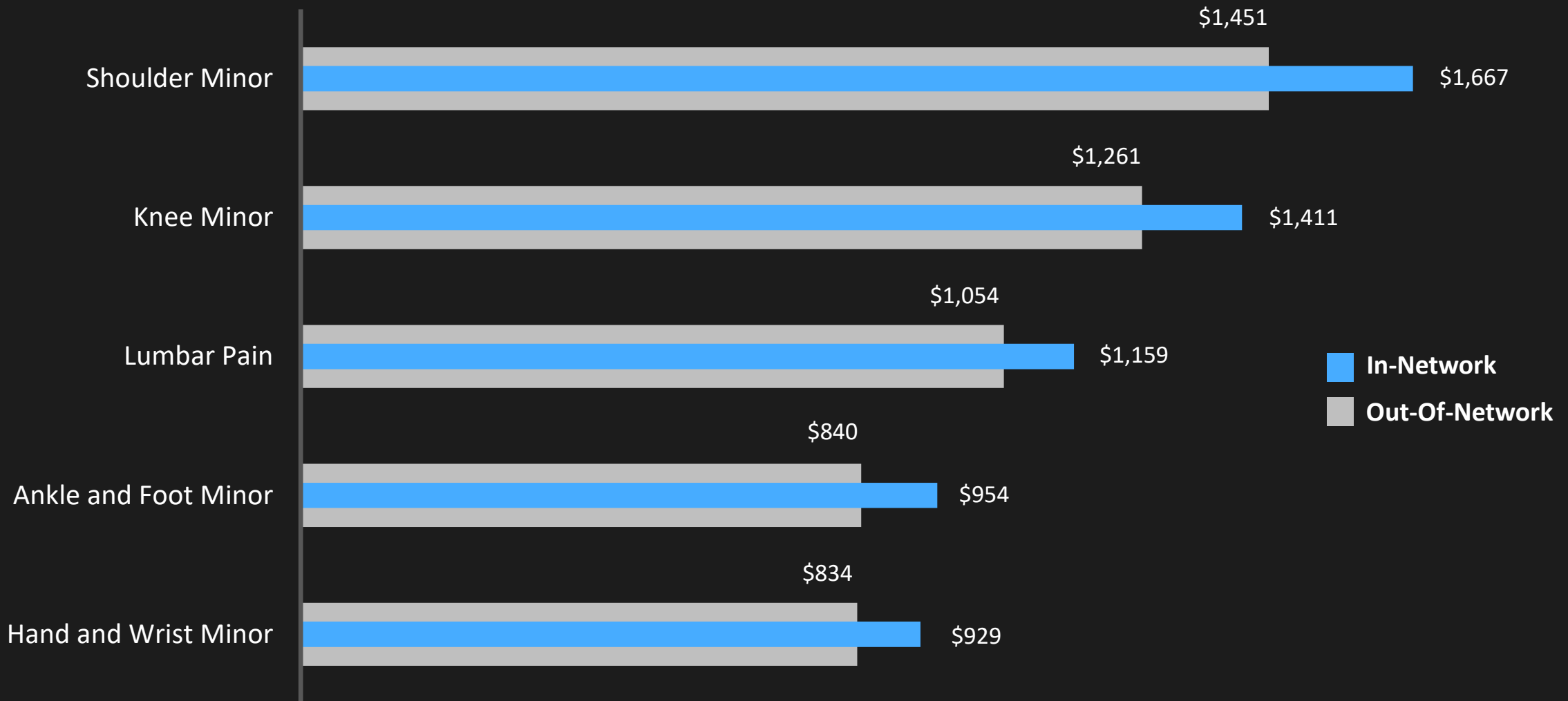
In-Network Providers Have a Higher Proportion of More Complex Evaluation and Management Visits

Share of Established Patient E&M Visits By CPT® Code



Source: NCCI's Medical Data Call for Accident Years 2011 to 2016 for 37 states—states where NCCI provides ratemaking services, excluding TX. Includes lost-time and medical-only claims. Adjusted for mix of claims. CPT® is a registered trademark of the American Medical Association and denotes Current Procedural Terminology. A claim is in-network if at least 80% of payments for services through 2016 are in-network. A claim is out-of-network if at most 20% of such payments are in-network.

For Common Injuries, In-Network Utilization Is Higher



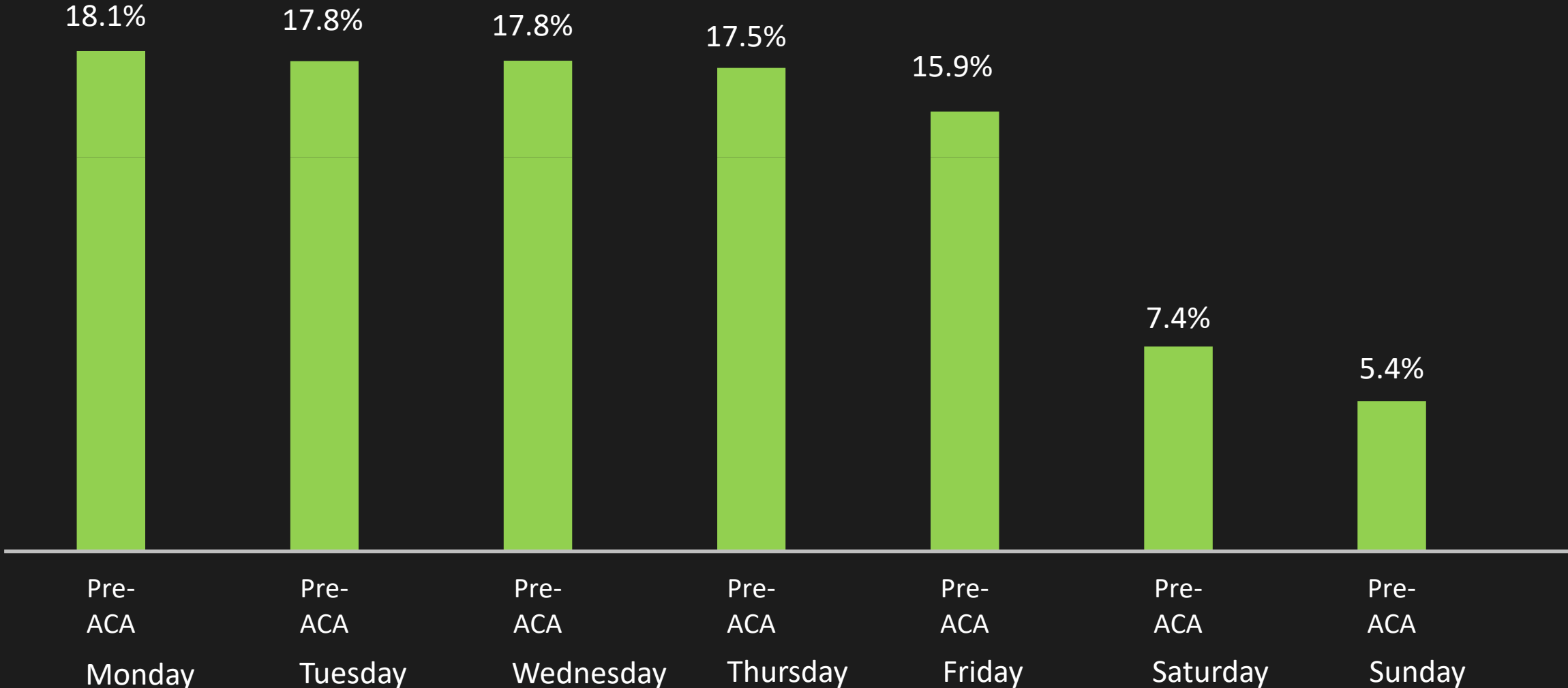
Source: NCCI's Medical Data Call for Accident Years 2011 to 2016 for 37 states—states where NCCI provides ratemaking services, excluding TX. Includes lost-time and medical-only claims. Adjusted for mix of claims. A claim is in-network if at least 80% of payments for services through 2016 are in-network. A claim is out-of-network if at most 20% of such payments are in-network. Utilization is measured as the cost of services using a common set of prices across states.

In-Network Claims Appear to Have Greater Average Utilization Than Out-of-Network Claims

- ◆ One reason might be selection bias—more medically complex injuries may be more likely to be steered in-network by the employer or insurer
- ◆ The added in-network services may or may not represent better care
- ◆ The incentive for physicians to upcode—bill for a more complex procedure—may be higher in-network to offset the lower price per service
- ◆ Networks may be more efficient at billing and scheduling

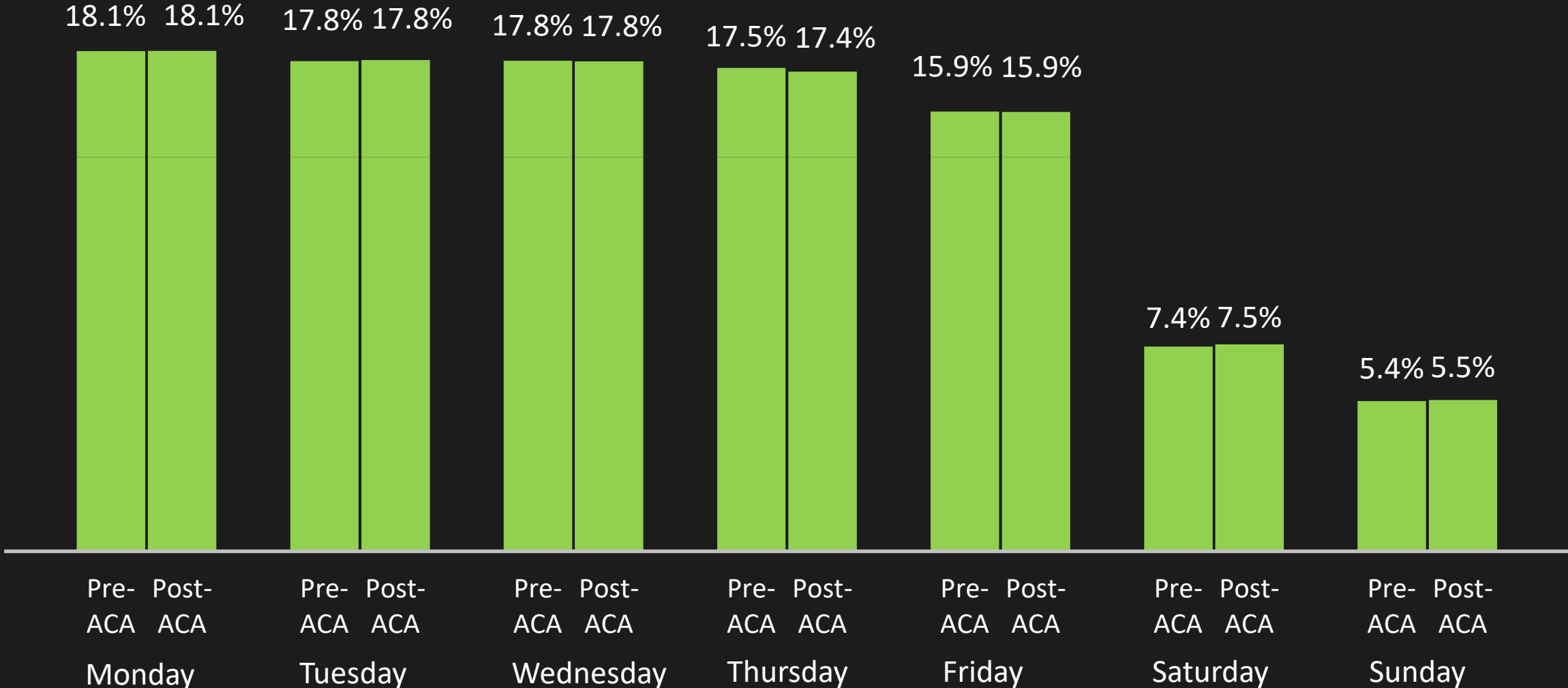
AFFORDABLE CARE ACT

Claim Shares by Injury Day of the Week Before ACA



Pre-ACA is Accident Years 2012 and 2013. Post-ACA is Accident Years 2014 and 2015.
Source: NCCI's Unit Statistical data for states where NCCI provides ratemaking services. Shares are based on lost-time and medical-only claims evaluated at 1st report.
Analysis excludes weeks with major holidays.

Claim Shares by Injury Day Are Not Impacted by ACA



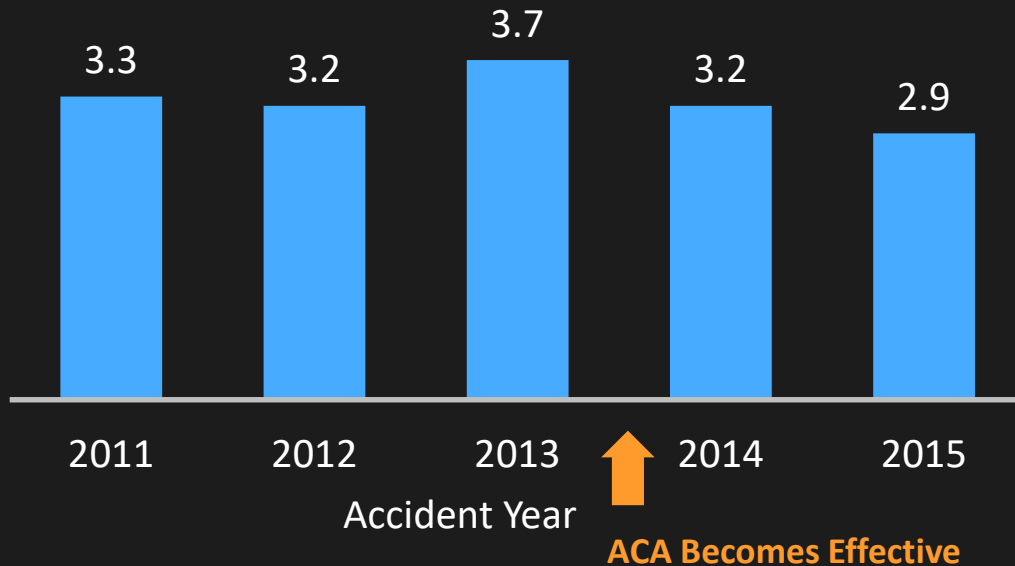
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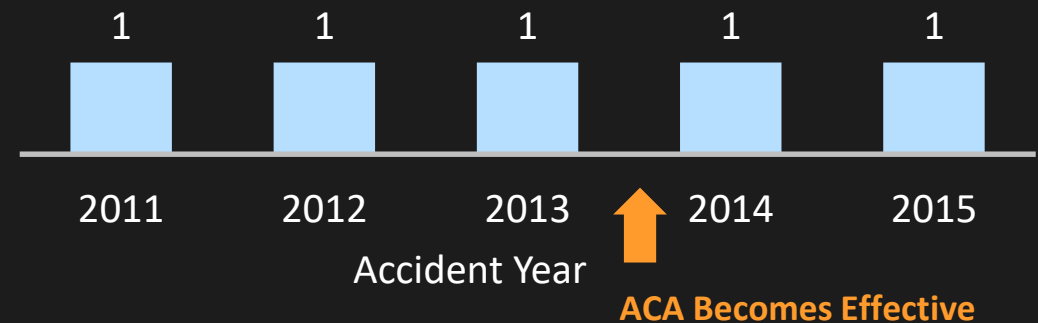
ACA Has No Apparent Impact on Time to First Treatment

All Strain and Sprain Cases—Time to First Treatment of Any Kind

Average Number of Days



Median Number of Days

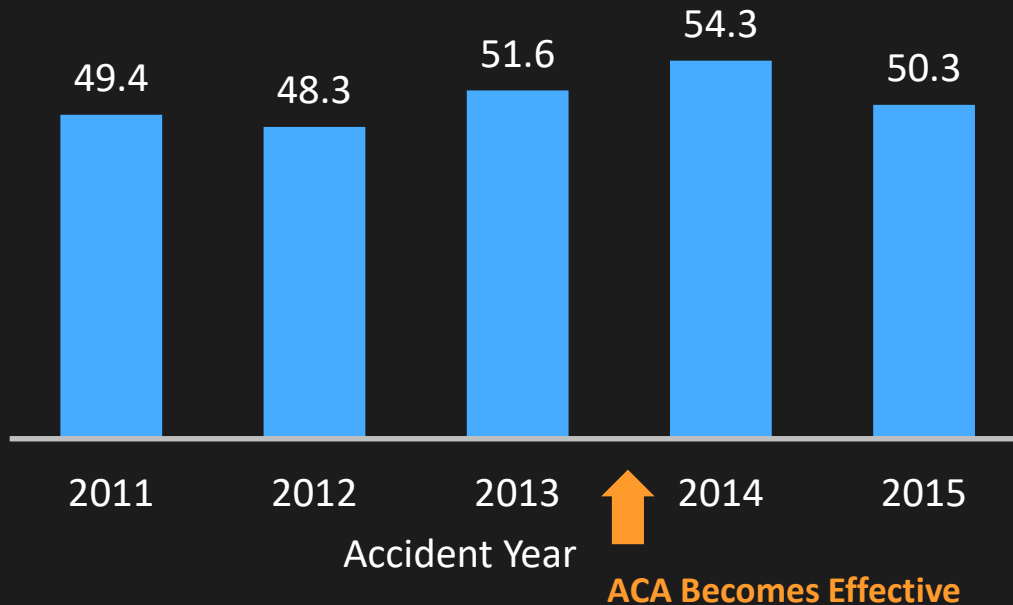


Source: NCCI's Medical Data Call for 37 states—states where NCCI provides ratemaking services, excluding TX—plus MA, MN, NJ, NY, and WI. Includes lost-time and medical-only claims.

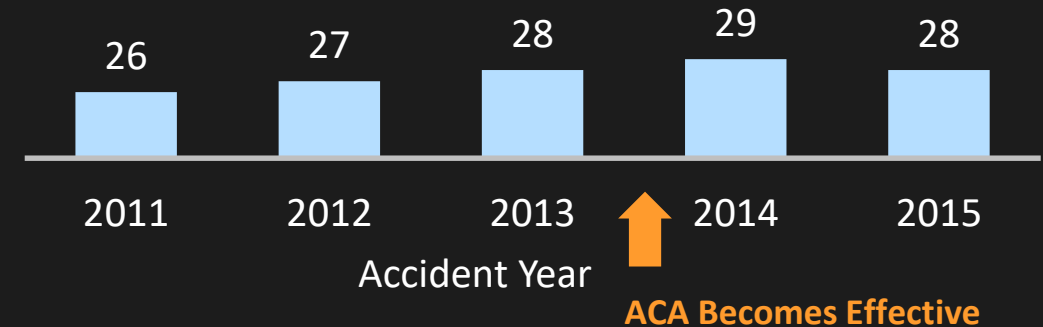
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Days to First Orthopedic Service for Strain and Sprain Cases

Average Number of Days



Median Number of Days

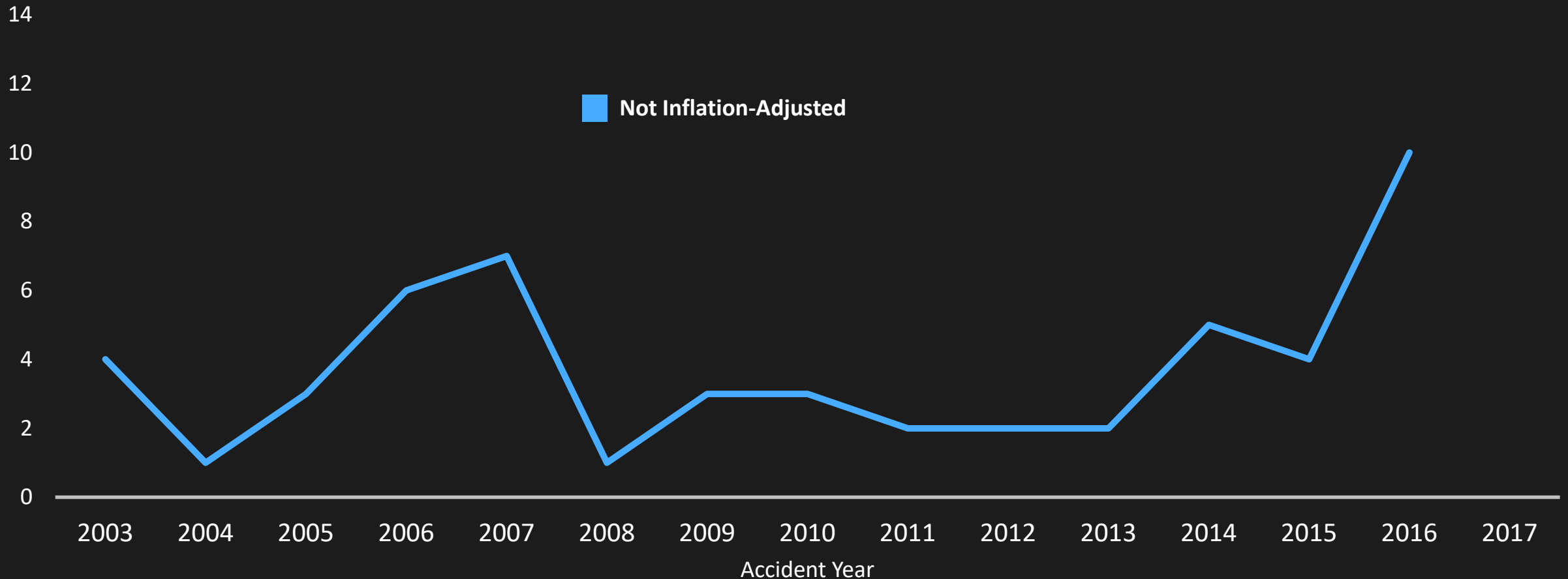


Source: NCCI's Medical Data Call for 37 states—states where NCCI provides ratemaking services, excluding TX—plus MA, MN, NJ, NY, and WI. Includes lost-time and medical-only claims.

MEGA CLAIMS

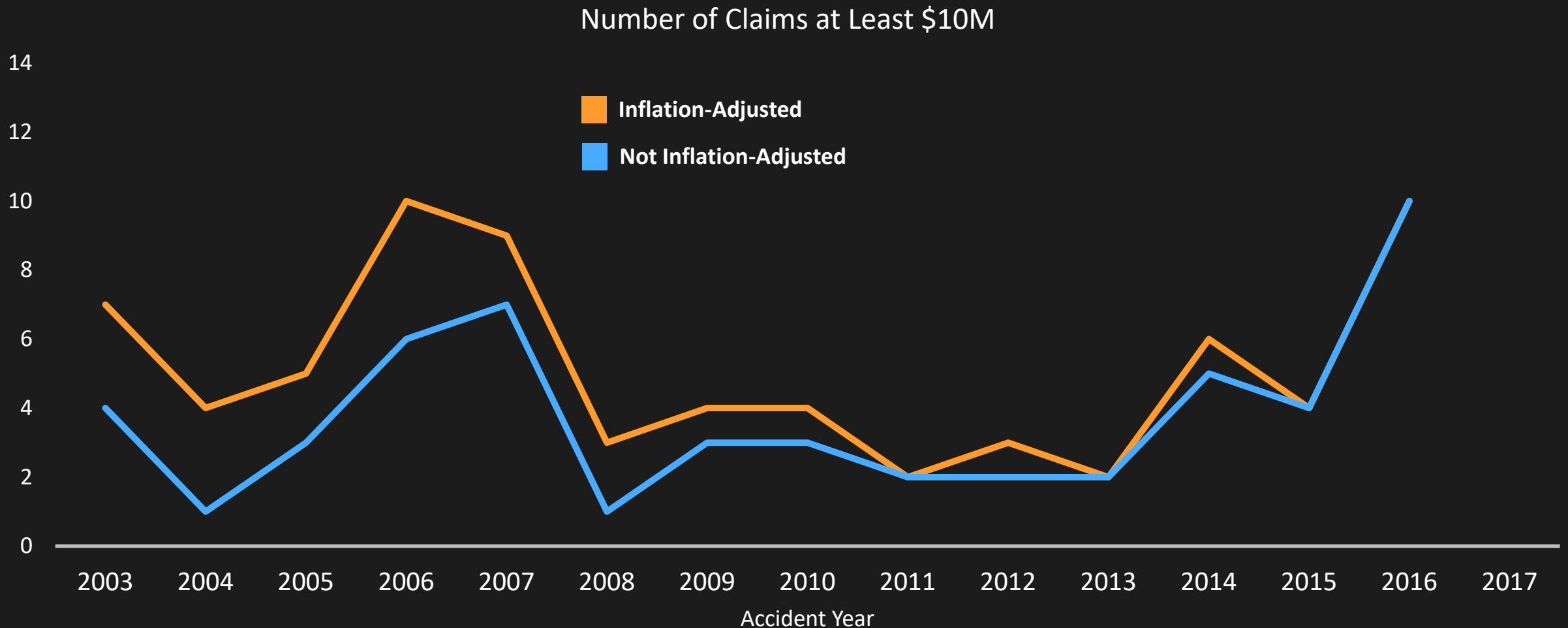
Recent Accident Years Show an Uptick in Mega Claims at 24 Months

Number of Claims at Least \$10M



Source: NCCI's Financial Call 31 data for 36 states—states where NCCI provides ratemaking services, excluding TX and WV. Claims on large-deductible policies are excluded.

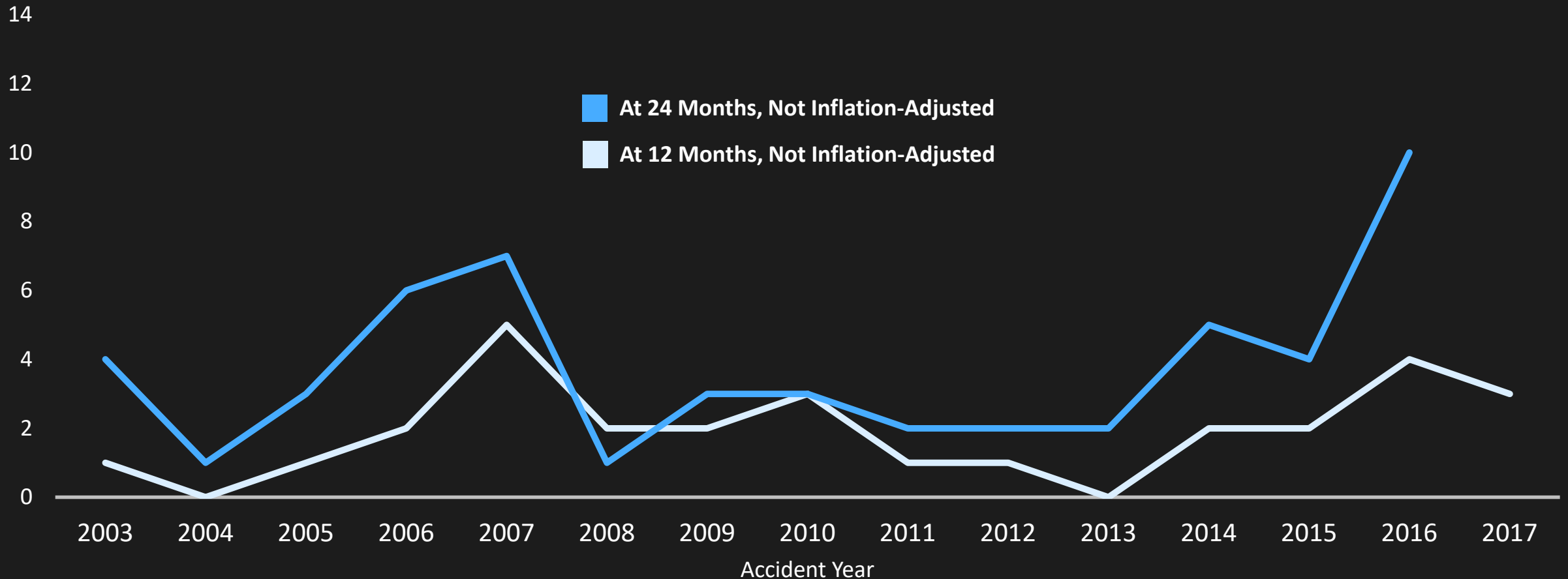
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Source: NCCI's Financial Call 31 data for 36 states—states where NCCI provides ratemaking services, excluding TX and WV. Claims on large-deductible policies are excluded. Inflation adjusted values use Quarterly Census of Employment and Average Weekly Wage for indemnity, and Personal Health Care index for medical.

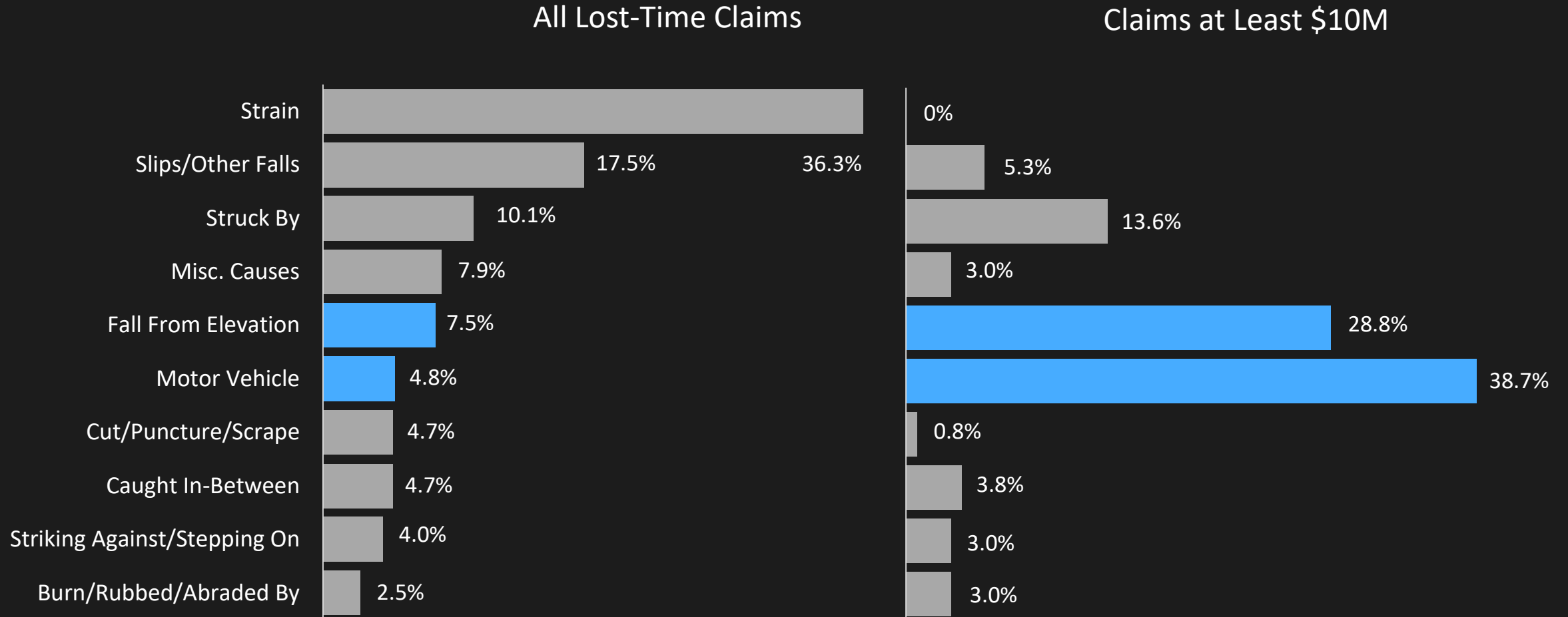
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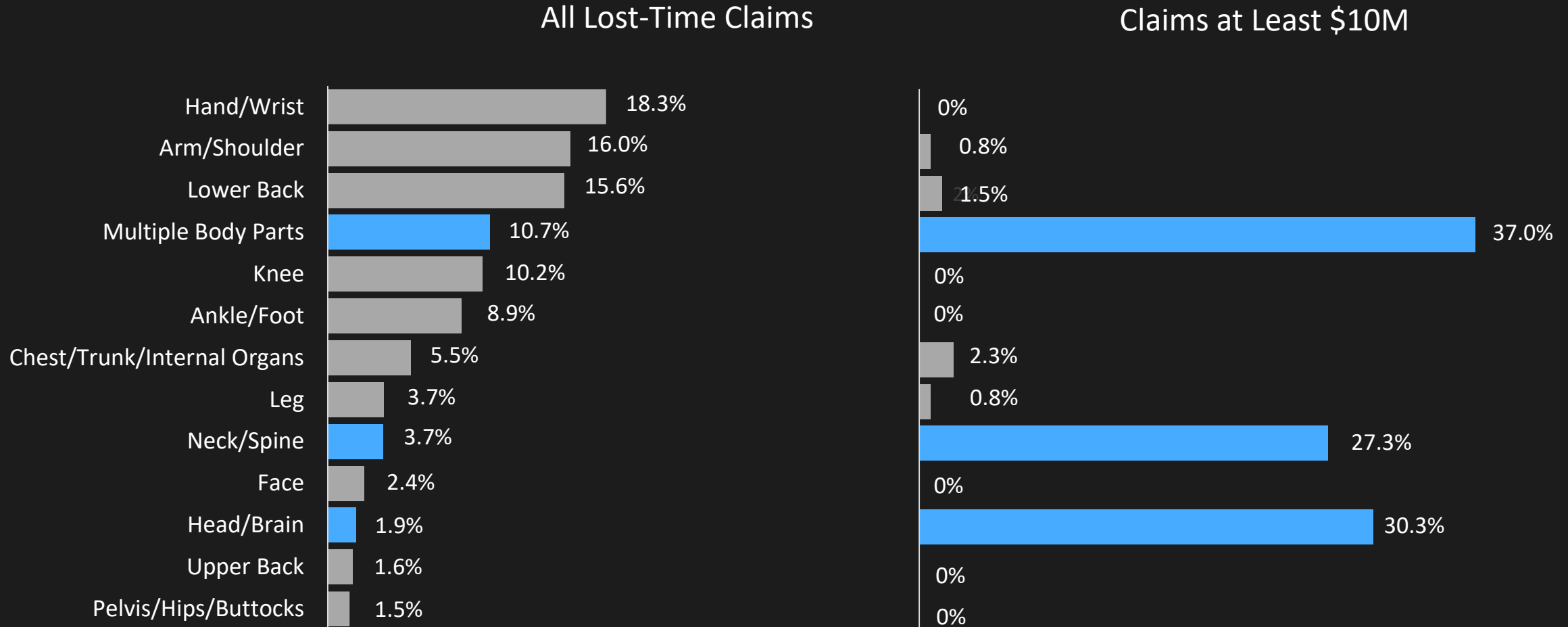
Source: NCCI's Financial Call 31 data for 36 states—states where NCCI provides ratemaking services, excluding TX and WV. Claims on large-deductible policies are excluded.

Nearly 70% of Mega Claims Are a Result of Motor Vehicle Accidents or Falls From Elevation



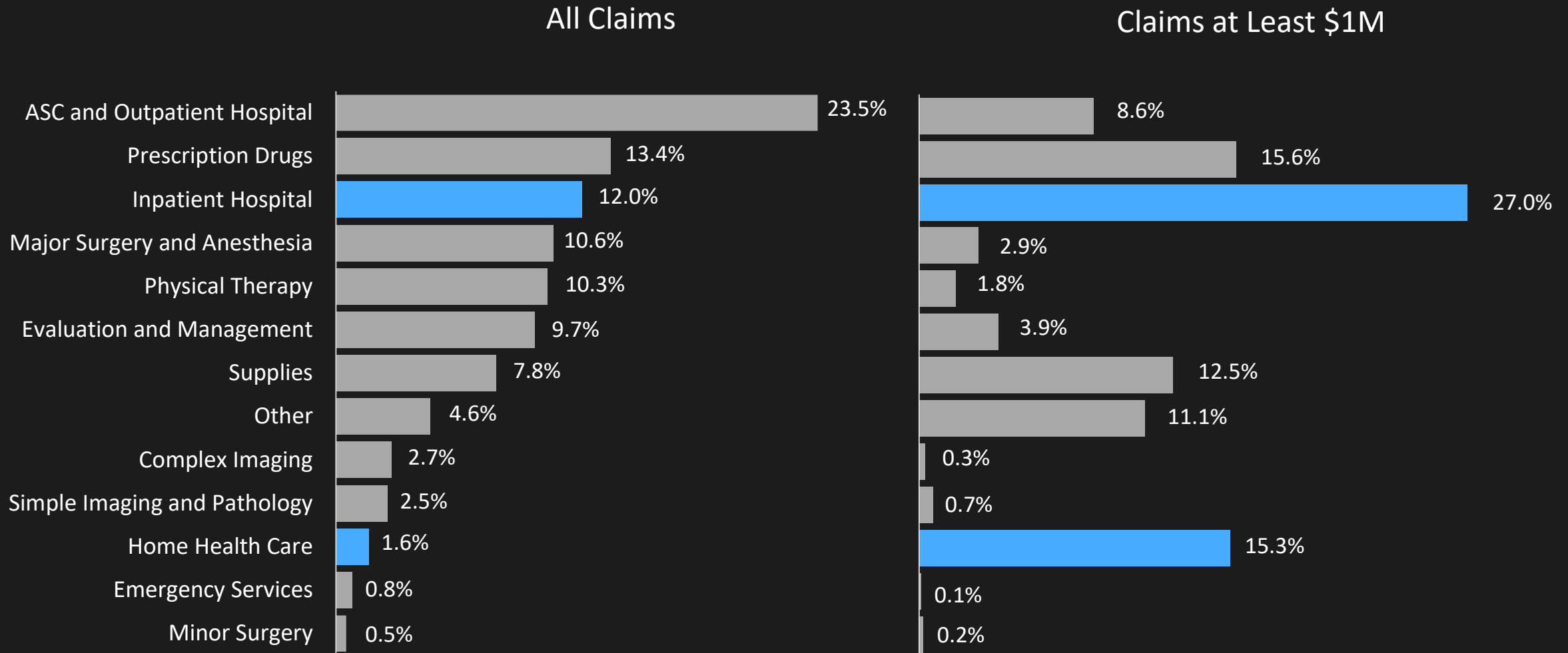
Source: NCCI's Unit Statistical Plan data for 36 states—states where NCCI provides ratemaking services, excluding TX and WV—for Accident Years 2001–2015 at 1st–5th reports.

Nearly 95% of Mega Claims Are for Injuries to the Central Nervous System or Multiple Body Parts



Source: NCCI's Unit Statistical Plan data for 36 states—states where NCCI provides ratemaking services—excluding TX and WV—for Accident Years 2001–2015 at 1st–5th reports.

Inpatient Hospital and Home Health Care Are Significantly Larger Shares of Medical Costs for Claims at Least \$1M



Source: NCCI's Medical Data Call and NCCI's Unit Statistical Plan data for 37 states—states where NCCI provides ratemaking services, excluding TX—plus MA, MI, MN, NJ, WI. Includes lost-time and medical-only claims. Analysis is based on Accident Years 2011–2013. Claim size is determined at 3rd report; shares of aggregate losses developed to ultimate.

Concluding Remarks

- ◆ Network price departures only partially address differences between state fee schedules
- ◆ Utilization appears higher in networks
- ◆ Time to first treatment has been holding steady for primary physicians
- ◆ Share of Monday claims has not been impacted by the ACA
- ◆ Nearly 70% of mega claims are a result of motor vehicle accidents or falls from elevation

Current NCCI Research Underlying This Presentation

- ◆ Provider Networks
- ◆ Time to First Treatment
- ◆ Prescription Drugs
- ◆ Monday Claims
- ◆ Medical Services by Size of Claim
- ◆ Large Losses
- ◆ State Variation in Medical Services